



# Advanced options Tekla Structures 2026

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# 1 Advanced options

Advanced options customize your version of Tekla Structures for different environments, requirements, and standards. For example, they set various file names and locations, define symbols used in drawings, and change how numbering is done.

Most advanced options are available in the user interface. To access the advanced options, click **File** --> **Settings** and, in the **Settings** area, select **Advanced options**.

Some advanced options are not shown in the **Advanced options** dialog and can only be set in initialization (.ini) files. The documentation of the option mentions when this is the case. If the advanced option is not already in the .ini file where you want to use it, you can add the advanced option on a new line.

The default values given for the advanced options in the documentation are for the Default environment. The values may be different in localized environments. If you want to change the defaults used in your projects, add the advanced options in an initialization file that is located in a project or firm folder. Settings in the initialization files do not change existing selections in models. They are used when you create a new model and when you add values for options that have no previous value in the model.

## List all advanced options set in the model

To list all advanced option values set in the current model, including those set in initialization files, click the **Write to file** button at the bottom of the **Advanced options** dialog.

## Find documentation for advanced options

To see the documentation for those advanced options that are shown in the **Advanced options** dialog, select an advanced option in the dialog and press F1 on your keyboard. This opens the correct help page for the option, and often provides additional information even for those options that have a short description directly in the dialog.

The documentation lists the advanced options alphabetically (see the attached listing), ignoring the initial letters XS. For example, under **A** you will find the

advanced option `XS_AISC_WELD_MARK` and under **B** the advanced option `XS_BACKGROUND_COLOR`. Advanced options starting with `XSR` are listed under **R**.

### **Search for advanced options**

The regular search is configured to find advanced options.

When you type "XS\_WELD", you will see suggestions to choose from. When you perform the search, you will see all advanced options containing "XS\_WELD" first and then after that those containing "WELD".

If you search for advanced options but only know a part of the name, first select the **Functionality filter: Advanced options** and then type your search word, for example "WELD". You will get [a list of all advanced options containing that word](#).

### **List of obsolete advanced options across Tekla Structures versions**

The [Obsolete advanced options](#) page provides information about the advanced options that have become obsolete in Tekla Structures in version 2018 and newer.

# 2 Change advanced option values

Use advanced options to configure Tekla Structures to suit the way you work, or to comply with specific project requirements or industry standards. You can change the values in the **Advanced options** dialog, or in the initialization (.ini) files.

---

**NOTE** The settings in the **Advanced options** dialog override the settings in any other initialization (.ini) files. We recommend that you change advanced option values in the **Advanced options** dialog in most cases.

---

## Change advanced option values in the Advanced options dialog

1. On the **File** menu, click **Settings --> Advanced options** to open the **Advanced options** dialog.
2. Browse the categories or search to find the advanced option that you want to set.

To search for advanced options, enter a search term in the **Search** field. To search for the search term in all categories, select **In all categories**.

You can also use wildcards in searches. For example, to find all advanced options that have the words `anchor` and `filter`, with any characters between these two words, enter `anchor*filter`.

3. Select the type of the advanced options from the list next to the option type.
  - You can change the type of the role-specific advanced option between **SYSTEM (ROLE)**, **MODEL (ROLE)**, and **DRAWING(ROLE)**.
    - When you change the option type to **SYSTEM(ROLE)**, the value automatically changes to the default value.
    - When you enter a value for a **SYSTEM (ROLE)** option, it changes to **MODEL (ROLE)** or **DRAWING(ROLE)**.

- You can change the type of system-specific advanced options from **SYSTEM** to **MODEL(SYSTEM)**. When you change the option type to **MODEL(SYSTEM)**, the value is saved in the options database. If you change the advanced option back to **SYSTEM**, the value is removed from the options database and the value specified in initialization files is used.
4. Enter the value for the advanced option or select the value from the list.
    - You can use switches with some advanced options, for example, to define the contents of marks: `%TPL:PROJECT.NUMBER%`.  
If you define a switch for an advanced option in the **Advanced options** dialog, use single percent signs `%xxx%` around the switch.  
If you define the switch in an `.ini` file, use double percent signs `%xxx%%` around the switch.  
For example, add `%%BOLT_NUMBER%%*D%%HOLE.DIAMETER%%` to define the advanced option `XS_BOLT_MARK_STRING_FOR_SIZE` in an `.ini` file.
    - If you need to enter a folder path, you can type a backslash at the end of the folder path or leave it out.
  5. Click **Apply** or **OK**.

---

**TIP** To create a complete list of advanced options in a text file, click **Write to file**. The list shows the name of the advanced option together with its current value and type. Note that writing to a file is only an export of the current settings, it is not another way of changing the advanced options.

---

### Change advanced option values in the .ini files

In some cases, you might need to change the advanced option in an `.ini` file, such as when the advanced option does not exist in the **Advanced options** dialog, or when you want to use the same value in all new models.

For example, you can add the advanced option to an environment `.ini` file or `user.ini` file.

For more information about other `.ini` files, see Typical initialization files (.ini files) and their reading order.

### Use switches as advanced option values

- If you need to give a switch as a value for an advanced option in an `.ini` file, use double percent signs (`%%`) around the switch. For example, enter the following advanced option on a row of its own in an `.ini` file: `set XS_DRAWING_PLOT_FILE_NAME_C=%%TPL:DR_PART_POS%%`
- If you need to give a switch as a value for an advanced option in the **Advanced options** dialog, use a single percent sign (`%`) around the switch. For example, enter `%TPL:DR_PART_POS%` as the value

for `XS_DRAWING_PLOT_FILE_NAME_C` in the **Printing** category of the **Advanced options** dialog.

# 3 Advanced options - A

## 3.1 XS\_AD\_ANALYSIS\_PLANES\_ENABLED

**Category in [Advanced options dialog \(page 29\)](#): Analysis and design**

Set this advanced option to `FALSE` to revert to the analysis model creation method used in Tekla Structures 2017i and earlier versions.

The default value is `TRUE`.

If you change the value, Tekla Structures recreates the analysis models.

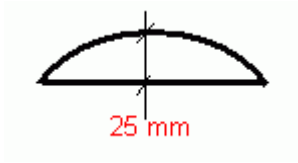
This advanced option is model specific and the setting is saved in the options database.

## 3.2 XS\_AD\_CURVED\_BEAM\_SPLIT\_ACCURACY\_MM

**Category in [Advanced options dialog \(page 29\)](#): Analysis and design**

When **Curved beams** is set to **Split into straight segments** in the analysis model properties, curved beams are approximated using polylines in the analysis model. This advanced option defines how closely the straight polyline segments follow the curved beams.

Use this advanced option to set the maximum distance between a curved beam and a straight segment. Enter the value in millimeters. The default value is 25.0 mm.

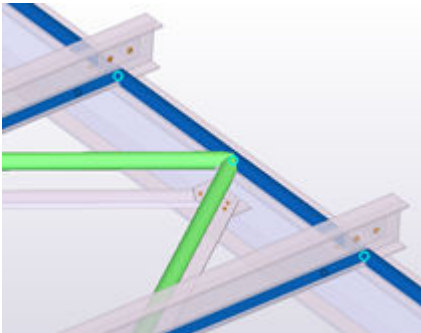


This advanced option is model specific and the setting is saved in the options database.

### 3.3 XS\_AD\_DRAW\_BAR\_DIAMETER\_MM

**Category in [Advanced options dialog \(page 29\)](#): Analysis and design**

Use this advanced option to define the diameter of the analysis parts when the analysis parts are shown in model views. Enter the value in millimeters. The default value is 70 mm.



This advanced option is user specific and the setting is saved in `options.bin` under the user folder, for example, in `C:\Users\\AppData\Local\Trimble\Tekla Structures\\UserSettings`. Redraw the model views after changing the value to activate the new setting.

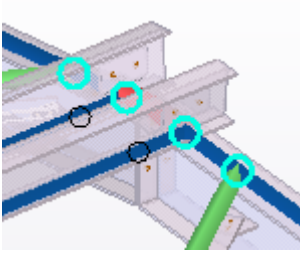
#### See also

[XS\\_AD\\_DRAW\\_NODE\\_SCALE \(page 33\)](#)

### 3.4 XS\_AD\_DRAW\_NODE\_SCALE

**Category in [Advanced options dialog \(page 29\)](#): Analysis and design**

Use this advanced option to scale the size of the analysis nodes when the analysis nodes are shown in model views. The default value is 1.



This advanced option is user specific and the setting is saved in `options.bin` under the user folder, for example, in `C:\Users\\AppData\Local\Trimble\Tekla Structures\\UserSettings`. Redraw the model views after changing the value to activate the new setting.

#### See also

[XS\\_AD\\_DRAW\\_BAR\\_DIAMETER\\_MM](#) (page 33)

### 3.5 XS\_AD\_ELEMENT\_ANGLE\_CHECK\_ANGLE\_DIFF\_LIMIT

Category in [Advanced options dialog \(page 29\)](#): Analysis and design

Use this advanced option to set a limit angle between physical part and analysis model member, in order to test the validity of the analysis model. When the angle is greater than the limit, a message appears and a warning is added to the log. Small differences in angles are usual in the analysis model of a truss, for example. The default value is `10.0`.

This advanced option is model specific and the setting is saved in the options database.

### 3.6 XS\_AD\_ENVIRONMENT

Category in [Advanced options dialog \(page 29\)](#): Analysis and design

This advanced option is used in analysis and design integration to set the environment, for example, to set the cross section catalog. The default value is `Europe`.

Possible values are dependent on the analysis application that is used. For some applications, this advanced option is not used.

This advanced option is model specific and the setting is saved in the options database.

## 3.7 XS\_AD\_GET\_MOMENT\_CONNECTION\_STATUS

Category in [Advanced options dialog \(page 29\)](#): **Analysis and design**

Use this advanced option to specify to which value (**Yes** or **No**) the **Moment connection symbols** option is set when the **Get results** command is used in the analysis model. The **Moment connection symbols** option is available on the **End conditions** tab in the user-defined attributes properties dialog of the part, and it defines whether the moment connection symbols are shown in drawings.

Set the advanced option to one of the following values:

- `yz`: if the rotations `ry` and `rz` are fixed in the analysis model, the value **Yes** is used, otherwise **No** is used.
- `xyz`: if all rotations are fixed in the analysis model, the value **Yes** is used, otherwise **No** is used.
- `z`: if the rotation `rz` is fixed in the analysis model, the value **Yes** is used, otherwise **No** is used.
- The advanced option is not set: The value you have set manually in the **Moment connection symbols** option is used.

The default is `yz`.

This advanced option is model specific and the setting is saved in the options database.

## 3.8 XS\_AD\_GET\_RESULTS\_DESIGN\_VALUES

**This advanced option must be set in an initialization (.ini) file.**

Set this advanced option to `TRUE` to import steel and concrete design values from Robot into Tekla Structures when you use the **Get results** or **Get results for selected** command in the **Analysis & Design Models** dialog. The default value is `TRUE`. If you do not want to import the design values, set this advanced option to `FALSE`.

**See also**

[XS\\_AD\\_GET\\_RESULTS\\_FORCES \(page 35\)](#)

## 3.9 XS\_AD\_GET\_RESULTS\_FORCES

**This advanced option must be set in an initialization (.ini) file.**

Set this advanced option to `TRUE` to import forces from Robot into Tekla Structures when you use the **Get results** or **Get results for selected** command in the **Analysis & Design Models** dialog. The default value is `FALSE`.

**See also**

[XS\\_AD\\_GET\\_RESULTS\\_DESIGN\\_VALUES](#) (page 35)

## 3.10 XS\_AD\_LOAD\_COMBINATION\_METHOD

**Category in [Advanced options dialog \(page 29\)](#): Analysis and design**

Use this advanced option to define whether a load combination is created instead of a repeated load in STAAD.Pro export from Tekla Structures.

Set to 0 to use `REPEAT LOAD`, or set to 1 to use `LOAD COMBINATION`.

The default value is 0.

This advanced option is model specific and the setting is saved in the options database.

## 3.11 XS\_AD\_MEMBER\_NUMBER\_VISUALIZATION

**Category in [Advanced options dialog \(page 29\)](#): Analysis and design**

Use this advanced option to show or hide member numbers when displaying the analysis model in a model view. The default is `TRUE`, which shows the numbers. To hide the numbers, set to `FALSE`.

This advanced option is model specific and the setting is saved in the options database.

## 3.12 XS\_AD\_MEMBER\_RESULT\_DISP\_DIVISION\_COUNT

**Category in [Advanced options dialog \(page 29\)](#): Analysis and design**

Use this advanced option to define the analysis member points whose results are saved in the `analysis_results.db5` database. This advanced option defines into how many parts each analysis member is divided.

Enter an integer value. The default is 0, which does not save any displacement results.

This advanced option is model specific and the setting is saved in the options database.

### Example

To save only the displacements of member ends, set `XS_AD_MEMBER_RESULT_DISP_DIVISION_COUNT` to 1.

To save three intermediate displacement results, in addition to the end displacements, set `XS_AD_MEMBER_RESULT_DISP_DIVISION_COUNT` to 4.

### See also

[XS\\_AD\\_MEMBER\\_RESULT\\_MIN\\_DISTANCE](#) (page 38)

[XS\\_AD\\_MEMBER\\_RESULT\\_DIVISION\\_COUNT](#) (page 37)

## 3.13 XS\_AD\_MEMBER\_RESULT\_DIVISION\_COUNT

Category in [Advanced options dialog \(page 29\)](#): Analysis and design

Use this advanced option to define the analysis member points whose results are saved in the `analysis_results.db5` database. This advanced option defines into how many parts each analysis member is divided.

The default is 1, which saves only the results of member ends.

This advanced option is model specific and the setting is saved in the options database.

### Example

To save the results of three intermediate points (quartiles) on each member, in addition to the end results, set `XS_AD_MEMBER_RESULT_DIVISION_COUNT` to 4.

### See also

[XS\\_AD\\_MEMBER\\_RESULT\\_MIN\\_DISTANCE](#) (page 38)

[XS\\_AD\\_MEMBER\\_RESULT\\_DIVISION\\_COUNT](#) (page 37)

### 3.14 XS\_AD\_MEMBER\_RESULT\_GRID\_SIZE

**Category in [Advanced options dialog \(page 29\)](#): Analysis and design**

Use this advanced option to define the grid spacing for the analysis results of plates, slabs, and panels. Enter the value in millimeters. The default value is 500.

This advanced option is model specific and the setting is saved in the options database.

### 3.15 XS\_AD\_MEMBER\_RESULT\_MIN\_DISTANCE

**Category in [Advanced options dialog \(page 29\)](#): Analysis and design**

Use this advanced option to define the minimum distance between the analysis result points on analysis members. Enter the value in millimeters. The default value is 500.

This advanced option is model specific and the setting is saved in the options database.

#### **See also**

[XS\\_AD\\_MEMBER\\_RESULT\\_DIVISION\\_COUNT \(page 37\)](#)

[XS\\_AD\\_MEMBER\\_RESULT\\_DISP\\_DIVISION\\_COUNT \(page 36\)](#)

### 3.16 XS\_AD\_MEMBER\_TYPE\_VISUALIZATION

**Category in [Advanced options dialog \(page 29\)](#): Analysis and design**

Use colors to show different analysis part types when displaying the analysis model in a model view. The default setting is `TRUE`, which shows the analysis parts using the analysis class colors. A setting of `FALSE` shows the plate objects using the analysis class colors and the other analysis parts in blue.

This advanced option is model specific and the setting is saved in the options database.

## 3.17 XS\_AD\_NEAR\_NODES\_WARNING\_LIMIT

Category in [Advanced options dialog \(page 29\)](#): Analysis and design

Use this advanced option to trigger a warning when analysis nodes are closer to each other than the limit.

Enter the limit in millimeters. The default value is 0, which means that Tekla Structures does not show warnings.

This advanced option is model specific and the setting is saved in the options database.

### Example

To have Tekla Structures show a warning for analysis nodes that are closer than 5 mm to each other, set `XS_AD_NEAR_NODES_WARNING_LIMIT` to 5.

### See also

[XS\\_AD\\_SHORT\\_MEMBER\\_WARNING\\_LIMIT \(page 42\)](#)

[XS\\_AD\\_SHORT\\_RIGIDLINK\\_WARNING\\_LIMIT \(page 42\)](#)

## 3.18 XS\_AD\_NODE\_NUMBER\_BY\_Z

Category in [Advanced options dialog \(page 29\)](#): Analysis and design

If you set this advanced option to `TRUE`, the start number of a new analysis node is set according to the global z coordinate of the node. For example:

- If z is less than 1000.0, the node start number is 0.
- If z is between 1000.0 and 1999.0, the node start number is 1000.
- If z is between 2000.0 and 2999.0, the node start number is 2000.

The first free number above the start number is assigned to the node.

The default is `FALSE`.

### 3.19 XS\_AD\_NODE\_NUMBER\_VISUALIZATION

**Category in [Advanced options dialog \(page 29\)](#): Analysis and design**

Use Use this advanced option to show or hide node numbers when displaying the analysis model in a model view. The default is `TRUE`, which shows the numbers.

This advanced option is model specific and the setting is saved in the options database.

### 3.20 XS\_AD\_OPTIMISATION\_DISABLED

**Category in [Advanced options dialog \(page 29\)](#): Analysis and design**

Use Use this advanced option to check profile catalog analysis values. To enable design optimization, use the value `FALSE`. To disable design optimization, use the value `TRUE`. The default value is `FALSE`.

This advanced option is model specific and the setting is saved in the options database.

**See also**

[XS\\_PROFILE\\_ANALYSIS\\_CHECK\\_ALL \(page 378\)](#)

### 3.21 XS\_AD\_OPTIMISATION\_NO\_WEIGHT\_SORT

**Category in [Advanced options dialog \(page 29\)](#): Analysis and design**

When optimization cross section group is extracted from the profile catalog, the group is sorted by default according to the section weight (cross section area). Set this advanced option to `TRUE` to disable this sorting, in which case the section order is the same as in the profile catalog.

If you use the value `FALSE`, the group is sorted according to the section weight. The default value is `FALSE`.

This advanced option is model specific and the setting is saved in the options database.

## 3.22 XS\_AD\_OPTIMISATION\_RECURSE\_CATALOG

Category in [Advanced options dialog \(page 29\)](#): **Analysis and design**

Set this advanced option to `TRUE` to have Tekla Structures ignore profile catalog rules for optimizing steel part sizes and search the entire profile catalog. If you want to take the rules into account, set it to `FALSE`. The default value is `TRUE`.

This advanced option is model specific and the setting is saved in the options database.

## 3.23 XS\_AD\_RESULT\_DATABASE\_ENABLED

Category in [Advanced options dialog \(page 29\)](#): **Analysis and design**

Use this advanced option to define whether the analysis results database `analysis_results.db5` is created. The default setting is `TRUE`. This creates the analysis results database.

If you decide not to create the analysis results database, set this advanced option to `FALSE`. In this way the use of large models with several load combinations is faster and less memory consuming.

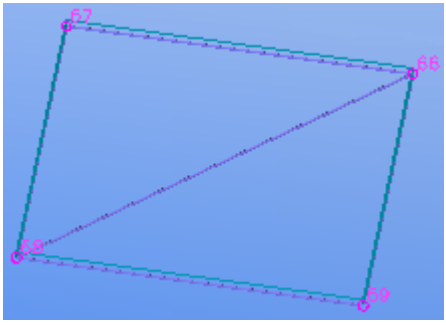
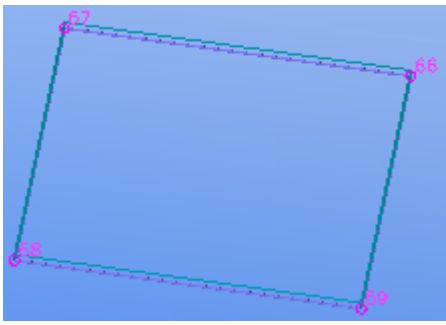
This advanced option is model specific and the setting is saved in the options database.

## 3.24 XS\_AD\_RIGID\_DIAPHRAGM\_VISUALIZATION

Category in [Advanced options dialog \(page 29\)](#): **Analysis and design**

This advanced option defines whether extra sticks are drawn in visualization for rigid diaphragms.

This advanced option is model specific and the setting is saved in the options database.

| Advanced option is set to | Appearance   |
|---------------------------|--|
| TRUE (default)            |  |
| FALSE                     |  |

### 3.25 XS\_AD\_SHORT\_MEMBER\_WARNING\_LIMIT

Category in [Advanced options dialog \(page 29\)](#): Analysis and design

Use this advanced option to trigger a warning when a analysis member is shorter that the limit.

Enter the length in millimeters. Default is 50. If the limit is set to 0, no checking is done.

This advanced option is model specific and the setting is saved in the options database.

### 3.26 XS\_AD\_SHORT\_RIGIDLINK\_WARNING\_LIMIT

Category in [Advanced options dialog \(page 29\)](#): Analysis and design

Use this advanced option to trigger a warning when an analysis rigid link is shorter that the limit. Enter the length in millimeters. Default is 10. If the limit is set to 0, no checking is done.

This advanced option is model specific and the setting is saved in the options database.

### 3.27 XS\_AD\_SOLID\_AXIAL\_EXPAND\_MM

Category in [Advanced options dialog \(page 29\)](#): **Analysis and design**

Used in analysis model creation when checking if parts are clashing. Parts are expanded in axial direction by the given distance to create clash also when there is a small gap between parts. The default value is 25.

This advanced option is model specific and the setting is saved in the options database.

**See also**

[XS\\_AD\\_SOLID\\_SECONDARY\\_EXPAND\\_MM \(page 43\)](#)

### 3.28 XS\_AD\_SOLID\_SECONDARY\_EXPAND\_MM

Category in [Advanced options dialog \(page 29\)](#): **Analysis and design**

Used in analysis model creation when checking if parts are clashing and if they should be connected in the analysis model. Secondary parts are expanded in all directions by the given distance to create clash also when there is a gap between parts. The default value is 75.

This advanced option is model specific and the setting is saved in the options database.

**See also**

[XS\\_AD\\_SOLID\\_AXIAL\\_EXPAND\\_MM \(page 43\)](#)

### 3.29 XS\_AD\_SUPPORT\_VISUALIZATION

Category in [Advanced options dialog \(page 29\)](#): **Analysis and design**

Use Use this advanced option to show or hide the support conditions when showing the analysis model in a model view. The default is `TRUE`, which shows the support conditions.

This advanced option is model specific and the setting is saved in the options database.

### 3.30 XS\_AD\_USE\_HIGH\_ACCURACY

Category in [Advanced options dialog \(page 29\)](#): **Analysis and design**

Set this advanced option to `FALSE` to allow for more tolerance in the creation of the analysis model. In certain situations this will result in a more suitable analysis model. If you do not want to allow more tolerance in the analysis mode creation, set this advanced option to `TRUE`. The default value is `FALSE`.

This advanced option is model specific and the setting is saved in the options database.

### 3.31 XS\_ADD\_SNAPPING\_SYMBOL\_TO\_CIRCLES

Category in [Advanced options dialog \(page 29\)](#): **Drawing properties**

Set this advanced option to `TRUE` to have the snapping point in the center of circles while you are snapping to the center of circles created in the model by using polygon cuts. You may need to snap to center of circles when you need to create dimensions, for example. The default value is `FALSE`.

If you change the value, you need to reopen the drawing.

This advanced option is model specific and the setting is saved in the options database.

### 3.32 XS\_ADJUST\_GRID\_LABELS

Category in [Advanced options dialog \(page 29\)](#): **Model views**

Set this advanced option to `FALSE` to disable the dynamic moving of grid labels when zooming in, and to keep the labels anchored to the end of the grid line. The default value is `TRUE`, and the grid line labels are kept visible. When working with very large grids having the grid labels always visible might slow down Tekla Structures. After you change the advanced option setting, close and re-open the view to implement the change.

### 3.33 XS\_AISC\_WELD\_MARK

#### Category in [Advanced options dialog \(page 29\)](#): Welds

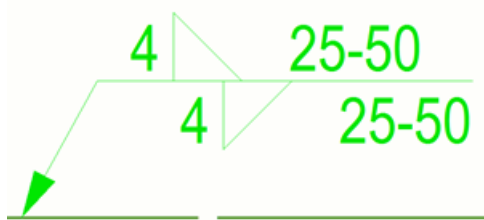
Set this advanced option to `TRUE` to create AISC-compliant weld marks, to use leg length as default fillet weld size dimensioning, and to create arrow side weld using the below line weld properties.

Set this advanced option to `FALSE` to create ISO-compliant weld marks, to use throat thickness as default fillet weld size dimensioning, and to create arrow side weld using the above line weld properties. `FALSE` is the default value.

This advanced option also affects the spacing of intermittent welds:

- `TRUE` uses the **Pitch** value entered in the weld properties as the center-to-center spacing of welds.
- `FALSE` uses the **Pitch** value entered in the weld properties as the spacing between the welds.

An AISC weld mark of a staggered intermittent weld with the pitch after a dash:



The AISC weld mark also complies with the American Welding Society (AWS) standard.

An ISO weld mark of a staggered intermittent weld with the distance between weld elements in parenthesis



This advanced option is model specific and the setting is saved in the options database.

---

**NOTE** The `XS_AISC_WELD_MARK` advanced option is delivered with model folder files. If you need to deliver the model to another party, send the full model with all files (not just the model database file `*.db1`) to ensure that the weld cross section size remains the same. If the value for this advanced option is changed, then the actual weld cross-section size will change accordingly.

---

### 3.34 XS\_ALLOW\_DRAWING\_TO\_MANY\_MULTI\_DRAWINGS

Category in [Advanced options dialog \(page 29\)](#): Numbering

Set this advanced option to `TRUE` to allow the same drawings to be included in more than one multidrawing.

If you want the drawing to be included in only one multidrawing, set this value to `FALSE` (default).

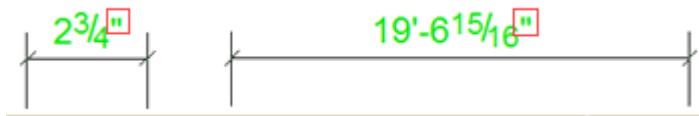
This advanced option is model specific and the setting is saved in the options database.

### 3.35 XS\_ALLOW\_INCH\_MARK\_IN\_DIMENSIONS

Category in [Advanced options dialog \(page 29\)](#): Dimensioning - general

Set to `TRUE` to have Tekla Structures include the inch symbol in dimensions. The default value is `TRUE`. If you do not want to allow inch marks, set this advanced option to `FALSE`.

`TRUE`:



`FALSE`:



This advanced option is role specific. When the type **SYSTEM(ROLE)** is in use, the default value is used. When the type **MODEL(ROLE)** or **DRAWING(ROLE)** is in use, you can change the value, which is then the same for all users in the current model.

### 3.36 XS\_ALLOW\_INCH\_MARK\_IN\_WELD\_SYMBOLS

Category in [Advanced options dialog \(page 29\)](#): Imperial Units

Set this advanced option to `TRUE` to have Tekla Structures include the inch symbol (") in weld symbols. If you do not want to include the inch symbol, set it to `FALSE` (default).

`TRUE`:



This advanced option is model specific and the setting is saved in the options database.

### 3.37 XS\_ALLOW\_REBARS\_ON\_TOP\_OF\_EACH\_OTHER

Category in [Advanced options dialog \(page 29\)](#): Concrete detailing

Set this advanced option to `TRUE` to allow the drawing of the reinforcing bars on top of each other in a drawing. This advanced option applies to a situation, where you have selected either **bar in the middle of group** or **customized** for the **Visibility of reinforcing bars in group** setting in the **Reinforcement** properties, and you have two reinforcing bar groups on top of each other in the model, for example, on the top surface of a slab and on the bottom surface of a slab.

The default value is `FALSE`.

This advanced option is model specific and the setting is saved in the options database.

### 3.38 XS\_ALLOW\_REINFORCING\_LOCKED\_PARTS

**This advanced option must be set in an initialization (.ini) file.**

Set to `TRUE` to create, modify, or delete reinforcement in parts that have been locked. This is useful, for example, when different parties of a project are responsible for modeling concrete parts and for modeling reinforcement, and when modification of parts needs to be prevented.

### 3.39 XS\_ALLOW\_SHEAR\_PLATE\_CLASH\_FLANGE

Category in [Advanced options dialog \(page 29\)](#): **Components**

Set this advanced option to `TRUE` (default) to omit the default 0.3 mm tolerance between shear tab and secondary part web for shear tab components. To use the tolerance, set it to `FALSE`.

This advanced option is model specific and the setting is saved in the options database.

### 3.40 XS\_ALWAYS\_CONFIRM\_SAVE\_WHEN\_CLOSING\_DRAWING

Category in [Advanced options dialog \(page 29\)](#): **Drawing properties**

Set this advanced option to `TRUE` to always display the confirmation message "Do you want to save current drawing?".

The default value is `FALSE`. This means that if you close a drawing without making any changes, Tekla Structures does not by default prompt you to save the drawing.

This advanced option is user specific and the setting is saved in `options.bin` under the user folder, for example, in `C:\Users\\AppData\Local\Trimble\Tekla Structures\\UserSettings`. Restart Tekla Structures to activate the new value.

### 3.41 XS\_ALWAYS\_CONFIRM\_SAVE\_WHEN\_EXIT

Use this advanced option to define whether Tekla Structures shows the **Exit** dialog and prompts you to save the model if you close it without making any changes.

Category in [Advanced options dialog \(page 29\)](#): **Modeling properties**

If this advanced option is set to `TRUE` (default), Tekla Structures always shows the **Exit** dialog and prompts you to save the model when closing it.

If this advanced option is set to `FALSE`, Tekla Structures does not show the **Exit** dialog if there are no changes after the last save.

---

**NOTE** When the **Exit** dialog is not shown, you cannot select or clear the **Yes, keep the license** checkbox. Tekla Structures keeps or releases

the license according to the value of the [XS\\_DEFAULT\\_KEEP\\_ONLINE\\_LICENSE\\_CHECKBOX](#) (page 118) advanced option.

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If you want to select whether to keep your subscription license reserved each time that you close Tekla Structures, set the `XS_ALWAYS_CONFIRM_SAVE_WHEN_EXIT` advanced option to `TRUE`.

This advanced option is user specific and the setting is saved in `options.bin` under the user folder, for example, in `C:\Users\\AppData\Local\Trimble\Tekla Structures\\UserSettings`. Restart Tekla Structures to activate the new value.

#### See also

[XS\\_DEFAULT\\_KEEP\\_ONLINE\\_LICENSE\\_CHECKBOX](#) (page 118)

## 3.42 XS\_ANCHOR\_BOLT\_PLAN\_ADDITIONAL\_PARTS\_FILTER

Category in [Advanced options dialog](#) (page 29): **Drawing properties**

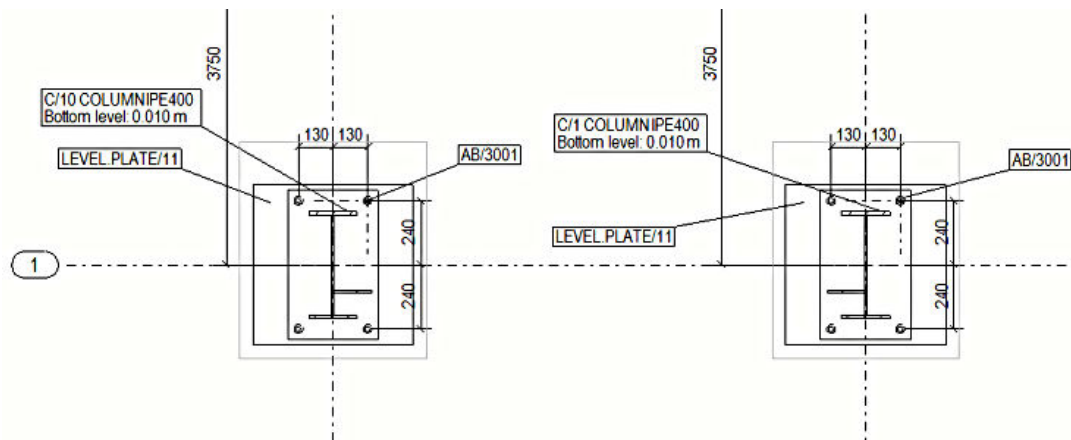
Use this advanced option to add additional parts that are not usually part of a column assembly to an anchor bolt plan, such as anchor rods or leveling plates. First define a general arrangement drawing filter and then give that filter name as the value for this advanced option.

This advanced option is model specific and the setting is saved in the options database.

In the following example we will make anchor rods and leveling plates visible in an anchor bolt plan.

1. Go to the **File** menu and click **Settings --> Advanced options --> Drawing properties**.
2. Enter the name of the general arrangement drawing filter for the advanced option `XS_ANCHOR_BOLT_PLAN_ADDITIONAL_PARTS_FILTER`. In this example, we will use the name `SHOW_IN_ABPLAN` (default).
3. On the **Drawings & reports** tab, click **Drawing properties > GA drawing**.
4. In the general arrangement drawing properties dialog, click **Filter**.
5. Click **Add row**.
6. Select **Part** as the **Category**, **Name** as the **Property**, **Equals** as the **Condition** and enter `*ANCHOR*LEVEL` in the **Value** box.
7. Enter the name of the drawing filter, `SHOW_IN_ABPLAN`, in the **Save as** box and click **Save as**.
8. Click **Cancel** to exit the dialog.

When you create an anchor bolt plan, both the anchor rods and the leveling plates are shown in the drawing. In the drawing below, the name of the anchor rod is "ANCHOR ROD" and the name of the leveling plate is "LEVELING PLATE."



### 3.43 XS\_ANCHOR\_BOLT\_PLAN\_BASEPLATE\_FILTER

Category in **Advanced options dialog (page 29): Drawing properties**

Use a general arrangement drawing filter to limit the number of visible objects to determine the parts to be included in the anchor bolt plan. First create the base plate filter, then enter its name as the value for the advanced option. Tekla Structures will show in the anchor bolt plan the base plates defined by the drawing filter.

If this advanced option is set, base plate is a part that fulfills the following rules:

- Part belongs to the same assembly as the column, which is the main part of the assembly.
- Part passes the drawing filter specified by XS\_ANCHOR\_BOLT\_PLAN\_BASEPLATE\_FILTER.

If there is more than one part in the column assembly that fulfills the rules, the lowest part is considered to be the base plate.

This advanced option is model specific and the setting is saved in the options database.

#### Example

XS\_ANCHOR\_BOLT\_PLAN\_BASEPLATE\_FILTER =<the name of the drawing filter for base plates>

### 3.44 XS\_ANCHOR\_BOLT\_PLAN\_BOLT\_FILTER

Category in [Advanced options dialog \(page 29\)](#): Drawing properties

Use a general arrangement drawing filter to limit the number of visible objects in a drawing and determine the parts to be included in the anchor bolt plan. First create the general arrangement drawing bolt filter, then enter its name as the value for this advanced option. Tekla Structures will show in the anchor bolt plan the bolts included in the drawing filter.

This advanced option is model specific and the setting is saved in the options database.

#### Example

```
XS_ANCHOR_BOLT_PLAN_BOLT_FILTER=<the name of the drawing  
filter for bolts>
```

### 3.45 XS\_ANCHOR\_BOLT\_PLAN\_COLUMN\_FILTER

Category in [Advanced options dialog \(page 29\)](#): Drawing properties

Use a general arrangement drawing view filter to limit the number of visible objects and determine the parts to be included in the anchor bolt plan. First create a general arrangement drawing column filter, then enter its name as the value for this advanced option. Tekla Structures will show in the anchor bolt plan the columns included in the filter.

This advanced option is model specific and the setting is saved in the options database.

#### Example

```
XS_ANCHOR_BOLT_PLAN_COLUMN_FILTER=<the name of the drawing  
filter for columns>
```

### 3.46 XS\_ANCHOR\_BOLT\_PLAN\_DRAWING\_TOLERANCE

Category in [Advanced options dialog \(page 29\)](#): Drawing properties

Use this advanced option to specify the distance of an assembly from the view plane for the assembly to be included in the anchor bolt plan. Enter the distance in millimeters. The default value is 200.

If you have anchor bolts at varying elevations, you can create a general arrangement drawing at the level of the top-most base plate/ anchor bolt. The anchor bolt plan view extrema looks downwards. If

the lowest level anchor bolt is not shown, adjust the advanced option `XS_ANCHOR_BOLT_PLAN_DRAWING_TOLERANCE`.

This advanced option is model specific and the setting is saved in the options database.

### 3.47 `XS_ANCHOR_BOLT_PLAN_USE_VIEW_COORDSYS_FOR_BOLT_DIMENSIONS`

**Category in [Advanced options dialog \(page 29\)](#): Drawing properties**

Use this advanced option to select the direction for the dimensions in the anchor bolt plans. If set to `TRUE`, the anchor bolt plan detail view dimensions are created using the coordinate system of the main view. This advanced option is set to `FALSE` by default, which means that the dimensions of anchor bolt plan detail views are created according to the base plate coordinate system.

This advanced option is model specific and the setting is saved in the options database.

### 3.48 `XS_ANGLE_DEGREE_SIGN`

**Category in [Advanced options dialog \(page 29\)](#): Drawing properties**

Use this advanced option to show the degree symbol correctly in Asian languages. By default, the value is `unicode:176`. The value can be changed depending on the desired character. To add the degree symbol in an Asian language, copy the symbol from a text file and paste it directly in the value field. Do not use a unicode value.

This advanced option is model specific and the setting is saved in the options database.

### 3.49 `XS_ANGLE_DIMENSION_SYMBOL_SIZE_FACTOR`

**Category in [Advanced options dialog \(page 29\)](#): Dimensioning - general**

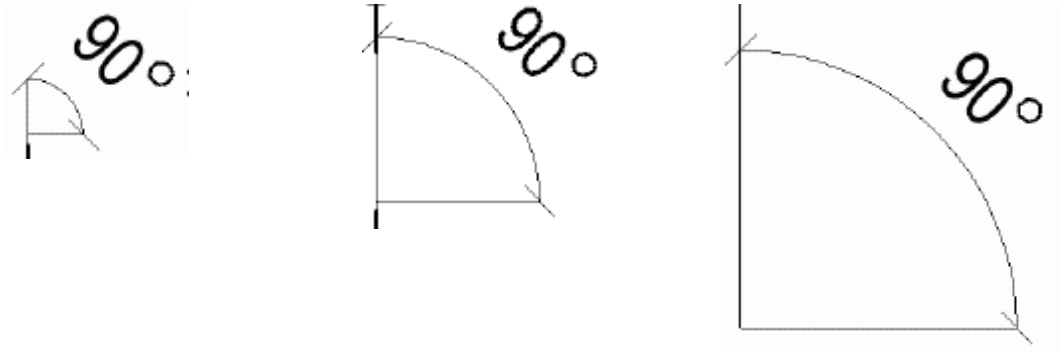
Use this advanced option to define the size of angle symbols in dimensions.

This advanced option is model specific and the setting is saved in the options database.

Value 1

Value 3 (default)

Value 5



---

**NOTE** Setting this advanced option disables the advanced option `XS_CHECK_TRIANGLE_TEXT_SIZE`.

---

**See also**

[XS\\_CHECK\\_TRIANGLE\\_TEXT\\_SIZE](#) (page 93)

### 3.50 XS\_ANGLE\_GRADIAN\_SIGN

Category in [Advanced options dialog \(page 29\)](#): **Drawing properties**

Use this advanced option to set the desired gradian sign to be used in angle dimensions in drawings. The default value is "g".



In angle dimensions, you have options for both gradians and degrees available.

This advanced option is model specific and the setting is saved in the options database.

### 3.51 XS\_ANGLE\_TEXT\_IN\_UNFOLDING\_BENDING\_LINE\_DIMENSIONING

Category in [Advanced options dialog \(page 29\)](#): **Dimensioning: Unfolding**

Use to set the prefix text for unfolded angles. This affects single-part drawings that show folded parts unfolded. Enter any text, for example, A=. By default, there is no prefix text.

This advanced option is model specific and the setting is saved in the options database.

### 3.52 XS\_APPLICATIONS\_PATH

**This advanced option must be set in an initialization (.ini) file.**

This advanced option is system specific and is read from `teklastructures.ini`. Generally, there is no need to modify system-specific settings. Do not modify them if you are not an administrator.

This advanced option defines the folders that contain the connection, detail, and detailing components.

#### Example

```
set
XS_APPLICATIONS_PATH=%XS_APPLICATIONS%;%XSDATADIR%environment
s\common\Extensions\applications\
```

The order in which the elements are placed affects how the applications and application settings are used. Tekla Structures reads the first elements first.

### 3.53 XS\_ASCII\_IMPORT\_CREATES\_CONSTRUCTION\_LINES

Category in [Advanced options dialog \(page 29\)](#) **Import**

Set this advanced option to `TRUE` to have Tekla Structures draw only construction lines between object points in an ASCII import. If you do not want to do this, set it to `FALSE` (default).

This advanced option is model specific and the setting is saved in the options database.

### 3.54 XS\_ASSEMBLY\_DRAWING\_VIEW\_TITLE

Category in [Advanced options dialog \(page 29\)](#): Drawing properties

Use to define a title for assembly drawing views in a **multidrawing**.

Enter any combination of text and options, and enclose each option in percent symbols (%).

Example: No. %MODEL\_NUMBER%, Marked %ASSEMBLY\_POS%

The options are:

- PART\_NAME
- PART\_MATERIAL
- PART\_POS
- ASSEMBLY\_POS
- MODEL\_NUMBER
- LENGTH
- PROFILE
- MAIN\_PART\_LENGTH
- DRAWING\_BASE\_NAME
- DRAWING\_NAME

This advanced option is role specific. When the type **SYSTEM(ROLE)** is in use, the default value is used. When the type **MODEL(ROLE)** or **DRAWING(ROLE)** is in use, you can change the value, which is then the same for all users in the current model.

### 3.55 XS\_ASSEMBLY\_FAMILY\_POSITION\_NUMBER\_FORMAT\_STRING

Category in [Advanced options dialog \(page 29\)](#): Numbering

Use to define the contents of the assembly family position number. For example, instead of DT1-1, DT1-2, you can define the numbering as DT1-A, DT1-B.

To get this result, set the advanced option as follows:

```
XS_ASSEMBLY_FAMILY_POSITION_NUMBER_FORMAT_STRING=  
%ASSEMBLY_PREFIX%%ASSEMBLY_FAMILY_NUMBER%-  
%ASSEMBLY_FAMILY_QUALIFIER_WITH_LETTERS%
```

This advanced option is model specific and the setting is saved in the options database.

Use the following options to define the contents of family position numbers. Use as many options as you need, and enclose each one in percent symbols (%).

| Option                                   | Description   |
|--|---|
| %ASSEMBLY_PREFIX%                        | Assembly prefix, defined in the part properties in the property pane.   |
| %ASSEMBLY_POS%                           | The running assembly position number, starting from the start number, defined in the part properties in the property pane.  |
| %ASSEMBLY_FAMILY_NUMBER%                 | Assembly family number, defined by the start number (in part properties in the property pane) and the final position in that numbering series.  |
| %ASSEMBLY_FAMILY_NUMBER_WITH_LETTERS%    | <p>Assembly family number with letters. The letters run automatically from A to Z. If more letters are needed, Tekla Structures takes a second or even a third letter into use, for example AA or AAA.</p> <p>You can also define valid letters with the advanced option<br/>XS_VALID_CHARS_FOR_ASSEMBLY_FAMILY_POSITION_NUMBERS.</p> |
| %ASSEMBLY_FAMILY_QUALIFIER%              | Assembly family qualifier, defined by the family numbering criteria given in the <b>Numbering Setup</b> dialog.   |
| %ASSEMBLY_FAMILY_QUALIFIER_WITH_LETTERS% | <p>Assembly family qualifier with letters. The letters run automatically from A to Z. If more letters are needed, Tekla Structures takes a second or even a third letter into use, for example AA or AAA.</p> <p>You can also define valid letters with the advanced option<br/>XS_VALID_CHARS_FOR_ASSEMBLY_FAMILY_QUALIFIER.</p>     |
| %UDA: [uda_name]%                        | User-defined attribute of the assembly or assembly main part. If the attribute is defined for the assembly, it will be used. If it is not defined, the main part attribute will be used. You can also define that only the user-defined attribute of the  |

| Option           | Description  |
|------------------|--|
|                  | main part will be used, for example<br>%UDA:MAINPART.USER_FIELD_1%.                              |
| %TPL:[tpl_name]% | Template attribute of the assembly or assembly main part, for example %<br>TPL:PROJECT.NUMBER% . |

### Number of characters

You can define the number of characters by adding a period and the required number to the end of each option. For example %ASSEMBLY\_FAMILY\_QUALIFIER\_WITH\_LETTERS.3% will result in three letters for every assembly, starting from AAA.

### Example

If you set the advanced option to

```
XS_ASSEMBLY_FAMILY_POSITION_NUMBER_FORMAT_STRING=%ASSEMBLY_PREFIX%/%ASSEMBLY_FAMILY_NUMBER.3%-
%ASSEMBLY_FAMILY_QUALIFIER.3%
```

The result will be

A/001-001.

### See also

[XS\\_VALID\\_CHARS\\_FOR\\_ASSEMBLY\\_FAMILY\\_POSITION\\_NUMBERS \(page 538\)](#)

[XS\\_VALID\\_CHARS\\_FOR\\_ASSEMBLY\\_FAMILY\\_QUALIFIER \(page 538\)](#)

## 3.56 XS\_ASSEMBLY\_MULTI\_NUMBER\_FORMAT\_STRING

Category in [Advanced options dialog \(page 29\)](#): Numbering

Use to base assembly numbers on drawing numbers. Use the following switches to define the contents of assembly marks. Use as many switches as you need, and enclose each one in percent symbols (%).

The available switches are:

| Switch                          | Description   |
|---------------------------------|---|
| %ASSEMBLY_MULTI_DRAWING_NUMBER% | Multidrawing name.  |
| %ASSEMBLY_MULTI_DRAWING_POS%    | Position of the assembly drawing inside the multidrawing. |
| %ASSEMBLY_PREFIX%               | Assembly prefix in the model.                             |

| Switch  | Description  |
|---|--|
| <code>%ASSEMBLY_POS%</code>   | Assembly position number in the model.   |
| Template fields   | Enter <code>TPL:</code> followed by the name of any relevant template field. Enclose each name in percent symbols (%). For example, <code>%TPL:PROJECT.NUMBER%</code><br><br><b>NOTE:</b> No template fields starting with <code>DRAWING</code> work for this advanced option, for example, <code>DRAWING.TITLE1</code> . If you use them in the value, Tekla Structures will replace the whole value string with the default value. |
| User-defined attributes that are defined in the <code>objects.inp</code> file | Enter <code>UDA:</code> followed by the name of any relevant user-defined attribute, exactly as it appears in the <code>objects.inp</code> file. For example, <code>%UDA:MY_INFO_1%</code>   |

This advanced option is model specific and the setting is saved in the options database.

### Example

To put the assembly multinumbers in the format multidrawing name + part prefix + position on multidrawing, set the advanced option as follows:

```
%ASSEMBLY_MULTI_DRAWING_NUMBER%%ASSEMBLY_PREFIX%
%ASSEMBLY_MULTI_DRAWING_POS%
```

This will create the assembly mark 10B1, where:

- 10 is the drawing number
- B is the assembly prefix
- 1 designates that it is the first assembly on the sheet.

### See also

[XS\\_USE\\_MULTI\\_NUMBERING\\_FOR](#) (page 517)

[XS\\_PART\\_MULTI\\_NUMBER\\_FORMAT\\_STRING](#) (page 358)

[XS\\_CAST\\_UNIT\\_MULTI\\_NUMBER\\_FORMAT\\_STRING](#) (page 83)

### 3.57 XS\_ASSEMBLY\_POSITION\_CODE\_3D

Category in [Advanced options dialog \(page 29\)](#): **Templates and symbols**

Set this advanced option to `TRUE` to include Z orientation in assembly position codes.

The default value is `FALSE`.

This advanced option is model specific and the setting is saved in the options database.

### 3.58 XS\_ASSEMBLY\_POSITION\_CODE\_TOLERANCE

Category in [Advanced options dialog \(page 29\)](#): **Templates and symbols**

Use this advanced option to define the tolerance distance to use when identifying grid position code for assembly. The default value is `500.0`.

This advanced option is model specific and the setting is saved in the options database.

### 3.59 XS\_ASSEMBLY\_POSITION\_NEW\_FORMAT

Category in [Advanced options dialog \(page 29\)](#): **Templates and symbols**

Use this advanced option to define how the assembly position code is displayed in reports. Set to `TRUE` to use a format such as `B1/C2` instead of `B-C/1-2`. The default value is `FALSE`.

This advanced option is model specific and the setting is saved in the options database.

### 3.60 XS\_ASSEMBLY\_POSITION\_NUMBER\_FORMAT\_STRING

Category in [Advanced options dialog \(page 29\)](#): **Numbering**

Use to define the contents of the assembly position number.

---

**NOTE** Do not change this advanced option after you have created single-part, assembly, or cast unit drawings, if you are using cloning. It may partially separate the drawings from the part they represent, causing the drawings to be flagged as deleted and other drawings to be cloned after the next numbering.

---

---

**NOTE** The advanced options

`XS_ASSEMBLY_POSITION_NUMBER_FORMAT_STRING` and `XS_PART_POSITION_NUMBER_FORMAT_STRING` (page 359) override the advanced option `XS_SWITCH_POS_NUMBERS_FOR` (page 489). `XS_SWITCH_POS_NUMBERS_FOR` has no impact on assembly and/or part position numbers if you use `XS_ASSEMBLY_POSITION_NUMBER_FORMAT_STRING` and/or `XS_PART_POSITION_NUMBER_FORMAT_STRING`.

---

The options are:

| Option                                   | Description   |
|--|---|
| <code>%ASSEMBLY_PREFIX%</code>           | Assembly prefix, defined in the part properties in the property pane.   |
| <code>%ASSEMBLY_POS%</code>              | The running assembly position number, starting from the start number defined in the part properties in the property pane.   |
| <code>%ASSEMBLY_POS_WITH_LETTERS%</code> | Same as above, but with letters.<br>Uses letters A – Z by default, but you can also define valid letters with the advanced option <code>XS_VALID_CHARS_FOR_ASSEMBLY_POSITION_NUMBERS</code> .   |
| <code>%UDA: [uda_name]%</code>           | User-defined attribute of the assembly or assembly main part. If the attribute is defined for the assembly, it will be used. If it is not defined, the main part attribute will be used. You can also define that only the user-defined attribute of the main part will be used, for example <code>%UDA:MAINPART.USER_FIELD_1%</code> . |
| <code>%TPL: [tpl_name]%</code>           | Template attribute of the assembly or assembly main part, for example <code>%TPL:PROJECT.NUMBER%</code> .   |

This advanced option is model specific and the setting is saved in the options database.

**Number of characters in the assembly position number**

You can define the number of characters by adding a period and the required number to the end of the options `%ASSEMBLY_POS_WITH_LETTERS%` and `%ASSEMBLY_POS%`. For example, `%ASSEMBLY_POS_WITH_LETTERS.3%` will result in three letters for every assembly, starting from AAA.

### Example

If you set the advanced option to `%ASSEMBLY_PREFIX%/%ASSEMBLY_POS.3%`, the result will be `A/001`.

### See also

[XS\\_VALID\\_CHARS\\_FOR\\_ASSEMBLY\\_POSITION\\_NUMBERS \(page 539\)](#)

## 3.61 XS\_ASSOCIATIVE\_CHANGE\_HIGHLIGHT\_SIZE

Category in [Advanced options dialog \(page 29\)](#): **Dimensioning - general**

Use this advanced option to define the height of the change symbol around the associativity points. The default value is 7.

This advanced option is model specific and the setting is saved in the options database.

### See also

[XS\\_HIGHLIGHT\\_ASSOCIATIVE\\_DIMENSION\\_CHANGES \(page 285\)](#)

## 3.62 XS\_ASSOCIATIVE\_CHANGE\_HIGHLIGHT\_SYMBOL

Category in [Advanced options dialog \(page 29\)](#): **Dimensioning - general**

Use this advanced option to define the associativity change symbol in use. The default value is `AssociativityAnchor@1` (a cloud).

This advanced option is model specific and the setting is saved in the options database.

### See also

[XS\\_HIGHLIGHT\\_ASSOCIATIVE\\_DIMENSION\\_CHANGES \(page 285\)](#)

## 3.63 XS\_ATTRIBUTE\_FILE\_EXCLUDE\_LIST

Category in [Advanced options dialog \(page 29\)](#): **File locations**

Use this advanced option to exclude attribute files or reports from the user interface. For this advanced option, control strings are given for controlling the access to attribute files or reports. If a control string is present anywhere in a file name of an attribute file or a report, the file or report becomes

unavailable. Several control strings can be entered, and the values are case sensitive. Use semicolon (;) as a separator.

The default value is

```
TS_Report_Inquire;dgn_attribute_info;import_revision
```

- Enter the file name or a part of the file name that you want to exclude from the user interface as the value for the advanced option. For example, setting the advanced option to `_eng;_det` removes all the attribute files that include the string `_eng` or `_det` in their name from the user interface.
- Enter the name or a part of the name of the report you want to exclude from the **Create report** dialog. For example, setting the advanced option to `_Part` hides the report `ts_Report_Inquire_Part.rpt` in the dialog.

Example:

```
PROJ1_;PROJ2_;_TeamA;Team_Detailing
```

This advanced option is role specific. When the type **SYSTEM(ROLE)** is in use, the default value is used. When the type **MODEL(ROLE)** or **DRAWING(ROLE)** is in use, you can change the value, which is then the same for all users in the current model.

## 3.64 XS\_AUTOCONNECTION\_TOLERANCE

Category in [Advanced options dialog \(page 29\)](#): **Components**

Use to set the size of the area that Tekla Structures searches for parts to connect with **AutoConnection**. Enter a value in millimeters, for example, 500. The default value is 0, which means that the connection is created only between colliding or adjacent parts.

This advanced option is model specific and the setting is saved in the options database.

## 3.65 XS\_AUTOCONNECTION\_USE\_UDL

Category in [Advanced options dialog \(page 29\)](#): **Components**

Set this advanced option to `TRUE` to switch on UDL calculation in **AutoConnection**. This calculates the maximum shear force allowed. The default value is `FALSE`.

This advanced option is model specific and the setting is saved in the options database.

## 3.66 XS\_AUTODEFAULT\_UDL\_PERCENT

Category in [Advanced options dialog \(page 29\)](#): **Components**

Use this advanced option to set a default percentage for UDL calculation. The default value is 50.

In **AutoDefaults** Tekla Structures uses the percentage in the connection properties. If no percentage is given, Tekla Structures uses this value.

In **AutoConnection** only the default percentage is used. You can activate the UDL calculation on with the advanced option XS\_AUTOCONNECTION\_USE\_UDL.

This advanced option is model specific and the setting is saved in the options database.

**See also**

[XS\\_AUTOCONNECTION\\_USE\\_UDL \(page 62\)](#)

## 3.67 XS\_AUTOMATIC\_NEW\_MODEL\_NAME

Category in [Advanced options dialog \(page 29\)](#): **Modeling properties**

Set this advanced option to `TRUE` (default) to have Tekla Structures suggest a name for a new model automatically in the **New** section of the **File** menu. The suggested name is `New model XX`, where `XX` is a running number.

If you set this advanced option to `FALSE`, the name is not suggested.

This advanced option is user specific and the setting is saved in `options.bin` under the user folder, for example, in `C:\Users\<user>\AppData\Local\Trimble\Tekla Structures\<version>\UserSettings`. Restart Tekla Structures to activate the new value.

## 3.68 XS\_AUTOMATICALLY\_CREATE\_VIEW\_FOR\_NEW\_LEVELS

Category in [Advanced options dialog \(page 29\)](#): **Modeling properties**

Use this advanced option to define whether a model view is automatically created when you create a new level in a building hierarchy. The default value is `FALSE`.

Set the value to `TRUE` to automatically create views.

This advanced option is user specific and the setting is saved in `options.bin` under the user folder, for example, in `C:\Users\\AppData\Local\Trimble\Tekla Structures\\UserSettings`.

Note that to create a building hierarchy, you need to set the `XS_USE_INTEGRATED_BUILDING_HIERARCHIES` advanced option to `TRUE`.

### See also

[XS\\_USE\\_INTEGRATED\\_BUILDING\\_HIERARCHIES \(page 515\)](#)

## 3.69 XS\_AUTOSAVE\_DIRECTORY

### Category in [Advanced options dialog \(page 29\)](#): File locations

Use this advanced option to define the path to the folder that contains the files that Tekla Structures saves automatically. The default value is `%XS_RUNPATH%\autosave\`. Do not leave the value out.

This advanced option is user specific and the setting is saved in `options.bin` under the user folder, for example, in `C:\Users\\AppData\Local\Trimble\Tekla Structures\\UserSettings`. Restart Tekla Structures to activate the new value.

# 4 Advanced options - B

## 4.1 XS\_BACKGROUND\_COLOR1

Category in [Advanced options dialog \(page 29\)](#): **Model views**

To have a gradient background color in model views, use the advanced options [XS\\_BACKGROUND\\_COLOR1 \(page 65\)](#), [XS\\_BACKGROUND\\_COLOR2 \(page 66\)](#), [XS\\_BACKGROUND\\_COLOR3 \(page 66\)](#), and [XS\\_BACKGROUND\\_COLOR4 \(page 66\)](#). With these advanced options you can control the color of each corner separately in a model view.

This advanced option controls the upper-left corner of the model view.

Define the color using RGB values in the following way:

```
<value for red> <value for green> <value for blue>.
```

Separate the values with spaces. Define the values on a scale of 0.0 to 1.0. If you want to use single-colored background, set the same value for all four background color advanced options. Reopen the view for the change to take effect.

The default value is 1.0 1.0 1.0. To use the default background color, leave the box empty.

This advanced option is user specific and the setting is saved in `options.bin` under the user folder, for example, in `C:\Users\<user>\AppData\Local\Trimble\Tekla Structures\<version>\UserSettings`.

### Example

- Use 0.0 0.0 0.0 for black background.
- Use 1.0 1.0 1.0 for white background.

## 4.2 XS\_BACKGROUND\_COLOR2

Category in [Advanced options dialog \(page 29\)](#): **Model views**

See [XS\\_BACKGROUND\\_COLOR1 \(page 65\)](#).

This advanced option controls the upper-right corner of the model view.

The default value is 1.0 1.0 1.0. To use the default background color, leave the box empty.

## 4.3 XS\_BACKGROUND\_COLOR3

Category in [Advanced options dialog \(page 29\)](#): **Model views**

See [XS\\_BACKGROUND\\_COLOR1 \(page 65\)](#).

This advanced option controls the bottom-left corner of the model view.

The default value is 0.80 0.79 0.85. To use the default background color, leave the box empty.

## 4.4 XS\_BACKGROUND\_COLOR4

Category in [Advanced options dialog \(page 29\)](#): **Model views**

See [XS\\_BACKGROUND\\_COLOR1 \(page 65\)](#).

This advanced option controls the bottom-right corner of the model view.

The default value is 0.80 0.79 0.85. To use the default background color, leave the box empty.

## 4.5 XS\_BASE\_LINE\_WIDTH

Category in [Advanced options dialog \(page 29\)](#): **Printing**

Use this advanced option to specify the base line width for printed drawings. Enter the value in millimeters as a decimal value. The default value is 0.01. The final line thicknesses in a printed drawing is the base line width multiplied by the pen thickness from the **Print drawings** dialog (or in the old printing, from the **Color** dialog). For example, 25 will give a thickness of 0.25 mm.

---

**TIP** To control the accuracy of line thickness, use a small value for `XS_BASE_LINE_WIDTH` and a large number for the pen.

---

This advanced option also affects lines on the screen, if you set `XS_BASE_LINE_WIDTH_AFFECTS_SCREEN` to `TRUE`.

This advanced option is model specific and the setting is saved in the options database.

**See also**

[XS\\_BASE\\_LINE\\_WIDTH\\_AFFECTS\\_SCREEN \(page 67\)](#)

## 4.6 XS\_BASE\_LINE\_WIDTH\_AFFECTS\_SCREEN

**Category in [Advanced options dialog \(page 29\)](#): Printing**

Set this advanced option to `TRUE`, if you want `XS_BASE_LINE_WIDTH` to affect the line widths on the screen in addition to the printed output.

Select `FALSE` if you do not want `XS_BASE_LINE_WIDTH` to affect the line widths on the screen.

The default value is `TRUE`.

This advanced option is model specific and the setting is saved in the options database.

**See also**

[XS\\_BASE\\_LINE\\_WIDTH \(page 66\)](#)

## 4.7 XS\_BASICVIEW\_HEIGHT

**Category in [Advanced options dialog \(page 29\)](#): Model views**

Use this advanced option to define the height of the basic view windows. Enter the height in pixels. The default value is 375.

This advanced option is user specific and the setting is saved in `options.bin` under the user folder, for example, in `C:\Users\<user>\AppData\Local\Trimble\Tekla Structures\<version>\UserSettings`. Restart Tekla Structures to activate the new value.

**Example**

```
XS_BASICVIEW_HEIGHT=570
```

### See also

[XS\\_BASICVIEW\\_POSITION\\_X \(page 68\)](#)

## 4.8 XS\_BASICVIEW\_POSITION\_X

**Category in [Advanced options dialog \(page 29\)](#): Model views**

Use this advanced option to control the horizontal position of the basic view windows on the screen. Enter the value in pixels. The default value is 100.

If the advanced option `XS_MDIBASICVIEWPARENT` is set, the origin for the position is the top left corner of the client area. Otherwise, the origin is the top left corner of the whole Tekla Structures window. Moving a toolbar also affects the size of the client area, because menus and toolbars are not part of it.

This advanced option is user specific and the setting is saved in `options.bin` under the user folder, for example, in `C:\Users\\AppData\Local\Trimble\Tekla Structures\\UserSettings`. Restart Tekla Structures to activate the new value.

### See also

[XS\\_MDIBASICVIEWPARENT \(page 331\)](#)

## 4.9 XS\_BASICVIEW\_POSITION\_Y

**Category in [Advanced options dialog \(page 29\)](#): Model views**

Use this advanced option to control the vertical position of the basic view windows on the screen. Enter the value in pixels. The default value is 20.

This advanced option is user specific and the setting is saved in `options.bin` under the user folder, for example, in `C:\Users\\AppData\Local\Trimble\Tekla Structures\\UserSettings`. Restart Tekla Structures to activate the new value.

### See also

[XS\\_BASICVIEW\\_POSITION\\_X \(page 68\)](#)

## 4.10 XS\_BASICVIEW\_WIDTH

Category in [Advanced options dialog \(page 29\)](#): **Model views**

Use this advanced option to define the width of the basic view windows. Enter the width in pixels, for example, 570. The default value is 375.

This advanced option is user specific and the setting is saved in `options.bin` under the user folder, for example, in `C:\Users\\AppData\Local\Trimble\Tekla Structures\\UserSettings`. Restart Tekla Structures to activate the new value.

**See also**

[XS\\_BASICVIEW\\_POSITION\\_X \(page 68\)](#)

## 4.11 XS\_BEVEL\_DIMENSIONS\_FOR\_PROFILES\_ONLY

Category in [Advanced options dialog \(page 29\)](#): **Dimensioning - parts**

Use this advanced option to define whether to show bevel dimensions only for profiles.

If you set the advanced option to `TRUE`, bevel dimensions are shown only for profiles.

If you set the advanced option to `FALSE` (default), bevel dimensions are always shown.

This advanced option is model specific and the setting is saved in the options database.

## 4.12 XSBIN

This advanced option is system specific and is read from `teklastructures.ini`. Generally, there is no need to modify system-specific settings. Do not modify them if you are not an administrator.

This advanced option defines the location of the Tekla Structures `bin` folder.

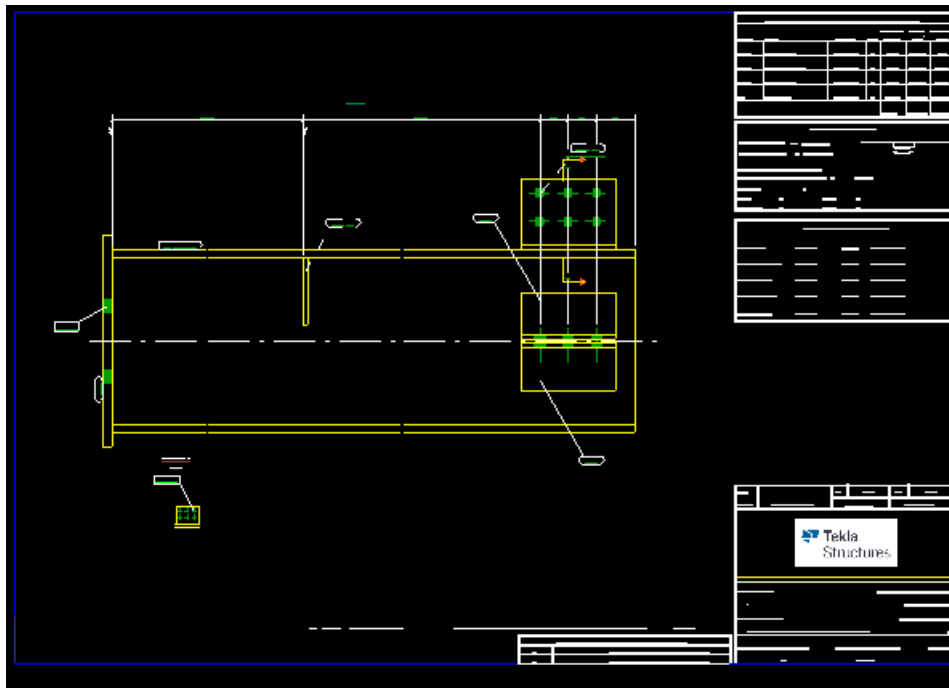
Starting from Tekla Structures version 2022, this advanced option is a read-only advanced option, which always points to the location where `teklastructures.exe` is found. Changing this advanced option is not allowed, because the change would be ignored by Tekla Structures. This advanced option is included in the `teklastructures.ini` file to communicate that it cannot be set to another value.

## 4.13 XS\_BLACK\_DRAWING\_BACKGROUND

Category in [Advanced options dialog \(page 29\)](#): Drawing views

Set this advanced option to `TRUE` to have a black background and colored lines in drawings. If you want to have a white background and colored lines, select `FALSE` (default).

This advanced option only affects the **Color** mode, not the **Black and white** or **Tekla Grayscale** mode.



This advanced option is user specific and the setting is saved in `options.bin` under the user folder, for example, in `C:\Users\\AppData\Local\Trimble\Tekla Structures\\UserSettings`.

Note that you do not need to restart to activate the changed value, just reopen the drawing.

### See also

[XS\\_USE\\_COLOR\\_DRAWINGS \(page 508\)](#)

## 4.14 XS\_BOLT\_DUPLICATE\_IGNORE

Category in [Advanced options dialog \(page 29\)](#): **Numbering**

---

**NOTE** Do not use this advanced option in new models. This advanced option was a temporary solution that has been replaced with a more comprehensive option.

Instead of the `XS_BOLT_DUPLICATE_...` advanced options, use the **No hole** option for **Special hole type** in the **Bolt** properties.

---

If necessary in existing models, use this advanced option to define whether duplicate bolt holes in the same location, or within a [tolerance \(page 71\)](#), in a part are ignored in part numbering, and in drawings and NC files.

The default value is `FALSE`.

If this advanced option is set to `TRUE`, the duplicate bolt holes are ignored in part numbering, and in drawings and NC files.

You can use this advanced option when only some and possibly a different set of the holes in otherwise identical parts will be used for bolting on site. In this way identical parts can be used in different conditions in the structure.

The size of the duplicate holes is not taken into consideration, only the location, so holes of different size are considered duplicates if they are in the same location.

If there are overlapping holes within the tolerance, the hole without a bolt is taken into account, and the hole created by an actual bolt is ignored.

---

**NOTE** It is not recommended to change this advanced option during a project, but if you do so, you must carry out full numbering.

---

This advanced option is model specific and the setting is saved in the options database.

### See also

[XS\\_BOLT\\_DUPLICATE\\_TOLERANCE \(page 71\)](#)

## 4.15 XS\_BOLT\_DUPLICATE\_TOLERANCE

Category in [Advanced options dialog \(page 29\)](#): **Numbering**

---

**NOTE** Do not use this advanced option in new models. This advanced option was part of a temporary solution that has been replaced with a more comprehensive option.

Instead of the `XS_BOLT_DUPLICATE_...` advanced options, use the **No hole** option for **Special hole type** in the **Bolt** properties.

---

If necessary in existing models, when [XS\\_BOLT\\_DUPLICATE\\_IGNORE \(page 70\)](#) is set to `TRUE`, use `XS_BOLT_DUPLICATE_TOLERANCE` to set the location tolerance that defines which bolt holes are considered duplicates and will therefore be ignored in part numbering.

The default value for the tolerance is 3 mm.

---

**NOTE** It is not recommended to change this advanced option during a project, but if you do so, you must carry out full numbering.

---

This advanced option is model specific and the setting is saved in the options database.

## 4.16 XS\_BOLT\_LENGTH\_EPSILON

Category in [Advanced options dialog \(page 29\)](#): **Modeling properties**

Use this advanced option to round bolt length.

Tekla Structures calculates bolt length using material thickness. To avoid having several bolt lengths where material thickness only differs slightly, set this advanced option to a positive or negative value. This value is multiplied by two and the result is subtracted from the material thickness in bolt length calculation. Enter the value in millimeters (all environments). Typical values are 0.001–0.5. The default value is 0.001.

This advanced option is model specific and the setting is saved in the options database.

## 4.17 XS\_BOLT\_MARK\_DIAMETER\_PREFIX

Category in [Advanced options dialog \(page 29\)](#): **Marking - bolts**

Use this advanced option to specify a prefix for bolt mark diameter. The possible values are `NONE` or any string.

This advanced option is model specific and the setting is saved in the options database.

### Example

For a bolt group consisting of three 20 mm diameter bolts:

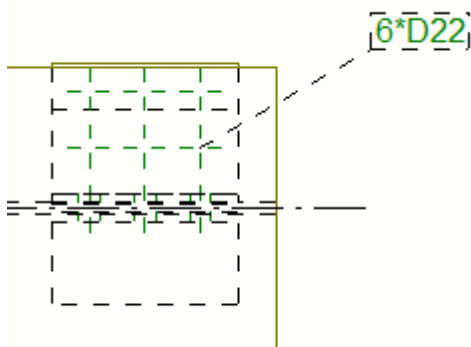
- If you do not give any value, result is  
3\*M20
- If you set `XS_BOLT_MARK_DIAMETER_PREFIX` to `NONE`, the result is  
3\*20
- If you set `XS_BOLT_MARK_DIAMETER_PREFIX` to `D`, the result is  
3\*D20

## 4.18 XS\_BOLT\_MARK\_IS\_ALWAYS\_VISIBLE

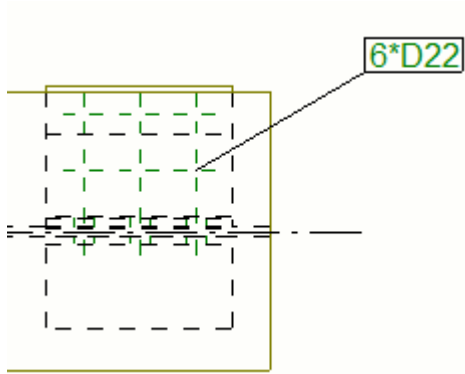
Category in [Advanced options dialog \(page 29\)](#): **Marking - bolts**

Set this advanced option to `TRUE` to show the bolt marks of bolts hidden from views by other objects. The bolt marks are displayed with solid leader lines and frames. If you set it to `FALSE` (default), the bolt marks of hidden bolts are displayed with dashed leader lines and frames. This advanced option affects all drawing types.

FALSE:



TRUE:



This advanced option is model specific and the setting is saved in the options database.

**See also**

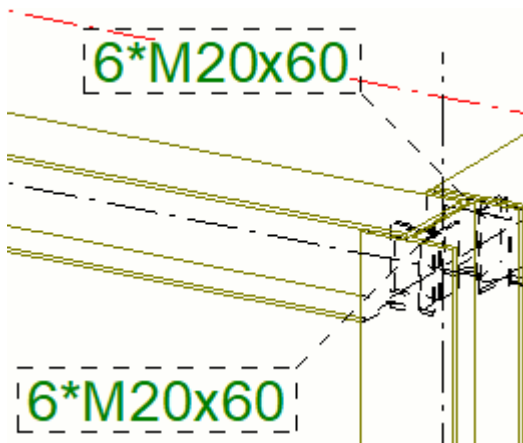
[XS\\_BOLT\\_MARK\\_IS\\_ALWAYS\\_VISIBLE\\_IN\\_GA](#) (page 74)

## 4.19 XS\_BOLT\_MARK\_IS\_ALWAYS\_VISIBLE\_IN\_GA

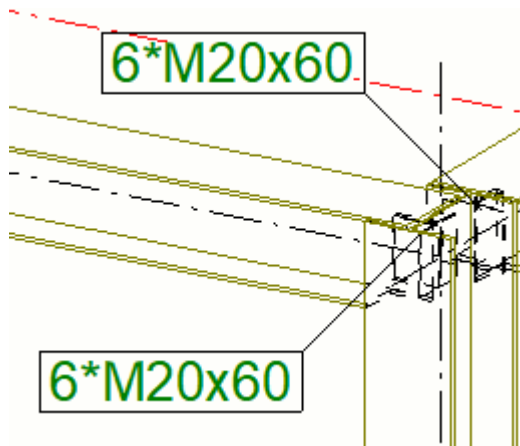
Category in [Advanced options dialog \(page 29\)](#): **Marking - bolts**

Set this advanced option to `TRUE` to show the bolt marks of bolts hidden from views by other objects. The bolt marks are displayed with solid leader lines and frames. If you set it to `FALSE` (default), the bolt marks of hidden bolts are displayed with dashed leader lines and frames. This advanced option only affects general arrangement drawings.

FALSE:



TRUE:




---

**NOTE** If you have set the advanced option `XS_BOLT_MARK_IS_ALWAYS_VISIBLE` to `TRUE`, the bolt marks are always displayed with solid lines even if you set `XS_BOLT_MARK_IS_ALWAYS_VISIBLE_IN_GA` to `FALSE`.

---

This advanced option is model specific and the setting is saved in the options database.

**See also**

[XS\\_BOLT\\_MARK\\_IS\\_ALWAYS\\_VISIBLE \(page 73\)](#)

## 4.20 XS\_BOLT\_MARK\_STRING\_FOR\_SIZE

**Category in [Advanced options dialog \(page 29\)](#): Marking - bolts**

Use this advanced option to define the contents of the **Size** element in bolt marks. For example, to have the bolt number and the hole diameter in the mark, enter `%BOLT_NUMBER%*D%HOLE.DIAMETER%`.

This advanced option is only used when there is a bolt and the hole is a normal one.

The advanced options `XS_SHOP_BOLT_MARK_STRING_FOR_SIZE` and `XS_SITE_BOLT_MARK_STRING_FOR_SIZE` override this setting.

You can use any combination of text and the following options as the value for this advanced option. You can use the options in any order, and make calculations.

- BOLT\_NUMBER
- DIAMETER
- LENGTH
- HOLE.DIAMETER

- LONG\_HOLE\_X
- LONG\_HOLE\_Y
- LONGHOLE\_MIN (the shorter of the slotted hole dimensions)
- LONGHOLE\_MAX (the longer of the slotted hole dimensions)
- BOLT\_STANDARD
- BOLT\_MATERIAL
- BOLT\_ASSEMBLY\_TYPE
- BOLT\_COUNTERSUNK
- BOLT\_SHORT\_NAME
- BOLT\_FULL\_NAME

Enclose each option in % characters.

---

**NOTE** If you define this advanced option in an `.ini` file, use double percent signs `%%` around the options. For example, `%%BOLT_NUMBER%%*D%%  
%HOLE.DIAMETER%%`.

---

To use special characters, enter a backslash (\) followed by an ASCII number.

With length-type options, but not in calculations, you can specify the number of decimals. For example, `HOLE.DIAMETER.2` shows (tapped) hole diameters with two decimals.

This advanced option is model specific and the setting is saved in the options database.

#### See also

[XS\\_SITE\\_BOLT\\_MARK\\_STRING\\_FOR\\_SIZE](#) (page 470)

[XS\\_SHOP\\_BOLT\\_MARK\\_STRING\\_FOR\\_SIZE](#) (page 440)

## 4.21 XS\_BOLT\_MARK\_STRING\_FOR\_SIZE\_IN\_GA

**Category in [Advanced options dialog \(page 29\)](#): Marking - bolts**

Use this advanced option to define the contents of the **Size** element in bolt marks in general arrangement drawings. If you have not set the advanced options `XS_SHOP_BOLT_MARK_STRING_FOR_SIZE_IN_GA` or `XS_SITE_BOLT_MARK_STRING_FOR_SIZE_IN_GA`, then this advanced option is used.

This advanced option is only used when there is a bolt and the hole is a normal one.

You can use any combination of text and the following options as the value for this advanced option. You can use the options in any order, and make calculations.

- BOLT\_NUMBER
- DIAMETER
- LENGTH
- HOLE.DIAMETER
- LONG\_HOLE\_X
- LONG\_HOLE\_Y
- LONGHOLE\_MIN (the shorter of the slotted hole dimensions)
- LONGHOLE\_MAX (the longer of the slotted hole dimensions)
- BOLT\_STANDARD
- BOLT\_MATERIAL
- BOLT\_ASSEMBLY\_TYPE
- BOLT\_COUNTERSUNK
- BOLT\_SHORT\_NAME
- BOLT\_FULL\_NAME

Enclose each option in % characters.

---

**NOTE** If you define this advanced option in an `.ini` file, use double percent signs `%%` around the options. For example, `%%BOLT_NUMBER%%*D%%HOLE.DIAMETER%%`.

---

To use special characters, enter a backslash (\) followed by an ASCII number.

With length-type options, but not in calculations, you can specify the number of decimals. For example, `HOLE.DIAMETER.2` shows (tapped) hole diameters with two decimals.

This advanced option is model specific and the setting is saved in the options database.

**See also**

[XS\\_SHOP\\_BOLT\\_MARK\\_STRING\\_FOR\\_SIZE\\_IN\\_GA](#) (page 441)

[XS\\_SITE\\_BOLT\\_MARK\\_STRING\\_FOR\\_SIZE\\_IN\\_GA](#) (page 471)

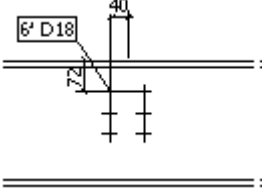
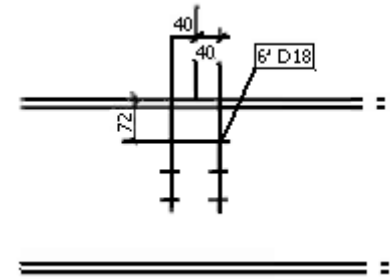
## 4.22 XS\_BOLT\_POSITION\_TO\_MIN\_AND\_MAX\_POINT

Category in [Advanced options dialog \(page 29\)](#): Dimensioning - bolts

Set this advanced option to `TRUE` to create minimum and maximum position dimensions for bolts. If you do not want to create minimum and maximum position dimensions for bolts, set it to `FALSE` (default).

This advanced option is model specific and the setting is saved in the options database.

The examples below show a maximum bolt dimension of 40:

| Setting  | Example   |
|--|---|
| Before setting the advanced option.                      |   |
| After setting the advanced option to <code>TRUE</code> . |  |

## 4.23 XS\_BOLT\_REPRESENTATION\_SYMBOL\_AXIS\_POSITION\_AS\_EXACT\_SOLID

Category in [Advanced options dialog \(page 29\)](#): Drawing properties

If you set the advanced option `XS_BOLT_REPRESENTATION_SYMBOL_AXIS_POSITION_AS_EXACT_SOLID` to `TRUE`, all bolt axis representations set to **Symbol** are presented in the same position as with **Exact solid**.

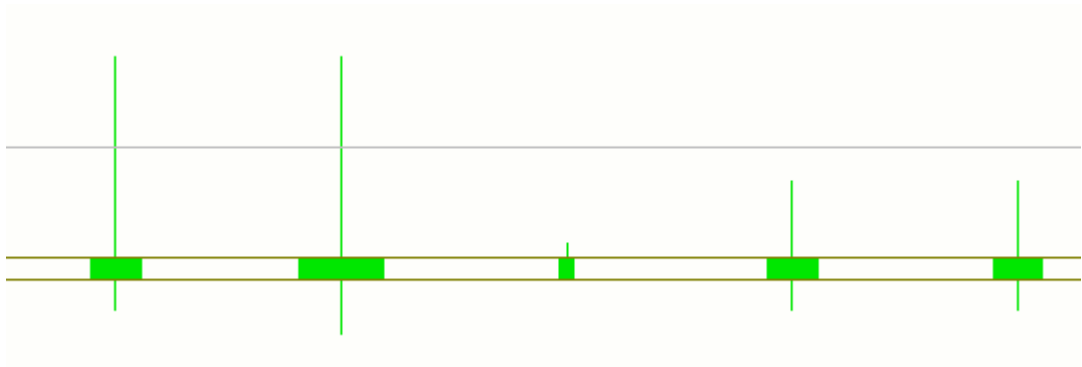
The default value is `TRUE`.

This advanced option is model specific and the setting is saved in the options database.

**Symbol** representation when the advanced option is set to `FALSE`:



**Symbol** representation when the advanced option is set to `TRUE`:



## 4.24 XS\_BOLT\_REPRESENTATION\_USE\_POSITIVE\_CUT\_LENGTH

Category in [Advanced options dialog \(page 29\)](#): Drawing properties

Set this advanced option to `TRUE` to create bolt holes in the drawing instead of sticks when the cut length is negative. `FALSE` is the default value.



This advanced option is model specific and the setting is saved in the options database.

## 4.25 XS\_BOLTS\_PERPENDICULAR\_TO\_PART\_PLANE\_IN\_NC

Category in [Advanced options dialog \(page 29\)](#): CNC

Set this advanced option to `TRUE` (default) to dimension bolts perpendicular to part plane in NC files. If you do not want to dimension the bolts, set it to `FALSE`.

This advanced option is model specific and the setting is saved in the options database.

# 5 Advanced options - C

## 5.1 XS\_CALCULATE\_POLYBEAM\_LENGTH\_ALONG\_REFERENCE\_LINE

Category in [Advanced options dialog \(page 29\)](#): Dimensioning - unfolding

Use this advanced option to calculate polybeam length along the reference line instead of the center line. By default, Tekla Structures measures polybeam length along the center line of the beam, regardless of the **Position in plane** values of the beam.

Set this advanced option to `TRUE` to calculate polybeam length along the reference line. Set it to `FALSE` (default) to calculate along the center line.

When this advanced option is set to `TRUE`, Tekla Structures ignores all unfolding parameters defined in the `unfold_corner_ratios.inp` file. However, this only affects polybeams with straight sections. The length of polybeams with curved chamfers is always controlled using `unfold_corner_ratios.inp`.

This advanced option is model specific and the setting is saved in the options database.

---

**NOTE** The center line option is always a safe alternative, because other modifications do not impact on it. For example, if you calculate length using the reference line and you have used offsets to move the beam, the result may not be the true length of the beam.

---

**NOTE** When [XS\\_USE\\_OLD\\_POLYBEAM\\_CALCULATION \(page 523\)](#) is set to `TRUE`, this advanced option is not used, even though results might be the same in most cases. To obtain reliable results, especially for Net Length, we recommend that you do not set `XS_USE_OLD_POLYBEAM_LENGTH_CALCULATION` to `TRUE`.

---

## 5.2 XS\_CAST\_UNIT\_FAMILY\_POSITION\_NUMBER\_FORMAT\_STRING

Category in [Advanced options dialog \(page 29\)](#): **Numbering**

Use this advanced option to define the contents of the cast unit family position number. For example, instead of DT1-1, DT1-2, you can define the numbering as DT1-A, DT1-B.

To get this result, set the advanced option as follows:

```
%CAST_UNIT_PREFIX%%CAST_UNIT_FAMILY_NUMBER%-
%CAST_UNIT_FAMILY_QUALIFIER_WITH_LETTERS%
```

Use the following options to define the contents of family position numbers. Use as many options as you need, and enclose each one in percent symbols (%).

| Option                                    | Description  |
|---|--|
| %CAST_UNIT_PREFIX%                        | Cast unit prefix, defined in the part properties in the property pane.   |
| %CAST_UNIT_POS%                           | The running cast unit position number, starting from the start number defined in the part properties in the property pane.   |
| %CAST_UNIT_FAMILY_NUMBER%                 | Cast unit family number, defined by the start number (in part properties in the property pane) and the final position in that numbering series.  |
| %CAST_UNIT_FAMILY_NUMBER_WITH_LETTERS%    | <p>Cast unit family number with letters. The letters run automatically from A to Z. If more letters are needed, Tekla Structures takes a second or even a third letter into use, for example AA or AAA.</p> <p>You can also define valid letters with the advanced option XS_VALID_CHARS_FOR_ASSEMBLY_FAMILY_POSITION_NUMBERS.</p> |
| %CAST_UNIT_FAMILY_QUALIFIER%              | Cast unit family qualifier, defined by the family numbering criteria given in the <b>Numbering Setup</b> dialog.   |
| %CAST_UNIT_FAMILY_QUALIFIER_WITH_LETTERS% | Cast unit family qualifier with letters. The letters run automatically from A to Z. If more letters are needed, Tekla Structures takes a second or even a  |

| Option            | Description   |
|-------------------|---|
|                   | <p>third letter into use, for example AA or AAA.</p> <p>You can also define valid letters with the advanced option<br/>XS_VALID_CHARS_FOR_ASSEMBLY_FAMILY_QUALIFIER.</p>  |
| %UDA: [uda_name]% | <p>User-defined attribute of the cast unit or cast unit main part. If the attribute is defined for the cast unit, it will be used. If it is not defined, the main part attribute will be used. You can also define that only the user-defined attribute of the main part will be used, for example %UDA:MAINPART.USER_FIELD_1%.</p> |
| %TPL: [tpl_name]% | <p>Template attribute of the cast unit or cast unit main part, for example % TPL: PROJECT.NUMBER%.</p>  |

This advanced option is model specific and the setting is saved in the options database.

### Number of characters

You can define the number of characters by adding a period and the required number to the end of each option. For example %CAST\_UNIT\_FAMILY\_QUALIFIER\_WITH\_LETTERS.3% will result in three letters for every cast unit, starting from AAA.

### Example

If you set the advanced option to

```
%CAST_UNIT_PREFIX%/%CAST_UNIT_FAMILY_NUMBER.3%-
%CAST_UNIT_FAMILY_QUALIFIER.3%
```

The result will be

```
A/001-001.
```

### See also

[XS\\_VALID\\_CHARS\\_FOR\\_ASSEMBLY\\_FAMILY\\_QUALIFIER \(page 538\)](#)

[XS\\_VALID\\_CHARS\\_FOR\\_ASSEMBLY\\_FAMILY\\_POSITION\\_NUMBERS \(page 538\)](#)

## 5.3 XS\_CAST\_UNIT\_MULTI\_NUMBER\_FORMAT\_STRING

Category in [Advanced options dialog \(page 29\)](#): **Numbering**

Use this advanced option to base cast unit numbers on drawing numbers. Use the following switches to define the contents of the cast unit marks. Use as many switches as you need, and enclose each one in percent symbols (%).

The available switches are:

| Switch   | Description   |
|--|---|
| %CAST_UNIT_MULTI_DRAWING_NUMBER%                                 | Multidrawing name.  |
| %CAST_UNIT_MULTI_DRAWING_POS%                                    | Position of the cast unit drawing inside the multidrawing.  |
| %CAST_UNIT_PREFIX%   | Cast unit prefix in the model.  |
| %CAST_UNIT_POS%  | Cast unit position number in the model.   |
| Template fields  | Enter TPL: followed by the name of any relevant template field. Enclose each name in percent symbols (%). For example, %TPL:PROJECT.NUMBER%<br><br><b>NOTE:</b> No template fields starting with DRAWING work for this advanced option, for example, DRAWING.TITLE1. If you use them in the value, Tekla Structures will replace the whole value string with the default value. |
| User-defined attributes that are defined in the objects.inp file | Enter UDA: followed by the name of any relevant user-defined attribute, exactly as it appears in the objects.inp file. For example, %UDA:MY_INFO_1%   |

This advanced option is model specific and the setting is saved in the options database.

### Example

To put the cast unit multinumbers in the format multidrawing name + part prefix + position on multidrawing, set the advanced option as follows:

```
%CAST_UNIT_MULTI_DRAWING_NUMBER%%CAST_UNIT_PREFIX%  
%CAST_UNIT_MULTI_DRAWING_POS%
```

This will create the cast unit mark 10B1, where:

- 10 is the drawing number

- B is the cast unit prefix
- 1 designates that it is the first cast unit on the sheet.

**See also**

[XS\\_USE\\_MULTI\\_NUMBERING\\_FOR](#) (page 517)

[XS\\_PART\\_MULTI\\_NUMBER\\_FORMAT\\_STRING](#) (page 358)

[XS\\_ASSEMBLY\\_MULTI\\_NUMBER\\_FORMAT\\_STRING](#) (page 57)

## 5.4 XS\_CAST\_UNIT\_POSITION\_NUMBER\_FORMAT\_STRING

Category in [Advanced options dialog \(page 29\)](#): **Numbering**

Use this advanced option to define the contents of the cast unit position number.

---

**NOTE** Do not change this advanced option after you have created single-part, assembly, or cast unit drawings, if you are using cloning. It may partially separate the drawings from the part they represent, causing the drawings to be flagged as deleted and other drawings to be cloned after the next numbering.

---

The options are:

| Option                       | Description   |
|------------------------------|---|
| %CAST_UNIT_PREFIX%           | Cast unit prefix, defined in the part properties in the property pane.  |
| %CAST_UNIT_POS%              | The running cast unit position number, starting from the start number defined in the part properties in the property pane.  |
| %CAST_UNIT_POS_WITH_LETTERS% | Same as above, but with letters.<br>Uses letters A – Z by default, but you can also define valid letters with the advanced option<br>XS_VALID_CHARS_FOR_ASSEMBLY_POSITION_NUMBERS   |
| %UDA: [uda_name]%            | User-defined attribute of the cast unit or cast unit main part. If the attribute is defined for the cast unit, it will be used. If it is not defined, the main part attribute will be used. You can also define that only the user-defined attribute of the |

| Option           | Description  |
|------------------|--|
|                  | main part will be used, for example %UDA:MAINPART.USER_FIELD_1%.                               |
| %TPL:[tpl_name]% | Template attribute of the cast unit or cast unit main part, for example % TPL:PROJECT.NUMBER%. |

This advanced option is model specific and the setting is saved in the options database.

### Number of characters

You can define the number of characters by adding a period and the required number to the end of the options %CAST\_UNIT\_POS% and %CAST\_UNIT\_POS\_WITH\_LETTERS%. For example, %CAST\_UNIT\_POS\_WITH\_LETTERS.3% will result in three letters for every cast unit, starting from AAA.

### Example

If you set the advanced option to %CAST\_UNIT\_PREFIX%/ %CAST\_UNIT\_POS.3%, the result will be A/001.

## 5.5 XS\_CENTER\_LINE\_TYPE

Category in [Advanced options dialog \(page 29\)](#): Drawing properties

**NOTE** The center line type defined for the advanced option XS\_CENTER\_LINE\_TYPE overrides the center line type selected in the drawing, view, or object level properties.

Use this advanced option to change the line type of the part center lines in drawings. Enter an integer value from 1 to 7. To see the center line type change, close the drawing and open it again.

You can select whether to show the center line in part properties.



| Value | Description |
|-------|-------------|
| 1     | Solid line  |

| Value | Description  |
|-------|--|
| 2 - 7 | Dotted lines.<br>The default value is 4 (dash-and-dot line). |

If you enter a value that is lower than 1 or higher than 7, Tekla Structures uses the default value 4.

**TIP** To see what the line types look like, see the **Hidden lines > Type** options on the **Appearance** tab in **Part Properties**.

This advanced option is model specific and the setting is saved in the options database.

## 5.6 XS\_CENTER\_TO\_CENTER\_DISTANCE\_IN\_ONE\_PART\_STRING

**Category in [Advanced options dialog \(page 29\)](#): Marking - bolts**

Use this advanced option to set the format of the element **Center-to-center distance** in bolt marks when the bolts are in the same part, for example, in a column or beam flange. Define the gage information in the bolt mark in the following way:

- Use the switch %VALUE% for the numeric value of a gage.
- You can add text and the option in any order, for example, %VALUE% GAGE or GAGE %VALUE%.
- If %VALUE% is missing, Tekla Structures adds the center-to-center distance to the end of the string.
- If this advanced option is not set, only %VALUE% is used.
- If Tekla Structures cannot calculate the gage, nothing is added in the mark.
- The default value is GAGE = %VALUE% .

This advanced option is model specific and the setting is saved in the options database.

### Example

There is a symmetrical bolt group in a beam flange. The value for gage is 10.

| In the Advanced options dialog | In bolt mark |
|--------------------------------|--------------|
| GAGE = %VALUE%                 | GAGE = 10    |

## 5.7 XS\_CENTER\_TO\_CENTER\_DISTANCE\_IN\_TWO\_PARTS\_STRING

Category in [Advanced options dialog \(page 29\)](#): Marking - bolts

Use this advanced option to set the format of the element **Center-to-center distance** in bolt marks where there are two parts.

The default value is  $c/c = \%VALUE\%$ .

This advanced option is model specific and the setting is saved in the options database.

### Example

There is a symmetrical bolt group in two clip angles. The center-to-center distance is 10.

| In the Advanced Options dialog | In bolt mark |
|--------------------------------|--------------|
| $c/c = \%VALUE\%$              | $c/c = 10$   |

### See also

[XS\\_CENTER\\_TO\\_CENTER\\_DISTANCE\\_IN\\_ONE\\_PART\\_STRING \(page 87\)](#)

## 5.8 XS\_CHAMFER\_ACCURACY\_FACTOR

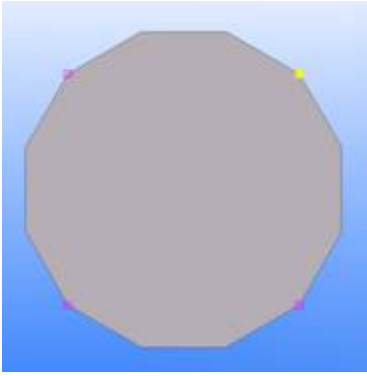
Category in [Advanced options dialog \(page 29\)](#): Speed and accuracy

Use this advanced option to define the number of points used for chamfers. Use lower values to increase the number of points used to construct the chamfer, thus making the curved chamfer smoother. Use larger values to decrease the number of points used to construct the chamfer, thus making the curved chamfer less smooth.

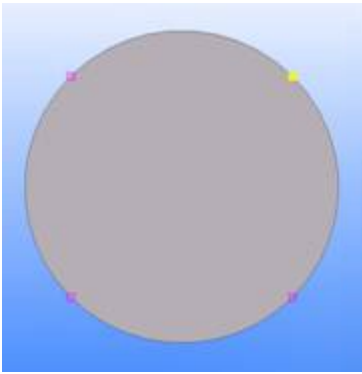
The default value is 4.0.

Restart Tekla Structures after changing the value to activate the new setting.

In the example below, the value is 16.



In the example below, the value is 1.



The minimum value is 0.1.

## 5.9 XS\_CHAMFER\_DISPLAY\_LENGTH\_FACTOR

Category in [Advanced options dialog \(page 29\)](#): **Model views**

Use to adjust chamfer length. Tekla Structures calculates plate chamfer length from the plate side length using the following formula:

$XS\_CHAMFER\_DISPLAY\_LENGTH\_FACTOR * \text{plate side length}$ . By default this factor is 0.08.

This advanced option is user specific and the setting is saved in `options.bin` under the user folder, for example, in `C:\Users\<user>\AppData\Local\Trimble\Tekla Structures\<version>\UserSettings`.

## 5.10 XS\_CHANGE\_DRAGGED\_DIMENSIONS\_TO\_FIXED

Category in [Advanced options dialog \(page 29\)](#): Drawing properties

Use this advanced option to define whether dimensions get fixed placing when you drag them away from their original location. When set to `TRUE`, dimension placing uses the fixed placing routine instead of free placing. `FALSE` keeps the placing free.

The default value is `TRUE`.

This advanced option does not affect the dimension type **Curved dimension, radial reference lines**.

This advanced option is user specific and the setting is saved in `options.bin` under the user folder, for example, in `C:\Users\\AppData\Local\Trimble\Tekla Structures\\UserSettings`. Restart Tekla Structures to activate the new value.

## 5.11 XS\_CHANGE\_DRAGGED\_MARKS\_TO\_FIXED

Category in [Advanced options dialog \(page 29\)](#): Drawing properties

Use this advanced option to define whether part, bolt, and reinforcement marks get fixed placing when you drag them away from their original location. When set to `TRUE`, mark placing uses the fixed placing routine instead of free placing.

The default value is `TRUE`.

This advanced option is user specific and the setting is saved in `options.bin` under the user folder, for example, in `C:\Users\\AppData\Local\Trimble\Tekla Structures\\UserSettings`. Restart Tekla Structures to activate the new value.

## 5.12 XS\_CHANGE\_DRAGGED\_NOTES\_TO\_FIXED

Category in [Advanced options dialog \(page 29\)](#): Drawing properties

Use this advanced option to define whether associative notes get fixed placing when you drag them away from their original location. When set to `TRUE`, associative notes placing uses the fixed placing routine instead of free placing. `FALSE` keeps the placing free.

The default value is `TRUE`.

This advanced option is user specific and the setting is saved in `options.bin` under the user folder, for example, in `C:\Users\\AppData\Local\Trimble\Tekla Structures\\UserSettings`. Restart Tekla Structures to activate the new value.

## 5.13 XS\_CHANGE\_DRAGGED\_TEXTS\_TO\_FIXED

**Category in [Advanced options dialog \(page 29\)](#): Drawing properties**

Use this advanced option to define whether texts get fixed placing when you drag them away from their original location. When set to `TRUE`, text uses the fixed placing routine instead of free placing. The default value is `TRUE`.

This advanced option is user specific and the setting is saved in `options.bin` under the user folder, for example, in `C:\Users\\AppData\Local\Trimble\Tekla Structures\\UserSettings`. Restart Tekla Structures to activate the new value.

## 5.14 XS\_CHANGE\_DRAGGED\_VIEWS\_TO\_FIXED

**Category in [Advanced options dialog \(page 29\)](#): Drawing properties**

Use this advanced option to define whether views get fixed placing when you drag them away from their original locations. When set to `TRUE`, view placing uses the fixed placing routine instead of free placing. If you set this advanced option to `FALSE`, fixed placing is not used. The default value is `TRUE`.

This advanced option is user specific and the setting is saved in `options.bin` under the user folder, for example, in `C:\Users\\AppData\Local\Trimble\Tekla Structures\\UserSettings`. Restart Tekla Structures to activate the new value.

## 5.15 XS\_CHANGE\_MARK\_ASTERISK\_TO

Category in [Advanced options dialog \(page 29\)](#): **Marking - parts**

Use this advanced option to specify a symbol that replaces the asterisk character (\*) in bolt marks and in the size elements of part marks. The default value is asterisk (\*).

This advanced option is model specific and the setting is saved in the options database.

---

**NOTE** You cannot use this advanced option to change the asterisk character in profile strings (PL10\*100).

---

### Example

```
XS_CHANGE_MARK_ASTERISK_TO=X
```

## 5.16 XS\_CHANGE\_WORKAREA\_WHEN\_MODIFYING\_VIEW\_DEPTH

Category in [Advanced options dialog \(page 29\)](#): **Model views**

Set this advanced option to `TRUE` (default) to automatically adjust the work area when you change the view depth.

Makes working with reference files easier. Objects such as parts and reference files outside the work area are not visible, even when they are within the view depth range.

## 5.17 XS\_CHECK\_BOLT\_EDGE\_DISTANCE\_ALWAYS

Category in [Advanced options dialog \(page 29\)](#): **Modeling properties**

Use this advanced option to select whether to check the bolt edge distance. Set to `TRUE` to always check the bolt edge distance and to `FALSE` to check it only when there are bolts in the object (the check is not done if there is only a hole).

The default value is `TRUE`.

This advanced option is user specific and the setting is saved in `options.bin` under the user folder, for example, in `C:\Users\<user>\AppData\Local\Trimble\Tekla Structures\<version>\UserSettings`. Restart Tekla Structures to activate the new value.

## 5.18 XS\_CHECK\_FLAT\_LENGTH\_ALSO

Category in [Advanced options dialog \(page 29\)](#): **Plate work**

Set this advanced option to `TRUE` (default) to check plate length and plate width, and then compare those with the possible dimensions for flat bars in `fltprops.inp`.

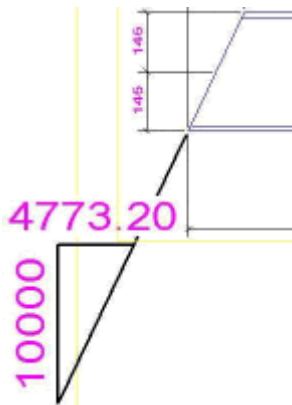
If you set this advanced option to `FALSE`, Tekla Structures only checks the plate width.

This advanced option is model specific and the setting is saved in the options database.

## 5.19 XS\_CHECK\_TRIANGLE\_TEXT\_SIZE

Category in [Advanced options dialog \(page 29\)](#): **Dimensioning - general**

Set this advanced option to `TRUE` to size the triangle to fit text in bevel dimensions. The default value is `FALSE`.



To define the angle symbol size, use the advanced option `XS_ANGLE_DIMENSION_SYMBOL_SIZE_FACTOR`.

---

**NOTE** Using advanced option `XS_ANGLE_DIMENSION_SYMBOL_SIZE_FACTOR` will disable advanced option `XS_CHECK_TRIANGLE_TEXT_SIZE`.

---

This advanced option is model specific and the setting is saved in the options database.

**See also**

[XS\\_ANGLE\\_DIMENSION\\_SYMBOL\\_SIZE\\_FACTOR \(page 52\)](#)

## 5.20 XS\_CHORD\_TOLERANCE\_FOR\_SMALL\_TUBE\_SEGMENTS

Category in [Advanced options dialog \(page 29\)](#): Speed and accuracy

Use this advanced option to define the chord tolerance for round tubes smaller than or equal to the limit set by the advanced option `XS_CHORD_TOLERANCE_SMALL_TUBE_SIZE_LIMIT`. Enter the value in millimeters. The default value is 1.0.

Re-open the model to activate the new value.

---

**NOTE** Do not change the chord tolerance settings during a project. Changing them automatically recreates the tubular sections in the model when you restart Tekla Structures, resulting in slightly different solid objects, which may affect numbering.

---

**See also**

[XS\\_CHORD\\_TOLERANCE\\_SMALL\\_TUBE\\_SIZE\\_LIMIT \(page 95\)](#)

[XS\\_CHORD\\_TOLERANCE\\_FOR\\_TUBE\\_SEGMENTS \(page 94\)](#)

## 5.21 XS\_CHORD\_TOLERANCE\_FOR\_TUBE\_SEGMENTS

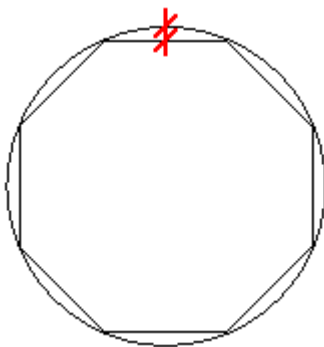
Category in [Advanced options dialog \(page 29\)](#): Speed and accuracy

Use this advanced option to define the chord tolerance for round tubes larger than the limit set by the advanced option `XS_CHORD_TOLERANCE_SMALL_TUBE_SIZE_LIMIT`. Enter the value in millimeters. The default value is 1.0.

Re-open the model to activate the new value.

**Chord tolerance**

*Chord tolerance* is the maximum difference between a straight segment used to display a tubular section in model views and the actual tubular section:



---

**NOTE** Do not change the chord tolerance settings during a project. Changing them automatically recreates the tubular sections in the model when you restart Tekla Structures, resulting in slightly different solid objects, which may affect numbering.

---

**See also**

[XS\\_CHORD\\_TOLERANCE\\_SMALL\\_TUBE\\_SIZE\\_LIMIT \(page 95\)](#)

[XS\\_CHORD\\_TOLERANCE\\_FOR\\_SMALL\\_TUBE\\_SEGMENTS \(page 94\)](#)

## 5.22 XS\_CHORD\_TOLERANCE\_SMALL\_TUBE\_SIZE\_LIMIT

**Category in [Advanced options dialog \(page 29\)](#): Speed and accuracy**

Use this advanced option to define the limit that determines whether a tube is considered small when calculating the chord tolerance. The value is compared to the diameter of the profile. Enter the value in millimeters. The default value is 50.0.

Re-open the model to activate the new value.

---

**NOTE** Do not change the chord tolerance settings during a project. Changing them automatically recreates the tubular sections in the model when you restart Tekla Structures, resulting in slightly different solid objects, which may affect numbering.

---

**See also**

[XS\\_CHORD\\_TOLERANCE\\_FOR\\_TUBE\\_SEGMENTS \(page 94\)](#)

[XS\\_CHORD\\_TOLERANCE\\_FOR\\_SMALL\\_TUBE\\_SEGMENTS \(page 94\)](#)

## 5.23 XS\_CLASH\_CHECK\_BETWEEN\_REINFORCING\_BARS

**Category in [Advanced options dialog \(page 29\)](#): Modeling properties**

Set this advanced option to `TRUE` to detect clashes between Tekla Structures reinforcing bars, and between reinforcing bars and other Tekla Structures objects (steel parts, bolts, embeds, and reference objects). Set to `FALSE` to detect clashes between reinforcing bars and other Tekla Structures objects except between reinforcing bars. The default is `TRUE`.

This advanced option is model specific and the setting is saved in the options database.

## 5.24 XS\_CLEAR\_MODEL\_HISTORY

Category in [Advanced options dialog \(page 29\)](#): **Speed and accuracy**

If you use model history log files, set this advanced option to `TRUE` to clear history data from the log file each time you open and save the model. The default value is `FALSE`.

This advanced option is system specific and is read from environment files. Generally, there is no need to modify system-specific settings. Do not modify them if you are not an administrator.

### See also

[XS\\_COLLECT\\_MODEL\\_HISTORY \(page 99\)](#)

## 5.25 XS\_CLONING\_TEMPLATE\_DIRECTORY

Category in [Advanced options dialog \(page 29\)](#): **File locations**

Enter a path to the parent folder that contains all the models that have the cloning templates that you want to show in the **Master Drawing Catalog**. The folder for a cloning template is shown in the **Master Drawing Catalog** dialog, when you hover over the template. You can have several paths separated by semicolon. Usually the path is defined in each environment in the `env_<environment>.ini` or in the `role_<role>.ini`.

Note that you need to copy the whole Tekla Structures model to the parent folder.

This advanced option is user specific and the setting is saved in `options.bin` under the user folder, for example, in `C:\Users\<user>\AppData\Local\Trimble\Tekla Structures\<version>\UserSettings`. Restart Tekla Structures to activate the new value.

### Example

```
C:\ProgramData\Trimble\Tekla  
Structures\<version>\environments\<environment>\Cast-in-  
Place\cloning_templates_1;C:\ProgramData\Trimble\Tekla  
Structures\<version>\environments\<environment>\Cast-in-  
Place\cloning_templates_2
```

where `cloning_templates_1` and `cloning_templates_2` are parent folders.

When you have defined the above parent folders, all cloning templates in the following Tekla Structures models are shown, for example:

```
C:\ProgramData\Trimble\Tekla  
Structures\<>version>\environments\<>environment>\Cast-in-  
Place\cloning_templates_1\tsmodel1
```

```
C:\ProgramData\Trimble\Tekla  
Structures\<>version>\environments\<>environment>\Cast-in-  
Place\cloning_templates_1\tsmodel2
```

```
C:\ProgramData\Trimble\Tekla  
Structures\<>version>\environments\<>environment>\Cast-in-  
Place\cloning_templates_2\tsmodel1
```

```
C:\ProgramData\Trimble\Tekla  
Structures\<>version>\environments\<>environment>\Cast-in-  
Place\cloning_templates_2\tsmodel2
```

---

**NOTE** There is another advanced option with a similar name, [XS\\_DRAWING\\_TEMPLATES\\_LIBRARY \(page 222\)](#). This advanced option defines the model folder that the **Clone** command in **Document manager** uses by default to get the drawing templates when you have selected to use drawing templates in another model.

---

## 5.26 XS\_CLOUD\_SHARING\_PROXY

---

**NOTE** We recommend you to set this advanced option in **File menu --> Sharing --> Sharing settings --> Tekla Model Sharing cache**.

---

Use this advanced option to set up a cache server that is used with the Tekla Model Sharing sharing service.

If needed, the advanced option can be set in initialization files. Set `XS_CLOUD_SHARING_PROXY` to name of the server;port in initialization files.

This advanced option is user-specific.

## 5.27 XS\_CNC\_CUT\_PLANE\_HEIGHT

Category in [Advanced options dialog \(page 29\)](#): **CNC**

Set this advanced option to a value between 0.3 and 1.0 if you get the following warning in the `dstv_nc.log` file for some NC files:

```
Error: Can't find intersection between solid and nc plane.  
Please try to adjust XS_CNC_CUT_PLANE_HEIGHT (0.3 .. 1.0)
```

You may get these warnings when you try to create NC files for folded parts. These NC files are not correct. For example, the external contours of the part may be entirely missing from the NC file. You will notice this if you view a DXF file created from the NC file.

To use this advanced option, follow these steps:

1. Set this advanced option using a value bigger than 0.3. Start with smaller values first. The internal default value is 0.3.
2. Create the NC files for the problematic part.
3. Check the file `dstv_nc.log`, and if there is still warning for this part, repeat steps 1 to 4 with another value.
4. After creating the NC files without any error messages in the `dstv_nc.log`, remove the advanced option from the `user.ini` file as this advanced option may cause problems for some other parts.

This advanced option is model specific and the setting is saved in the options database.

## 5.28 XS\_CNC\_HOLE\_DIAMETER\_ROUNDING

**Category in [Advanced options dialog \(page 29\)](#): CNC**

Use this advanced option to define the rounding factor of holes for NC files. NC files are accurate to 0.01 mm. Note that tapped holes are also affected.

Use to round bolt diameters with very small differences in diameter to the same value. You may need to use different diameters because bolts can have different tolerance values in a Tekla Structures model. You can input more decimals into bolt tolerance values in the component dialogs than in the general bolt dialog.

The rounding routine is used only when you create NC files.

Set the rounding factor the same value (in mm) as the drill tolerance of the machine tool. The default value is 0.00001.

Tekla Structures divides the original hole diameter by the rounding factor, then rounds the result to the nearest integer, then multiplies it by the rounding factor. As a result, bolt diameters with very small differences in diameter are now rounded to the same value.

This advanced option is model specific and the setting is saved in the options database.

### Example

Here the rounding factor is 1.5875 (1/16 inch), which results in the following:

- Diameter 26.99 mm (1" 1/16 from component dialog) =>  $26.99/1.5875$  => 17.00 => 17 =>  $17*1.5875$  => 26.99 mm

- Diameter 27.00 mm (1" 1/16 from bolt dialog) => 27.00/1.5875 => 17.01 => 17 => 17\*1.5875 => 26.99 mm

## 5.29 XS\_COLLECT\_MODEL\_HISTORY

**Category in [Advanced options dialog \(page 29\)](#): Speed and accuracy**

Tekla Structures is able to collect model history data on various objects, for example, parts in the inquire object dialog, reinforcing bars, and components in reports, etc. Set this advanced option to `TRUE` (default) to collect the data. If you do not want to collect the model history, set it to `FALSE`.

This advanced option is model specific and the setting is saved in the options database.

**See also**

[XS\\_CLEAR\\_MODEL\\_HISTORY \(page 96\)](#)

## 5.30 XS\_COMBINED\_BOLT\_DIM\_CHARACTER

**Category in [Advanced options dialog \(page 29\)](#): Dimensioning - bolts**

Use this advanced option to define the character used in combined bolt dimensions. Enter any character, for example, @. The default value is asterisk (\*).

You can combine bolt group internal dimensions, 3\*60, 3\*60=180 or have single dimensions (60,60,60).

This advanced option is model specific and the setting is saved in the options database.

## 5.31 XS\_COMPANY\_SETTINGS\_DIRECTORY

**This advanced option must be set in an initialization (.ini) file.** For example, you can set this advanced option in an `options.ini` file located under the model, firm, or project folder.

This advanced option defines the folder where the `company.ini` initialization file is located. The `company.ini` file contains enterprise-level settings. To use the `company.ini` file, you must create it. The `company.ini` file is read only if the `XS_COMPANY_SETTINGS_DIRECTORY` advanced option is set.

## 5.32 XS\_COMPLEX\_PART\_MEMBERS\_DO\_NOT\_HAVE\_TO\_BE\_MAIN\_PARTS

Category in [Advanced options dialog \(page 29\)](#): Dimensioning - parts

Use this advanced option in complex part/ assembly dimensioning to dimension other than main parts as one. The default value is `FALSE`.

This advanced option is role specific. When the type **SYSTEM(ROLE)** is in use, the default value is used. When the type **MODEL(ROLE)** or **DRAWING(ROLE)** is in use, you can change the value, which is then the same for all users in the current model.

## 5.33 XS\_COMPONENT\_CATALOG\_ALLOW\_SYSTEM\_EDIT

Category in [Advanced options dialog \(page 29\)](#): Modeling properties

Set this advanced option to `TRUE` to be able to edit the **Applications & components** catalog definition files that are located in the `XS_SYSTEM` folders.

Generally, there is no need to modify system-specific settings. Do not modify them if you are not an administrator.

## 5.34 XS\_COMPONENT\_CATALOG\_DO\_REPORT\_LEGACY\_FILE\_ISSUES

Category

**This advanced option must be set in an initialization (.ini) file.**

This advanced option is system specific and is read from `teklastructures.ini`. Generally, there is no need to modify system-specific settings. Do not modify them if you are not an administrator.

Set the advanced option to `TRUE` to enable the reporting of legacy component catalog issues to the message log in the **Applications and Components** catalog.

Restart Tekla Structures after changing the value to activate the new setting.

## 5.35 XS\_COMPONENT\_CATALOG\_COMPACT\_THUMBNAI\_SIZE

**Category in [Advanced options dialog \(page 29\)](#): Modeling properties**

Use this advanced option to adjust the size of thumbnails to between 16 and 96 pixels in the compact view. The default is 40.

This advanced option is user specific and the setting is saved in `options.bin` under the user folder, for example, in `C:\Users\\AppData\Local\Trimble\Tekla Structures\\UserSettings`. Restart Tekla Structures to activate the new value.

**See also**

[XS\\_COMPONENT\\_CATALOG\\_THUMBNAI\\_SIZE \(page 101\)](#)

## 5.36 XS\_COMPONENT\_CATALOG\_THUMBNAI\_SIZE

**Category in [Advanced options dialog \(page 29\)](#): Modeling properties**

Use this advanced option to adjust the size of thumbnails to between 16 and 96 pixels in the normal view. The default is 96 pixels.

This advanced option is user specific and the setting is saved in `options.bin` under the user folder, for example, in `C:\Users\\AppData\Local\Trimble\Tekla Structures\\UserSettings`. Restart Tekla Structures to activate the new value.

**See also**

[XS\\_COMPONENT\\_CATALOG\\_COMPACT\\_THUMBNAI\\_SIZE \(page 100\)](#)

## 5.37 XS\_CONCRETE\_PART\_NUMBERING\_PREFIX

**Category in [Advanced options dialog \(page 29\)](#): Numbering**

Use this advanced option to define a numbering prefix for concrete parts. The default value is `Concrete`.

This advanced option is model specific and the setting is saved in the options database.

**See also**

[XS\\_CONCRETE\\_PART\\_NUMBERING\\_START\\_NUMBER \(page 102\)](#)

## 5.38 XS\_CONCRETE\_PART\_NUMBERING\_START\_NUMBER

Category in [Advanced options dialog \(page 29\)](#): **Numbering**

Use this advanced option to define a start number for concrete beams, panels, and footings. The default value is 1.

If you change the value, the new start number only affects the parts that are created after the value has been changed.

This advanced option is model specific and the setting is saved in the options database.

**See also**

[XS\\_CONCRETE\\_PART\\_NUMBERING\\_PREFIX \(page 101\)](#)

## 5.39 XS\_CONNECTING\_SIDE\_MARK\_SYMBOL

Category in [Advanced options dialog \(page 29\)](#): **Marking - parts**

Use this advanced option to change the symbol for a connecting side mark in single-part, cast unit, and assembly drawings. By default, the side mark symbol is the symbol number 34 in the `xsteel.sym` symbol file. To change the symbol, set this advanced option to a different symbol number.

Symbol 34 in `xsteel.sym`:



To define a connecting side mark symbol for general arrangement drawings, set the advanced option [XS\\_GA\\_CONNECTING\\_SIDE\\_MARK\\_SYMBOL \(page 271\)](#) to the desired value in an initialization (.ini) file.

To define the minimum distance of the connecting part from the main part so that when the distance is larger than the value you enter, Tekla Structures draws a connecting side mark, set a value for the advanced option [XS\\_MIN\\_DISTANCE\\_FOR\\_CONNECTING\\_SIDE\\_MARK \(page 333\)](#).

This advanced option is model specific and the setting is saved in the options database.

## 5.40 XS\_CONNECT\_CONNECTION\_PARTS\_IN\_AUTOCONNECTION

Category in [Advanced options dialog \(page 29\)](#): **Components**

Set this advanced option to `FALSE` (default) if you do not want to connect the parts created by the connection in Autoconnection. If you set it to `TRUE`, the parts created by the connection are connected in Autoconnection.

This advanced option is model specific and the setting is saved in the options database.

## 5.41 XS\_CONNECT\_PLATE\_PROFILES\_IN\_AUTOCONNECTION

Category in [Advanced options dialog \(page 29\)](#): **Components**

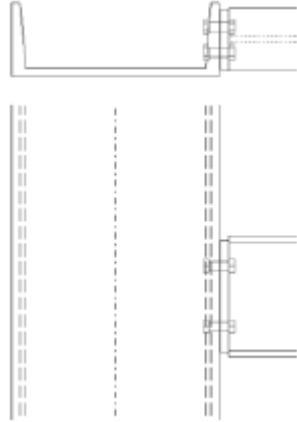

Set this advanced option to `TRUE` to enable **AutoConnection** for built-up members. If you set this advanced option to `FALSE`, Tekla Structures does not consider plates as members when you use AutoConnection. The default value is `TRUE`.

This advanced option is model specific and the setting is saved in the options database.

## 5.42 XS\_CONSIDER\_NEIGHBOUR\_PARTS\_IN\_HIDDEN

Category in [Advanced options dialog \(page 29\)](#): **Drawing properties**

Set this advanced option to `TRUE` (default) to draw parts behind neighbor using hidden lines. If you want to show parts behind neighboring parts using a visible line type, set this advanced option to `FALSE`.

| Setting   | Example of appearance in drawing  |
|---|---|
| Set to <code>TRUE</code> (default). Parts behind neighbor parts are drawn with hidden lines.  |   |
| Set to <code>FALSE</code> . Parts behind neighbor parts are drawn with the visible line type. |  |

This advanced option is model specific and the setting is saved in the options database.

### 5.43 `XS_CONSIDER_REBAR_HOOK_LOCATION_IN_CAST_UNIT_NUMBERING`

**This advanced option must be set in an initialization (.ini) file.**

Use this advanced option to define whether the location of the reinforcing bar hooks is taken into account in cast unit numbering or not.

The default value is `TRUE` in the `common` environment.

When this advanced option is set to `TRUE`, cast units that are otherwise identical will receive different numbers if the hooks in otherwise identical bars

point in different directions, or if the stirrup hooks are in different corners, for example.

Restart Tekla Structures after changing the value to activate the new setting.

## 5.44 XS\_CONSIDER\_REBAR\_NAME\_IN\_NUMBERING

**Category in [Advanced options dialog \(page 29\)](#): Concrete detailing**

Set this advanced option to `FALSE` to only take part names into account when numbering, not reinforcing bar names. The default value is `FALSE`.

This advanced option is model specific and the setting is saved in the options database.

## 5.45 XS\_CONTOUR\_PLATE\_POINT\_ON\_SAME\_LINE\_LIMIT

**Category in [Advanced options dialog \(page 29\)](#): Modeling properties**

Cleans away system component provided contour plate profile points in cases where points are on an almost straight line if the provided (middle) points deviate from the line at most as much as the value of this advanced option. The point is then so close to the line between the previous and next point that it is redundant and can be removed. Enter a decimal value. The default is 1.0 mm.

This advanced option is model specific and the setting is saved in the options database.

**See also**

[XS\\_CONTOUR\\_PLATE\\_POINT\\_ON\\_SAME\\_LINE\\_LIMIT\\_FOR\\_CLOSE\\_POINTS \(page 105\)](#)

## 5.46 XS\_CONTOUR\_PLATE\_POINT\_ON\_SAME\_LINE\_LIMIT\_FOR\_CLOSE\_POINTS

**Category in [Advanced options dialog \(page 29\)](#): Modeling properties**

Cleans away system component provided contour plate profile points in cases where points are on an almost straight line if the provided (middle) points deviate from the line at most as much as the value of this advanced option. The point is then so close to the line between the previous and next point that

it is redundant and can be removed. This advanced option is used if section point distances between two consecutive points are smaller than 10.0 mm. The default value for this advanced option is 0.1 mm.

This advanced option is model specific and the setting is saved in the options database.

**See also**

[XS\\_CONTOUR\\_PLATE\\_POINT\\_ON\\_SAME\\_LINE\\_LIMIT \(page 105\)](#)

## 5.47 XS\_CONVERSION\_ARBITRARY\_PROFILE\_MAPPING\_BY\_NAME\_MUST\_MATCH\_DIMENSIONS

**Category in [Advanced options dialog \(page 29\)](#): Modeling properties**

Set this advanced option to `TRUE` to require that the dimensions match the arbitrary profile mapping when mapping profile name to profile name in IFC object conversion. `FALSE` is the default value.

This advanced option is model specific and the setting is saved in the options database.

## 5.48 XS\_CONVERT\_OLD\_FORCE\_UNITS\_TO\_SI\_FROM

**Category in [Advanced options dialog \(page 29\)](#): Components**

Use this advanced option to define how to convert part and connection attribute tables when you open a Tekla Structures catalog prior to version 7.0.

You can use the following units: kg/T/N/daN/kN/lbf/kip, or a numerical value.

This advanced option is model specific and the setting is saved in the options database.

**Example**

To convert force units from kip to SI, set this advanced option to `kip`.

## 5.49 XS\_CONVERT\_OLD\_MOMENT\_UNITS\_TO\_SI\_FROM

**This advanced option must be set in an initialization (.ini) file.**

Use this advanced option to define how to convert part and connection attribute tables when you open a Tekla Structures catalog prior to version 7.0.

You can use the following units: kgm/Tm/Nm/daNm/kNm/lbf-in/lbf-ft/kip-in/kip-ft, or a numerical value.

### Example

To convert moment units from kip-ft to SI, set this advanced option to `kip-ft`.

## 5.50 XS\_COPY\_REVISIONS\_IN\_AUTOMATIC\_CLONING

**Category in [Advanced options dialog \(page 29\)](#): Drawing properties**

Set this advanced option to `TRUE` to copy the revisions and user-defined attributes to the automatically cloned drawings. `TRUE` is the default value.

This advanced option is model specific and the setting is saved in the options database.

## 5.51 XS\_COUNT\_ALL\_PARTS\_IN\_NSFS\_REPEATED\_PART\_MARK

**Category in [Advanced options dialog \(page 29\)](#): Marking - parts**

Use this advanced option to determine how the quantity of parts with merged part marks is shown. Set this advanced option to `TRUE` to count all parts. By default, this advanced option is set to `FALSE`.

This advanced option is role specific. When the type **SYSTEM(ROLE)** is in use, the default value is used. When the type **MODEL(ROLE)** or **DRAWING(ROLE)** is in use, you can change the value, which is then the same for all users in the current model.

### Example

When there are four or more identical stiffeners on both sides of a beam web, the mark is

- 4x1002BS if `XS_COUNT_ALL_PARTS_IN_NSFS_REPEATED_PART_MARK` is set to `TRUE`.
- 2x1002BS if `XS_COUNT_ALL_PARTS_IN_NSFS_REPEATED_PART_MARK` is set to `FALSE`.

## See also

[XS\\_COUNT\\_BOTH\\_PARTS\\_IN\\_NSFS\\_PART\\_MARK](#) (page 108)

## 5.52 XS\_COUNT\_BOTH\_PARTS\_IN\_NSFS\_PART\_MARK

Category in [Advanced options dialog \(page 29\)](#): **Marking - parts**

Use this advanced option to determine how the quantity of parts with merged part marks is shown. Set this advanced option to `TRUE` to count both parts. If you do not want to do this, set it to `FALSE` (default).

This advanced option is role specific. When the type **SYSTEM(ROLE)** is in use, the default value is used. When the type **MODEL(ROLE)** or **DRAWING(ROLE)** is in use, you can change the value, which is then the same for all users in the current model.

### Example

When there are two identical stiffeners on both sides of a beam web, the mark is

- **2x1002BS** if `XS_COUNT_BOTH_PARTS_IN_NSFS_PART_MARK=TRUE`.
- **1002BS** if `XS_COUNT_BOTH_PARTS_IN_NSFS_PART_MARK=FALSE`.

## See also

[XS\\_COUNT\\_ALL\\_PARTS\\_IN\\_NSFS\\_REPEATED\\_PART\\_MARK](#) (page 107)

Merge marks automatically

## 5.53 XS\_CREATE\_ALSO\_BIG\_HTML\_REPORT\_PICTURES

Category in [Advanced options dialog \(page 29\)](#): **Concrete detailing**

Set this advanced option to `TRUE` to create an additional set of pictures to the report folder. The pictures are three times larger in size compared to the ones in the HTML report. The default is `FALSE`.

This advanced option is user specific and the setting is saved in `options.bin` under the user folder, for example, in `C:\Users\\AppData\Local\Trimble\Tekla Structures\\UserSettings`. Restart Tekla Structures to activate the new value.

## 5.54 XS\_CREATE\_DRAWING\_PREVIEW\_AUTOMATICALLY

Category in [Advanced options dialog \(page 29\)](#): **Drawing properties**

Set this advanced option to `TRUE` to take a snapshot of a drawing each time the drawing is saved. The snapshot is saved in the `\drawing` folder under the current model folder. The snapshot is used as the default preview image for the drawing in the **Master Drawing Catalog**. If you set this advanced option to `FALSE`, the snapshot is not taken. The default value is `FALSE`.

This advanced option is user specific and the setting is saved in `options.bin` under the user folder, for example, in `C:\Users\\AppData\Local\Trimble\Tekla Structures\\UserSettings`. Restart Tekla Structures to activate the new value.

## 5.55 XS\_CREATE\_MISSING\_MARKS\_IN\_INTELLIGENT\_CLONING

Category in [Advanced options dialog \(page 29\)](#): **Marking - general**

Use to create all marks to a cloned drawing where new parts have been added. To create the marks, set the advanced option to `TRUE`. The default is `FALSE`.

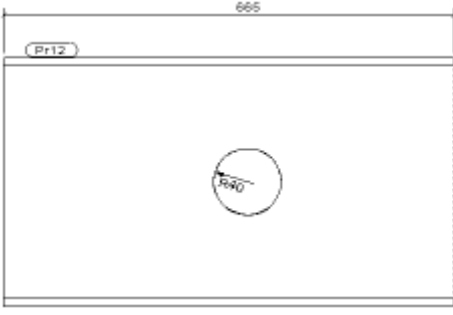
This advanced option is model specific and the setting is saved in the options database.

## 5.56 XS\_CREATE\_ROUND\_HOLE\_DIMENSIONS

Category in [Advanced options dialog \(page 29\)](#): **Dimensioning - parts**

Enter `TRUE` (default) to dimension the round hole center point in drawings.

| Setting | Example of appearance in drawings |
|---------|-----------------------------------|
| TRUE    |                                   |

| Setting | Example of appearance in drawings  |
|---------|--|
| FALSE   |  |

You get the automatic dimension to hole center only if the cut part profile is round.

This advanced option does not apply to automatic general arrangement drawing dimensions.

This advanced option is model specific and the setting is saved in the options database.

## 5.57 XS\_CREATE\_CONNECTION\_WHEN\_COPYING\_DRAWING\_VIEWS

**Category in [Advanced options dialog \(page 29\)](#): Drawing properties**

Set this advanced option to `TRUE` to link Icopied views to the original drawing. This means, for example, that when you delete a drawing from which you copied a view, Tekla Structures also deletes the copied view. The default value is `FALSE`.

This advanced option is role specific. When the type **SYSTEM(ROLE)** is in use, the default value is used. When the type **MODEL(ROLE)** or **DRAWING(ROLE)** is in use, you can change the value, which is then the same for all users in the current model.

For more information about using `XS_CREATE_CONNECTION_WHEN_COPYING_DRAWING_VIEWS`, see the following support article: [What does the XS\\_CREATE\\_CONNECTION\\_WHEN\\_COPYING\\_DRAWING\\_VIEWS advanced option do?](#)

## 5.58 XS\_DRAWING\_CREATE\_SNAPSHOT\_ON\_DRAWING\_CREATION

Category in [Advanced options dialog \(page 29\)](#): **Drawing properties**

Set this advanced option to `TRUE` to create a snapshot of a drawing at the same time that you create the drawing. If you set this option to `TRUE`, you no longer need to open a drawing to save it to create the snapshot. The default value is `FALSE`.

This advanced option is model specific and the setting is saved in the options database.

### See also

[XS\\_DRAWING\\_SNAPSHOT\\_CREATION \(page 218\)](#)

## 5.59 XS\_CREATE\_VIEW\_FROM\_MODEL\_OLD\_WAY

Category in [Advanced options dialog \(page 29\)](#): **Drawing views**

Use this advanced option to specify which values Tekla Structures uses for drawing view boundaries in general arrangement drawings. This only affects views created from the model.

If you set this advanced option to `FALSE` (default), the drawing view boundary values are based on the current work area x and y coordinates of a model view.

When this advanced option is set to `TRUE`, the drawing view boundary values are based on the entire model view, ignoring the work area settings.

In both cases the depth values are based on the model view display depth values.

This advanced option is model specific and the setting is saved in the options database.

## 5.60 XS\_CS\_CHAMFER\_DIVIDE\_ANGLE

Category in [Advanced options dialog \(page 29\)](#): **Speed and accuracy**

Use this advanced option to change the angles dividing a cross section chamfer. The default value is `30.0` degrees.

---

**NOTE** A very small value will cause profile roundings not to be visible.

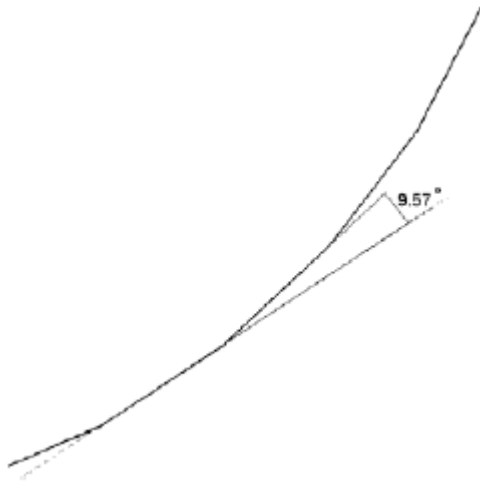
Using this advanced option affects the rounding radius for parts that have high accuracy (for example parts in drawings and in DWG export).

---

This advanced option is model specific and the setting is saved in the options database.

### Example

`XS_CS_CHAMFER_DIVIDE_ANGLE=10.0`



---

**TIP** When you want to export B-rep as exact solids in the IFC export, you need to set the advanced option [XS\\_EXPORT\\_BREP\\_AS\\_EXACT\\_SOLID \(page 259\)](#) to `TRUE`. To get smoother edges to the export, set `XS_CS_CHAMFER_DIVIDE_ANGLE` to 10.

---

### See also

[XS\\_SOLID\\_USE\\_HIGHER\\_ACCURACY \(page 482\)](#)

## 5.61 XS\_CURVED\_AXIS\_PLACE

Category in [Advanced options dialog \(page 29\)](#): Profiles

By default, Tekla Structures calculates the length of curved parts along the center axis. Use this advanced option to define the position of this axis as a ratio.

Tekla Structures calculates the location of the axis using the formula  $h=H/2.0*\text{ratio}$ . The default value is zero (0). Define the ratio as 1.0 to calculate

length along the upper flange. Define the ratio as -1.0 to define the length along the lower flange.

This value is used in report and drawing templates.

## 5.62 XS\_CUSTOM\_COMPONENT\_DECIMALS

**Category in [Advanced options dialog \(page 29\)](#): Speed and accuracy**

Use this advanced option to adjust the number of decimals for custom components. This setting only works with parametric variables whose **Value type** is **Text**. Other parameter types follow the normal accuracy settings.

The default value is 3.

## 5.63 XS\_CUT\_SYMBOL\_FONT

**Category in [Advanced options dialog \(page 29\)](#): Drawing properties**

This advanced option affects only old drawings created when Tekla Structures did not have font settings available in the object properties. This advanced option is used only for converting fonts when opening old drawings.

Use this advanced option to define the font for the section symbol. The default value is Arial. If you do not specify a font, Tekla Structures uses the default font defined for XS\_DEFAULT\_FONT.

This advanced option is model specific and the setting is saved in the options database.

**See also**

[XS\\_DEFAULT\\_FONT \(page 116\)](#)

## 5.64 XS\_CYCLIC\_SOLVER\_MAX\_LOOPS

**Category in [Advanced options dialog \(page 29\)](#): Modeling properties**

Use this advanced option to define how many cycles Tekla Structures makes to solve the dependencies in custom components. Enter a number for the amount of cycle loops. The default is 2.

This advanced option is model specific and the setting is saved in the options database.

# 6 Advanced options - D

## 6.1 DAK\_BMPPATH

**This advanced option must be set in an initialization (.ini) file.**

This advanced option is system specific and is read from `teklastructures.ini`. Generally, there is no need to modify system-specific settings. Do not modify them if you are not an administrator.

Use to point to the folder for bitmap files used in

- custom components
- user-defined attributes (`objects.inp` file)
- profile catalog
- some system components
- custom line types, dimension line arrow types and leader line arrow types

This advanced option is by default defined in the `teklastructures.ini` file. The default definition is

```
set DAK_BMPPATH=%XSDATADIR%\bitmaps\;%XSBIN%Env\bitmaps\
```

where the first folder is for customer-specific and user-defined bitmaps and the second for Tekla Structures system-specific bitmaps.

### Example

If you want to define a folder of your own, use a semicolon to separate the path, see an example below.

```
set DAK_BMPPATH=%DAK_BMPPATH%;H:\Tekla\bitmaps\
```

## 6.2 XSDATADIR

**This advanced option must be set in an initialization (.ini) file.**

This advanced option is system specific and is read from `teklastructures.ini`. It can also be set locally, see your environment `.ini` file (`env_<environment_name>.ini`). Generally, there is no need to modify system-specific settings. Do not modify them if you are not an administrator.

`XSDATADIR` is defined in the `teklastructures.ini` file. It points to a location where the installation installs the environment files and folders.

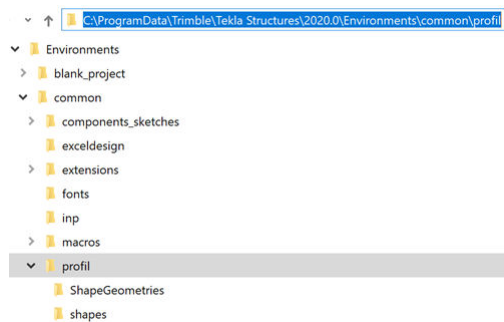
### Example

By default, this advanced option is set as follows: `set XSDATADIR=C:\ProgramData\Trimble\Tekla Structures\<version>\`

## 6.3 XS\_DEFAULT\_BREP\_PATH

**This advanced option must be set in an initialization (.ini) file.**

Use to define the location of the default shapes that are available in the shape catalog when you create a new model. By default, this advanced option is set to point to the `common` environment, and the definition files of the default shapes are read from the `\Shapes` and `\ShapeGeometries` folders under the `\profil` folder.



The definition files of the shapes that you use from this location when you create items in a model are copied to the model folder.

### Example

To have Tekla Structures read the default shapes from the German environment, set this advanced option as follows:

```
set XS_DEFAULT_BREP_PATH=%XSDATADIR%\environments\germany\
```

or

```
set XS_DEFAULT_BREP_PATH=C:\ProgramData\Trimble\Tekla  
Structures\<<version>\environments\germany\
```

## 6.4 XS\_DEFAULT\_ENVIRONMENT

**This advanced option must be set in an initialization (.ini) file.**

Use this advanced option together with [XS\\_DEFAULT\\_LICENSE \(page 118\)](#) and [XS\\_DEFAULT\\_ROLE \(page 120\)](#) for bypassing the **Tekla Structures - Setup** dialog (the sign in dialog). Set these advanced options in a separate .ini file, and point to that file using the `-I` (capital i) parameter in the Tekla Structures shortcut. The parameter is used to point to a file which needs to be read **before** other initialization files.

---

**WARNING** If roles are used in your environment, both `XS_DEFAULT_ENVIRONMENT` and `XS_DEFAULT_ROLE` should be set for the startup to work correctly. `XS_DEFAULT_LICENSE` is optional.

---

**For example:**

```
set XS_DEFAULT_ENVIRONMENT=C:\ProgramData\Trimble\Tekla  
Structures\<<version>\Environments\germany\env_Germany.ini
```

**See also**

[XS\\_DEFAULT\\_ROLE \(page 120\)](#)

[XS\\_DEFAULT\\_LICENSE \(page 118\)](#)

## 6.5 XS\_DEFAULT\_FONT

**Category in [Advanced options dialog \(page 29\)](#): Model views**

Use this advanced option to specify the default font in the model and drawings, for example, when creating grids, dimensions, and mark texts. Enter the name of any Windows font, for example, Arial. The default value is Segoe UI semibold.

This advanced option affects only old drawings created when Tekla Structures did not have font settings available in the object properties. This advanced option is used only for converting fonts when opening old drawings.

For old drawings, if any of the following advanced options are not set, or if font conversion is needed in drawings, Tekla Structures uses `XS_DEFAULT_FONT`:

- XS\_CUT\_SYMBOL\_FONT
- XS\_DIMENSION\_FONT
- XS\_GRID\_TEXT\_FONT
- XS\_MARK\_FONT
- XS\_VIEW\_TITLE\_FONT
- XS\_WELD\_FONT

For example, if XS\_MARK\_FONT has no value set and you open an old model with a newer version of Tekla Structures, XS\_DEFAULT\_FONT is used when converting marks to the new model database.

This advanced option is user specific and the setting is saved in options.bin under the user folder, for example, in C:\Users\\AppData\Local\Trimble\Tekla Structures\\UserSettings. Restart Tekla Structures to activate the new value.

### See also

[XS\\_DEFAULT\\_FONT\\_SIZE \(page 117\)](#)

[XS\\_CUT\\_SYMBOL\\_FONT \(page 113\)](#)

[XS\\_DIMENSION\\_FONT \(page 130\)](#)

[XS\\_GRID\\_TEXT\\_FONT \(page 276\)](#)

[XS\\_MARK\\_FONT \(page 318\)](#)

[XS\\_VIEW\\_TITLE\\_FONT \(page 545\)](#)

[XS\\_WELD\\_FONT \(page 549\)](#)

## 6.6 XS\_DEFAULT\_FONT\_SIZE

**Category in [Advanced options dialog \(page 29\)](#): Model views**

Use this advanced option to set the default font size when modeling. The default value is 12.

This advanced option is user specific and the setting is saved in options.bin under the user folder, for example, in C:\Users\\AppData\Local\Trimble\Tekla Structures\\UserSettings. Restart Tekla Structures to activate the new value.

## 6.7 XS\_DEFAULT\_HEIGHT\_FOR\_CALCULATED\_DRAWING\_SIZE

Category in [Advanced options dialog \(page 29\)](#): Drawing properties

---

**NOTE** No longer used when defining drawing layouts.

---

Use this advanced option to change the default height for the calculated drawing size. Enter the value in millimeters. The default value is 287.

This advanced option is model specific and the setting is saved in the options database.

### See also

[XS\\_DEFAULT\\_WIDTH\\_FOR\\_CALCULATED\\_DRAWING\\_SIZE \(page 121\)](#)

## 6.8 XS\_DEFAULT\_KEEP\_ONLINE\_LICENSE\_CHECKBOX

Use this advanced option to set the default value of the **Yes, keep the license** checkbox in the **Exit** dialog.

**This advanced option must be set in an initialization (.ini) file.** For example, you can set this advanced option in `user.ini`, `teklastructures.ini`, or `bypass.ini`.

When this advanced option is set to `TRUE`, the **Yes, keep the license** checkbox is selected, which keeps the subscription license reserved. The default value is `TRUE`.

When this advanced option is set to `FALSE`, the **Yes, keep the license** checkbox is not selected by default.

When this advanced option is not set, the checkbox is selected if you selected it in the previous Tekla Structures session.

---

**NOTE** After you change the value of this advanced option, you must restart Tekla Structures for the change to take effect.

---

## 6.9 XS\_DEFAULT\_LICENSE

**This advanced option must be set in an initialization (.ini) file.**

Use this advanced option to set the default online subscription or license for a user role. The advanced option can be used either in a role-specific initialization file (`role_*.ini`) for setting the default online subscription or

license for a selected role, or in a separate initialization file together with [XS\\_DEFAULT\\_ROLE \(page 120\)](#) and [XS\\_DEFAULT\\_ENVIRONMENT \(page 116\)](#) for bypassing the **Tekla Structures - Setup** dialog (the sign in dialog).

---

**WARNING** If roles are used in your environment, both `XS_DEFAULT_ENVIRONMENT` and `XS_DEFAULT_ROLE` should be set for the startup to work correctly. `XS_DEFAULT_LICENSE` must be set if there are more than one subscription or license type available.

---

Possible values are:

- CARBON
- GRAPHITE
- DIAMOND
- FULL
- TEKLASTRUCTURES\_PRIMARY
- STEEL\_DETAILING
- REBAR\_DETAILING
- PRECAST\_CONCRETE\_DETAILING
- CONSTRUCTION\_MODELING
- DRAFTER
- ENGINEERING
- PROJECT\_VIEWER
- PRODUCTION\_PLANNER
- EDUCATIONAL
- DEVELOPER

**See also**

[XS\\_DEFAULT\\_ROLE \(page 120\)](#)

[XS\\_DEFAULT\\_ENVIRONMENT \(page 116\)](#)

## 6.10 XS\_DEFAULT\_MODEL\_TEMPLATE

**This advanced option must be set in an initialization (.ini) file.**

Use this advanced option to define the model template that is used as the default when you create a new model in **File --> New**.

Define a value for the advanced option in the role initialization files, available in your environment folders. Store the default model template to the folder defined by the advanced option [XS\\_MODEL\\_TEMPLATE\\_DIRECTORY](#) (page 338).

If this advanced option is not set, the model template that was used last is displayed in **File --> New**.

### Example

```
set XS_DEFAULT_MODEL_TEMPLATE=EngineeringTemplate
```

## 6.11 XS\_DEFAULT\_ROLE

**This advanced option must be set in an initialization (.ini) file.**

Use this advanced option together with [XS\\_DEFAULT\\_LICENSE](#) (page 118) and [XS\\_DEFAULT\\_ENVIRONMENT](#) (page 116) for bypassing the **Tekla Structures - Setup** dialog (the sign in dialog). Set these advanced options in a separate .ini file, and point to that file using the `-I` (capital i) parameter in the Tekla Structures shortcut. The parameter is used to point to a file which needs to be read **before** other initialization files.

---

**WARNING** If roles are used in your environment, both `XS_DEFAULT_ENVIRONMENT` and `XS_DEFAULT_ROLE` should be set for the startup to work correctly. `XS_DEFAULT_LICENSE` is optional.

---

### For example:

```
set XS_DEFAULT_ROLE=C:\ProgramData\Trimble\Tekla  
Structures\<version>\Environments\USA\Role_Imperial_Steel_Det  
ailing.ini
```

### See also

[XS\\_DEFAULT\\_LICENSE](#) (page 118)

[XS\\_DEFAULT\\_ENVIRONMENT](#) (page 116)

## 6.12 XS\_DEFAULT\_UNICODE\_FONT\_DRAWING\_PRINTING

**Category in [Advanced options dialog](#) (page 29) Printing**

Use this advanced option to define the default font that is used when the selected font for printing does not contain all of the multibyte characters used in the text. When a default font is defined, the characters are shown correctly even without embedding fonts. By default, the font is set to Arial Unicode MS. This font might not be installed on your machine by default, and you may need

to install it. You can also define another font that contains the characters you need and that you have installed on your machine.

This advanced option is user specific and the setting is saved in `options.bin` under the user folder, for example, in `C:\Users\\AppData\Local\Trimble\Tekla Structures\\UserSettings`. Restart Tekla Structures to activate the new value.

## 6.13 XS\_DEFAULT\_WIDTH\_FOR\_CALCULATED\_DRAWING\_SIZE

Category in [Advanced options dialog \(page 29\)](#): Drawing properties

---

**NOTE** No longer used when defining drawing layouts.

---

Use this advanced option to change the default width for the calculated drawing size. Enter the value in millimeters. The default is 410.

This advanced option is model specific and the setting is saved in the options database.

**See also**

[XS\\_DEFAULT\\_HEIGHT\\_FOR\\_CALCULATED\\_DRAWING\\_SIZE \(page 117\)](#)

## 6.14 XS\_DELETE\_UNNECESSARY\_DG\_FILES

Category in [Advanced options dialog \(page 29\)](#): Drawing properties

Use the `XS_DELETE_UNNECESSARY_DG_FILES` advanced option to define whether unnecessary drawing files are automatically deleted. To automatically delete the drawing files that are no longer used, set the advanced option to `TRUE` (default). If you do not want to delete the unnecessary drawing files, set the advanced option to `FALSE`.

By default, the `.dg` files are deleted after 7 days. Use the `XS_DELETE_UNNECESSARY_DG_FILES_SAFETY_PERIOD` advanced option to define how long the drawing files are kept before they are deleted.

This advanced option is model specific and the setting is saved in the options database.

**See also**

[XS\\_DELETE\\_UNNECESSARY\\_DG\\_FILES\\_SAFETY\\_PERIOD \(page 122\)](#)

## 6.15 XS\_DELETE\_UNNECESSARY\_DG\_FILES\_SAFETY\_PERIOD

Category in [Advanced options dialog \(page 29\)](#): Drawing properties

---

**WARNING** We recommend that you do not modify the value of this advanced option unless you are an experienced Tekla Structures user.

---

Use the `XS_DELETE_UNNECESSARY_DG_FILES_SAFETY_PERIOD` advanced option to set the time frame after which unnecessary drawing files (.dg) are deleted. Enter the required time frame in days, for example, 5. By default, `XS_DELETE_UNNECESSARY_DG_FILES_SAFETY_PERIOD` is set to 7 days.

Note the following:

- The time of the day is also taken into account, not only the creation date.
- The .dg files will be deleted when the model is saved.
- If you set the value to 0, the unnecessary .dg files are deleted immediately.

---

**NOTE** Do not use 0 or other short periods in multi-user mode. Drawing files created by other users during your session may get deleted.

---

This advanced option is model specific and the setting is saved in the options database.

**See also**

[XS\\_DELETE\\_UNNECESSARY\\_DG\\_FILES \(page 121\)](#)

## 6.16 XS\_DELETE\_UNNECESSARY\_REFMODEL\_FILES\_SAFETY\_PERIOD

Category in [Advanced options dialog \(page 29\)](#): Multi-user

Use this advanced option to define the time frame after which unnecessary reference model files are deleted. Enter the required time frame in days. This advanced option is set to 7 days by default. This advanced option is used together with another advanced option `XS_REFERENCE_MODEL_KEEP_VERSIONS_COUNT`, which cleans up the unnecessary reference model revisions. Also have a look at the help page for [XS\\_REFERENCE\\_MODEL\\_KEEP\\_VERSIONS\\_COUNT \(page 410\)](#).

- In multiuser model, files are kept until the safety period has passed.
- Note that this advanced option has no effect on shared models. In shared model, files are kept until write out.

---

**WARNING** We recommend that you do not modify the value of this advanced option unless you are an experienced Tekla Structures user.

---

This advanced option is model specific and the setting is saved in the options database.

## 6.17 XS\_DETAIL\_BOUNDARY\_RADIUS

Category in [Advanced options dialog \(page 29\)](#): Drawing properties

Use this advanced option to define a fixed size for circle-shaped detail boundaries in detail marks.

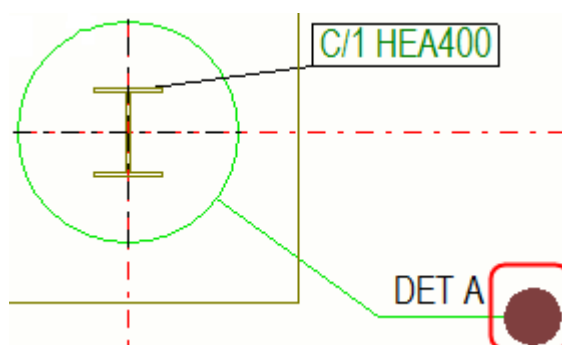
Enter a numeric value in millimeters for the radius. By default, no size is set.

This advanced option is model specific and the setting is saved in the options database.

## 6.18 XS\_DETAIL\_MARK\_REFERENCE\_SYMBOL

Category in [Advanced options dialog \(page 29\)](#): Drawing properties

If you have set **Symbol** to **Custom** in the detail mark properties, Tekla Structures uses the value that you have set to this advanced option to define the symbol to be used. For example, if you enter `xsteel@3`, Tekla Structures uses the symbol number 3 in the `xsteel.sym` symbol file.



This advanced option is model specific and the setting is saved in the options database.

## 6.19 XS\_DETAIL\_SYMBOL\_REFERENCE

Category in [Advanced options dialog \(page 29\)](#): Drawing properties

You can move drawing views from one drawing to another. This advanced option sets the reference text for detail marks for detail views moved to another drawing. You can enter free text, user-defined attributes (%UDA\_NAME%, %USERDEFINED.UDA\_NAME%), or template attributes (%ATTRIBUTE\_NAME%).

If you enter user-defined attributes or template attributes, use single % characters around them in the **Advanced options** dialog. %DRAWING\_TITLE% is the default value, and %TITLE% gives the same result. If you use these attributes, the detail mark gets the target drawing name that has been entered in the **Name** field in the drawing properties dialog. If you enter %TITLE1%, %TITLE2%, or %TITLE3%, the mark gets the text from the **Title 1 - Title 3** fields in the target drawing properties. You can also use the format %DR\_TITLE1%, %DR\_TITLE2%, and %DR\_TITLE3% to do the same.

| General arrangement drawing properties |  |                  |
|--|--|------------------|
| Save                                   | Load   | PCD_Ceiling_Plan |
| <b>%DRAWING_TITLE%</b>                 | <input checked="" type="checkbox"/> Name:    | GA 17            |
| <b>%TITLE1%</b>                        | <input checked="" type="checkbox"/> Title 1: |                  |
| <b>%TITLE2%</b>                        | <input checked="" type="checkbox"/> Title 2: |                  |
| <b>%TITLE3%</b>                        | <input checked="" type="checkbox"/> Title 3: |                  |

This advanced option is model specific and the setting is saved in the options database.

**See also**

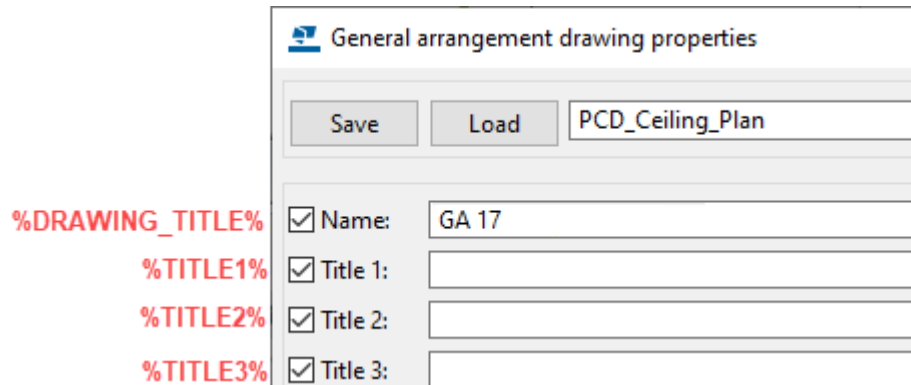
[XS\\_DETAIL\\_VIEW\\_REFERENCE \(page 124\)](#)

## 6.20 XS\_DETAIL\_VIEW\_REFERENCE

Category in [Advanced options dialog \(page 29\)](#): Drawing properties

You can move drawing views from one drawing to another. This advanced option sets the reference text for detail view labels for details moved to another drawing. You can enter free text, user-defined attributes (%UDA\_NAME%, %USERDEFINED.UDA\_NAME%), or template attributes (%ATTRIBUTE\_NAME%).

If you enter user-defined attributes or template attributes, use single % characters around them in the **Advanced options** dialog. The %DRAWING\_TITLE% attribute is the default value, and the %TITLE% attribute gives the same result. If you use these attributes, the view label gets the source drawing name entered in the **Name** field in the drawing properties dialog. If you enter %TITLE1%, %TITLE2%, or %TITLE3%, the view label gets the text from the **Title 1 - Title 3** fields in source drawing properties. You can also use the format %DR\_TITLE1%, %DR\_TITLE2%, and %DR\_TITLE3% to do the same.



This advanced option is model specific and the setting is saved in the options database.

**See also**

[XS\\_DETAIL\\_SYMBOL\\_REFERENCE](#) (page 123)

## 6.21 XS\_DGN\_EXPORT\_USE\_LOCAL\_ID

**Category in [Advanced options dialog](#) (page 29): Export**

Set this advanced option to `TRUE` to enable the use of local ID numbers in 3D DGN export. Every exported part gets a unique ID number starting from 1. The ID is saved as a user-defined attribute, and the same ID will be used in consequent exports. The default value is `TRUE`.

This advanced option is model specific and the setting is saved in the options database.

## 6.22 XS\_DIAGNOZE\_AND\_REPAIR\_WRONG\_UDA\_TYPE

Category in [Advanced options dialog \(page 29\)](#): Speed and accuracy

Set this advanced option to `TRUE` to enable the detecting and fixing of the incorrect user-defined attribute (UDA) value types in **Diagnose & repair --> Diagnose and change attribute definitions**.

The default value is `TRUE`.

If you edit the `object.inp` file by changing the UDA value type after the values are set, the UDA values of the incorrect types are not reported correctly, and you cannot change them.

When `XS_DIAGNOZE_AND_REPAIR_WRONG_UDA_TYPE` is set to `TRUE`, use can use **Diagnose & repair --> Diagnose and change attribute definitions** to detect and repair the incorrect UDA value types by reverting the value types to the default values.

---

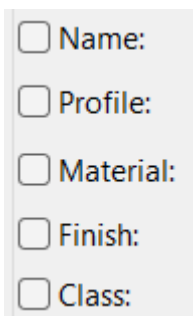
**WARNING** We recommend that you do not modify the value of this advanced option unless you are an experienced Tekla Structures user.

---

## 6.23 XS\_DIALOG\_ENABLE\_STATE

**This advanced option must be set in an initialization (.ini) file.**

Use this advanced option to clear all checkboxes in a dialog. `TRUE` is the default value.



A screenshot of a dialog box with a light gray background. It contains five rows, each with an unchecked checkbox followed by a label: "Name:", "Profile:", "Material:", "Finish:", and "Class:".

## 6.24 XS\_DIMENSION\_ALL\_BOLT\_GROUPS\_SEPARATELY

Category in [Advanced options dialog \(page 29\)](#): Dimensioning - bolts

Set this advanced option to `TRUE` to prevent Tekla Structures from combining bolt group dimensions. To combine bolt group dimensions, set it to `FALSE` (default).

This advanced option is model specific and the setting is saved in the options database.

## 6.25 XS\_DIMENSION\_DECIMAL\_SEPARATOR

Category in [Advanced options dialog \(page 29\)](#): Dimensioning - general

Use this advanced option to define the character to be used as a decimal separator in dimensions and level marks in drawings. The default value is a full stop (.).

`XS_DIMENSION_DECIMAL_SEPARATOR = <separator character>`.

This advanced option is model specific and the setting is saved in the options database.

---

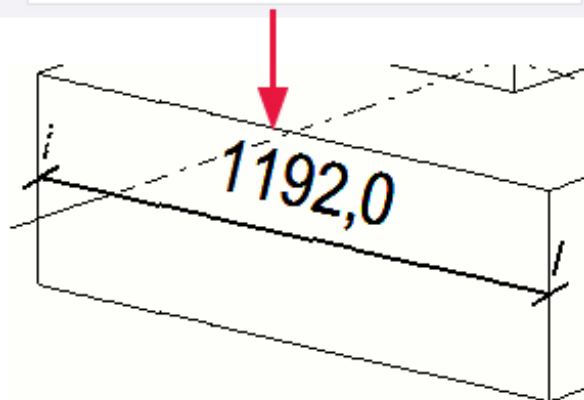
**NOTE** With this advanced option, you cannot change the separators in dimension objects in drawings but not in part marks.

---

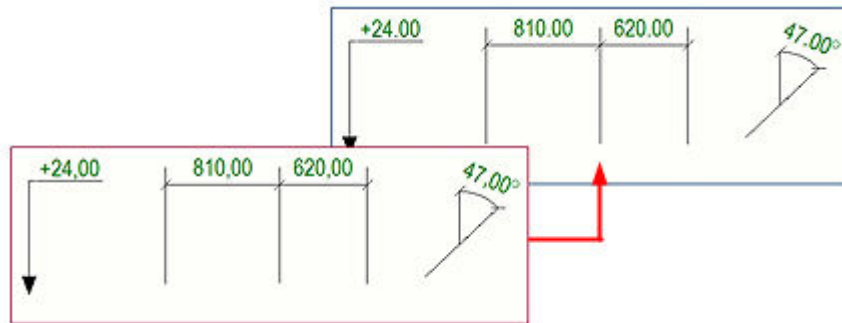
### Example

In the following example, the dimension mark contains a comma when the dimension settings in the dimension properties are set as follows, and the advanced option is set to `XS_DIMENSION_DECIMAL_SEPARATOR=,`

|           |           |
|-----------|-----------|
| Units     | automatic |
| Precision | 0.00      |
| Format    | ###,#     |



In the following example, the separator was first a period and was then changed to a comma.



## 6.26 XS\_DIMENSION\_DIGIT\_GROUPING\_CHARACTER

**Category in [Advanced options dialog \(page 29\)](#): Dimensioning - general**

Use this advanced option to specify which separator character to use in large dimension values. For example, entering a comma (,) results in 154321 becoming 154,321. If you do not specify a character, Tekla Structures uses a space in dimensions when you set **Digit grouping** to **Yes** in **Dimension properties (Use grouping** in GA drawings). By default, no value is set.

This advanced option is model specific and the setting is saved in the options database.

**See also**

[XS\\_DIMENSION\\_DIGIT\\_GROUPING\\_COUNT \(page 128\)](#)

## 6.27 XS\_DIMENSION\_DIGIT\_GROUPING\_COUNT

**Category in [Advanced options dialog \(page 29\)](#): Dimensioning - general**

Use this advanced option to specify the number of digits after which a space (default) or a [separator character \(page 128\)](#) will be inserted in dimension values. If you set this advanced option to 3 (default), 154321 becomes 154 321.

This advanced option is model specific and the setting is saved in the options database.

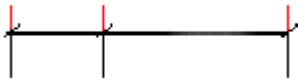
**See also**

[XS\\_DIMENSION\\_DIGIT\\_GROUPING\\_CHARACTER \(page 128\)](#)

## 6.28 XS\_DIMENSION\_EXTENSION\_LINE\_AWAY\_FACTOR

Category in [Advanced options dialog \(page 29\)](#): Dimensioning - general

Use this advanced option to adjust the length of the dimension extension lines that are facing away from the dimension points. Define the length as a factor for the dimension text size. The default is 1.0 (text height \* 1.0).



This option is applied only when the option **Short extension line** is set to **Yes** or **On grid lines only** in the dimension properties.

This advanced option is model specific and the setting is saved in the options database.

**See also**

[XS\\_DIMENSION\\_EXTENSION\\_LINE\\_TOWARD\\_FACTOR \(page 129\)](#)

## 6.29 XS\_DIMENSION\_EXTENSION\_LINE\_ORIGIN\_OFFSET

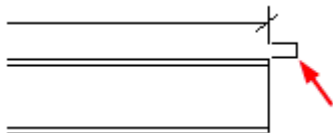
Category in [Advanced options dialog \(page 29\)](#): Dimensioning - general

This advanced option works only if you have set **Short dimensions** lines to **No** in the dimension properties.

Use this advanced option to specify the distance between the dimension extension line origin and the start of the extension line (extension line origin offset). The default value is 1.

This advanced option is model specific and the setting is saved in the options database.

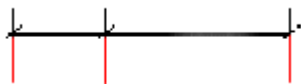
In the following example, extension line origin offset is defined:



## 6.30 XS\_DIMENSION\_EXTENSION\_LINE\_TOWARD\_FACTOR

Category in [Advanced options dialog \(page 29\)](#): **Dimensioning - general**

Use this advanced option to adjust the length of the dimension extension lines that are facing towards the dimension points. Define the length as a factor for the dimension text size. The default is 1.5 (text height \* 1.5).



This advanced option is applied only when the option **Short extension line** is set to **Yes** or **On grid lines only** in the dimension properties.

This advanced option is model specific and the setting is saved in the options database.

**See also**

[XS\\_DIMENSION\\_EXTENSION\\_LINE\\_AWAY\\_FACTOR \(page 129\)](#)

## 6.31 XS\_DIMENSION\_FONT

Category in [Advanced options dialog \(page 29\)](#): **Drawing properties**

This advanced option affects only old drawings created when Tekla Structures did not have font settings available in the object properties. This advanced option is used only for converting fonts when opening old drawings.

Use this advanced option to specify the font for dimension text. The default value is Arial. If you do not specify a font, Tekla Structures uses the default font defined for `XS_DEFAULT_FONT` instead.

This advanced option is model specific and the setting is saved in the options database.

**See also**

[XS\\_DEFAULT\\_FONT \(page 116\)](#)

## 6.32 XS\_DIMENSION\_GROUPING\_COUNT\_SEPARATOR

Category in [Advanced options dialog \(page 29\)](#): Dimensioning - general

Use this advanced option to define the symbol that is displayed between the quantity and the automatic tag text in grouped dimensions. The default is x.

This advanced option is model specific and the setting is saved in the options database.

Note that the advanced option

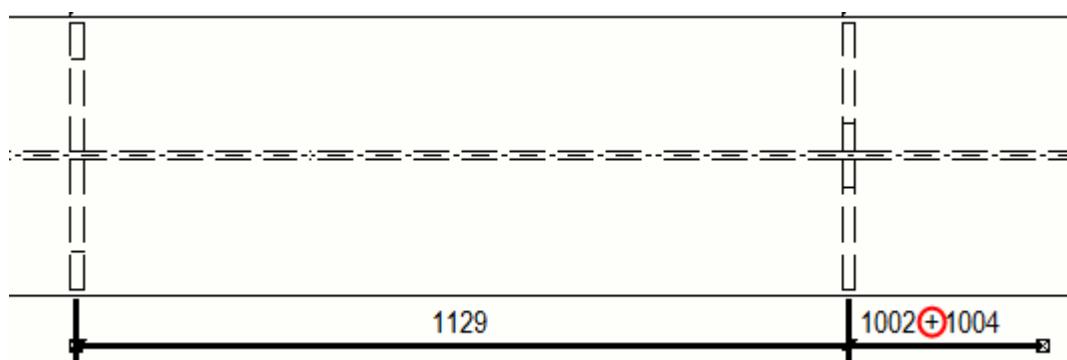
`XS_DIMENSION_GROUPING_COUNT_SEPARATOR` is intended for grouped dimensions that are defined in the dimensioning settings for Integrated dimensioning. For other dimension marks, use the advanced option [XS\\_DIMENSION\\_MARK\\_MULTIPLIER \(page 132\)](#).

## 6.33 XS\_DIMENSION\_MARK\_CONNECTOR

Category in [Advanced options dialog \(page 29\)](#): Dimensioning - general

Use this advanced option to change the character that is used in dimension tags when the dimension tag displays the properties of the different objects dimensioned, for example, different part positions, and one dimension line is used. A plus sign is used by default.

This advanced option is model specific and the setting is saved in the options database.

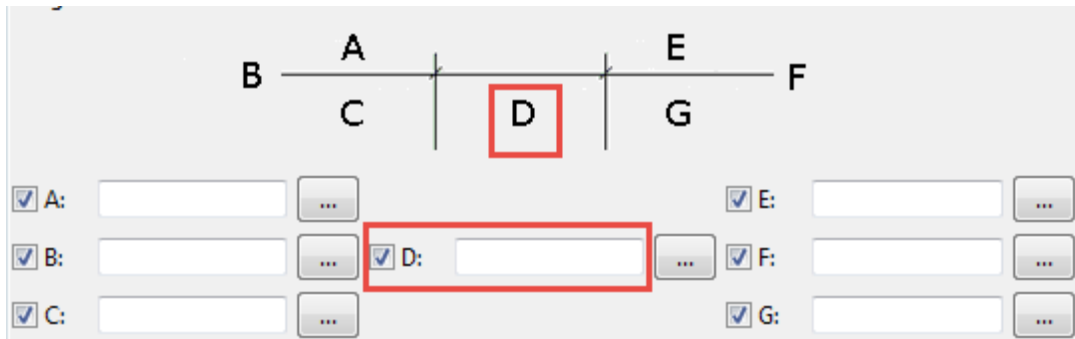


## 6.34 XS\_DIMENSION\_MARK\_CREATE\_MIDDLE\_TAG\_ALWAYS

**This advanced option must be set in an initialization (.ini) file.**

Since Tekla Structures version 2017, the dimension middle tag functionality has been extended to show by default object information also when the

dimension start and end are pointing to different objects. In previous versions, the middle tag content was only shown when the start and end were pointing to the same object. The previous functionality can be taken into use by setting this advanced option to `FALSE`.



## 6.35 XS\_DIMENSION\_MARK\_MULTIPLIER

**Category in [Advanced options dialog \(page 29\)](#): Dimensioning - general**

Use this advanced option to change the multiplication sign when there are several parts that have the same mark content, for example, HEA400 + 2 x HEA300. This advanced option has effect only if you have selected **Part count** in the dimension properties. `x` is the default value.

This advanced option is model specific and the setting is saved in the options database.

## 6.36 XS\_DIMENSION\_PART\_MARK\_CONTENT\_IN\_ASSEMBLY

**Category in [Advanced options dialog \(page 29\)](#): Dimensioning - parts**

Use this advanced option to define the content of the part mark placed next to the dimension line label in assembly drawings. Give any combination of the switches listed below.

The available switches are:

- PROFILE
- MATERIAL
- SIZE
- LENGTH
- COMMENT
- WPDIST (distance between work points)

- GR\_L (gross length of the part)

---

**TIP** If you want to display the part mark content in the same order as the switches, set `XS_DIMENSION_PART_MARK_CONTENT_STRICT_POSITION` to `TRUE`.

---

This advanced option is role-specific. When you change the value, it changes from system- to model-specific, and its value is the same for all users in the current model.

### Example

```
XS_DIMENSION_PART_MARK_CONTENT_IN_ASSEMBLY=PROFILE_AND_LENGTH
.  
XS_DIMENSION_PART_MARK_CONTENT_IN_ASSEMBLY=PROFILE_AND_GR_L
```

### See also

[XS\\_DIMENSION\\_PART\\_MARK\\_CONTENT\\_IN\\_SINGLE \(page 133\)](#)

[XS\\_DIMENSION\\_PART\\_MARK\\_CONTENT\\_STRICT\\_POSITION \(page 134\)](#)

## 6.37 XS\_DIMENSION\_PART\_MARK\_CONTENT\_IN\_SINGLE

Category in [Advanced options dialog \(page 29\)](#): **Dimensioning - parts**

Use this advanced option to define the content of the part mark that is placed next to the dimension line label in single-part drawings. Give any combination of the switches listed below.

The available switches are:

- PROFILE
- MATERIAL
- SIZE
- LENGTH
- COMMENT
- WPDIST (distance between work points)
- GR\_L (gross length of the part)

---

**TIP** If you want to display the part mark content in the same order as the switches, set `XS_DIMENSION_PART_MARK_CONTENT_STRICT_POSITION` to `TRUE`.

---

This advanced option is model specific and the setting is saved in the options database.

### Example

```
XS_DIMENSION_PART_MARK_CONTENT_IN_SINGLE=PROFILE_AND_MATERIAL  
XS_DIMENSION_PART_MARK_CONTENT_IN_SINGLE=PROFILE_AND_GR_L
```

### See also

[XS\\_DIMENSION\\_PART\\_MARK\\_CONTENT\\_IN\\_ASSEMBLY](#) (page 132)

[XS\\_DIMENSION\\_PART\\_MARK\\_CONTENT\\_STRICT\\_POSITION](#) (page 134)

## 6.38 XS\_DIMENSION\_PART\_MARK\_CONTENT\_STRICT\_POSITION

Category in [Advanced options dialog \(page 29\)](#): Dimensioning - parts

Use this advanced option for controlling the order of the switches in `XS_DIMENSION_PART_MARK_CONTENT_IN_ASSEMBLY` and `XS_DIMENSION_PART_MARK_CONTENT_IN_SINGLE` and thus the order of the part mark content in assembly and single-part drawings.

When set to `TRUE`, you can freely select the order of the switches in `XS_DIMENSION_PART_MARK_CONTENT_IN_ASSEMBLY` and `XS_DIMENSION_PART_MARK_CONTENT_IN_SINGLE`, and the part mark content follows the order of the switches. The default value is `FALSE`.

This advanced option is model specific and the setting is saved in the options database.

### See also

[XS\\_DIMENSION\\_PART\\_MARK\\_CONTENT\\_IN\\_ASSEMBLY](#) (page 132)

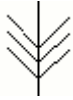
[XS\\_DIMENSION\\_PART\\_MARK\\_CONTENT\\_IN\\_SINGLE](#) (page 133)

## 6.39 XS\_DIMENSION\_PLATE\_SIDE\_MARK\_SYMBOL\_CENTER

Category in [Advanced options dialog \(page 29\)](#): Dimensioning - general

Use this advanced option to define the symbol Tekla Structures uses in center plate side marks. This symbol can be set for a dimension in the dimension properties. For this advanced option, Tekla Structures uses a symbol defined in the `dimension_marks.sym` symbol file usually located in the folder `..\Tekla Structures\<version>\environments\common\symbols\`.

The default value is 1.



This advanced option is model specific and the setting is saved in the options database.

---

**TIP** You can change the symbol used in the plate side mark by adding the desired symbol in the `dimension_marks.sym` file in Symbol Editor, and entering the numeric value of the new symbol as the value for this advanced option. Save the modified symbol file in the current model folder. For more information about handling symbols in Tekla Structures drawings, see Add symbols in drawings.

---

## 6.40 XS\_DIMENSION\_PLATE\_SIDE\_MARK\_SYMBOL\_LEFT

Category in [Advanced options dialog \(page 29\)](#): Dimensioning - general

Use this advanced option to define the symbol that Tekla Structures uses in the left plate side marks. This symbol can be set for a dimension in the dimension properties. For this advanced option, Tekla Structures uses a symbol defined in the `dimension_marks.sym` symbol file usually located in the folder `..\Tekla Structures\<version>\environments\common\symbols\`.

The default value is 0.



This advanced option is model specific and the setting is saved in the options database.

---

**TIP** You can change the symbol used in the plate side mark by adding the desired symbol in the `dimension_marks.sym` file in Symbol Editor, and entering the numeric value of the new symbol as the value for this advanced option. Save the modified `dimension_marks.sym` symbol file in the current model folder. For more information about handling symbols in Tekla Structures drawings, see Add symbols in drawings.

---

## 6.41 XS\_DIMENSION\_PLATE\_SIDE\_MARK\_SYMBOL\_RIGHT

Category in [Advanced options dialog \(page 29\)](#): Dimensioning - general

Use this advanced option to define the symbol that Tekla Structures uses in right plate side marks. This symbol can be set for a dimension in the dimension properties. For this advanced option, Tekla Structures uses a symbol defined in the `dimension_marks.sym` symbol file usually located in the folder `..\Tekla Structures\<<version>\environments\common\symbols\`.

The default value is 2.



This advanced option is model specific and the setting is saved in the options database.

---

**TIP** You can change the symbol used in the plate side mark by adding the desired symbol in the `dimension_marks.sym` file in Symbol Editor, and entering the numeric value of the new symbol as the value for this advanced option. Save the modified `dimension_marks.sym` symbol file in the current model folder. For more information about handling symbols in Tekla Structures drawings, see [Add symbols in drawings](#).

---

## 6.42 XS\_DIMENSION\_SKEWED\_BOLTS\_IN\_PART\_PLANE\_IN\_SINGLE\_DRAWINGS

Category in [Advanced options dialog \(page 29\)](#): Dimensioning - bolts

Set this advanced option to `TRUE` to dimension bolts perpendicular to the part plane in single-part drawings. If you do not want to do this, set it to `FALSE`. The default value is `TRUE`.

This advanced option is model specific and the setting is saved in the options database.

## 6.43 XS\_DISABLE\_ADVANCED\_OPTIONS

**This advanced option must be set in an initialization (.ini) file.**

You can disable the **Advanced options** dialog so that the advanced options can be edited only in the initialization files.

To disable the dialog, set this advanced option to `TRUE`. If you do not want to disable the dialog, set it to `FALSE`. The default value is `FALSE`.

## 6.44 XS\_DISABLE\_ANALYSIS\_AND\_DESIGN

**Category in [Advanced options dialog \(page 29\)](#): Analysis and design**

Set this advanced option to `TRUE` to disable and hide the following analysis and design tools from the Tekla Structures user interface:

- The commands from the **Analysis & design** ribbon tab
- The parts' analysis property dialogs
- The **Analysis** tab from the parts' user-defined attributes

The default value is `FALSE`.

This advanced option is user specific and the setting is saved in `options.bin` under the user folder, for example, in `C:\Users\\AppData\Local\Trimble\Tekla Structures\\UserSettings`. Restart Tekla Structures to activate the new value.

## 6.45 XSR\_DISABLE\_ASSEMBLY\_UDA\_INHERITANCE

**This advanced option must be set in an initialization (.ini) file.**

Use this advanced option in templates and reports to report the assembly UDA values. If `XSR_DISABLE_ASSEMBLY_UDA_INHERITANCE` is set to `FALSE`, and the assembly does not have a UDA value, the UDA value is taken from the assembly main part.

This advanced option is also used in the IFC4 export. The IFC4 export uses the UDA value from the main part of the assembly if the assembly does not have it defined. You can disable this functionality using `XSR_DISABLE_ASSEMBLY_UDA_INHERITANCE`. If you set the advanced option to `TRUE`, and if UDA is not set on the assembly level, the UDA is left empty or it uses assembly level's default value. If you set it to `FALSE`, the UDA is inherited from the main part.

## 6.46 XS\_DISABLE\_CANCEL\_DIALOG\_FOR\_SAVE\_NUMBERING\_SAVE

Category in [Advanced options dialog \(page 29\)](#): **Numbering**

Use this advanced option to revert to the old numbering functionality that offers no option to cancel numbering before the second save is made. The default value is `FALSE`.

This advanced option is model specific and the setting is saved in the options database.

## 6.47 XS\_DISABLE\_CLASSIFIER\_FOR\_MODIFIED\_PARTS

Category in [Advanced options dialog \(page 29\)](#): **Drawing properties**

Use this advanced option to disable the detailed object level settings check for modified parts. When you change part properties in a model after you have defined the detailed object level settings, part representation and mark content are updated in general arrangement drawings unless you have set this advanced option to `TRUE`.

To disable the check for modified parts, set the advanced option to `TRUE`.

To enable the check for modified parts, set the advanced option to `FALSE`. The default value is `FALSE`.

This advanced option is user specific and the setting is saved in `options.bin` under the user folder, for example, in `C:\Users\\AppData\Local\Trimble\Tekla Structures\\UserSettings`. Restart Tekla Structures to activate the new value.

## 6.48 XS\_DISABLE\_DRAWING\_PLOT\_DATE

Category in [Advanced options dialog \(page 29\)](#): **Drawing properties**

Set this advanced option to `TRUE` to disable the print date information in drawings. The print date information is shown in the **Document manager** column **Output date**. By default, the advanced option is set to `TRUE`. Set to `FALSE` to have the print date information.

---

**NOTE** Disabling the print date helps to avoid possible conflicts when working with multi-user models in situations where a user modifies drawings while another user prints the same drawings.

---

This advanced option is model specific and the setting is saved in the options database.

## 6.49 XS\_DISABLE\_PARTIAL\_REFRESH

**Category in [Advanced options dialog \(page 29\)](#): Model views**

Set this advanced option to `TRUE` to disable partial refreshing of OpenGL windows. This advanced option is for older ATI graphics cards. If you do not want to disable the partial refresh, set the advanced option to `FALSE`.

This advanced option is user specific and the setting is saved in `options.bin` under the user folder, for example, in `C:\Users\\AppData\Local\Trimble\Tekla Structures\\UserSettings`. Restart Tekla Structures to activate the new value.

## 6.50 XS\_DISABLE\_REBAR\_MODELING

**Category in [Advanced options dialog \(page 29\)](#): Analysis and design**

If you set this advanced option to `TRUE`, Tekla Structures removes the reinforcing bar modeling module, even if your subscription includes this module. The subscription always includes this module, except in the Viewer configuration. The default is `FALSE`.

This advanced option is user specific and the setting is saved in `options.bin` under the user folder, for example, in `C:\Users\\AppData\Local\Trimble\Tekla Structures\\UserSettings`. Restart Tekla Structures to activate the new value.

## 6.51 XS\_DISABLE\_TEKLA\_ASSISTANT

**This advanced option must be set in an initialization (.ini) file.**

If you previously installed the Trimble Assistant for Tekla side pane and no longer want to use it, use this advanced option to disable the side pane.

To disable the Trimble Assistant for Tekla side pane, set this advanced option to `TRUE`. The default value is `FALSE`.

## 6.52 XS\_DISABLE\_TEMPLATE\_DOUBLE\_CLICK

**Category in [Advanced options dialog \(page 29\)](#): Drawing properties**

By default, you are allowed to edit drawing templates and table layouts. It is possible to prevent the template and table layout editing by setting the advanced option `XS_DISABLE_TEMPLATE_DOUBLE_CLICK` to `TRUE`. When you do this:

- You cannot start editing templates or table layouts by double-clicking a template in a drawing. Instead, the **Drawing properties** dialog will be displayed.
- You cannot start editing templates or table layout by right-clicking a template in a drawing and selecting the corresponding commands.

This advanced option is user specific and the setting is saved in `options.bin` under the user folder, for example, in `C:\Users\\AppData\Local\Trimble\Tekla Structures\\UserSettings`. Restart Tekla Structures to activate the new value.

## 6.53 XS\_DISABLE\_VIEW\_CENTERING\_ASSEMBLY

**Category in [Advanced options dialog \(page 29\)](#): Drawing views**

Use this advanced option to left-align and/or top-align assembly drawing views at drawing creation. Enter any of the following values:

HOR = align views horizontally (to left)

VER = align views vertically (to top)

TRUE = align views horizontally and vertically (to top left)

HOR VER = align views horizontally and vertically (to top left, enter both values separated by a space)

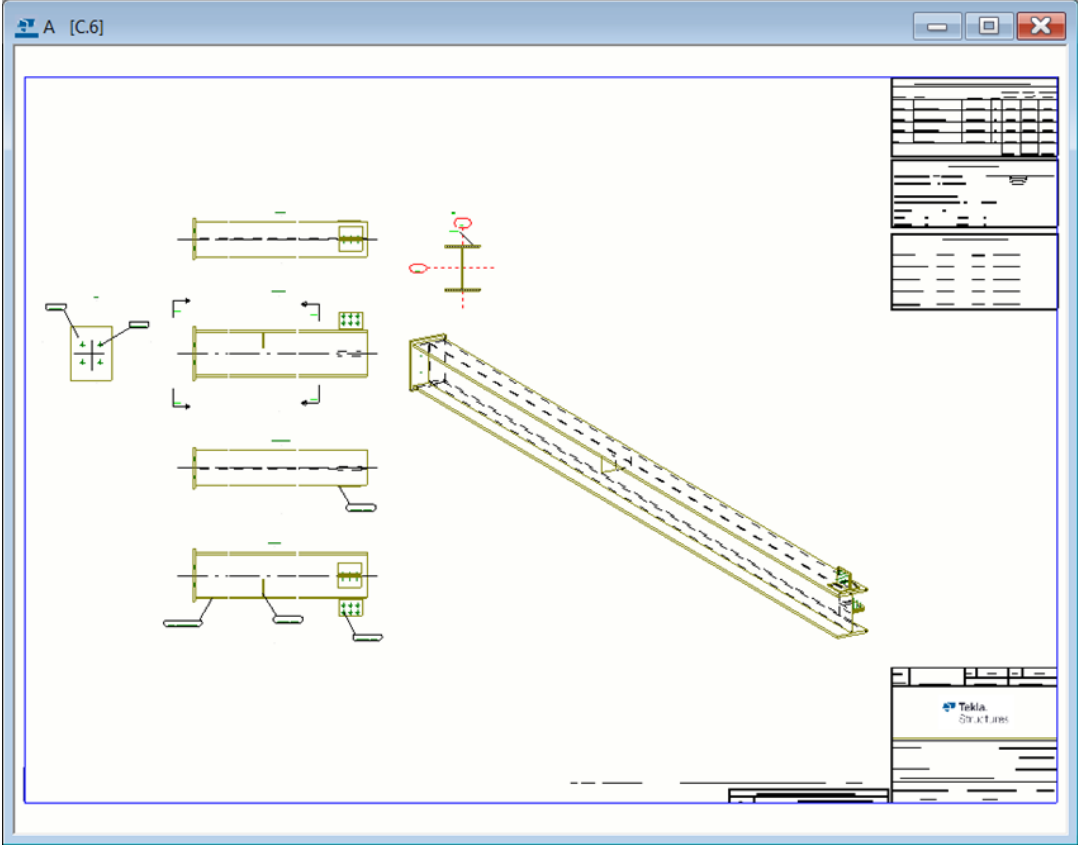
FALSE = create centered views

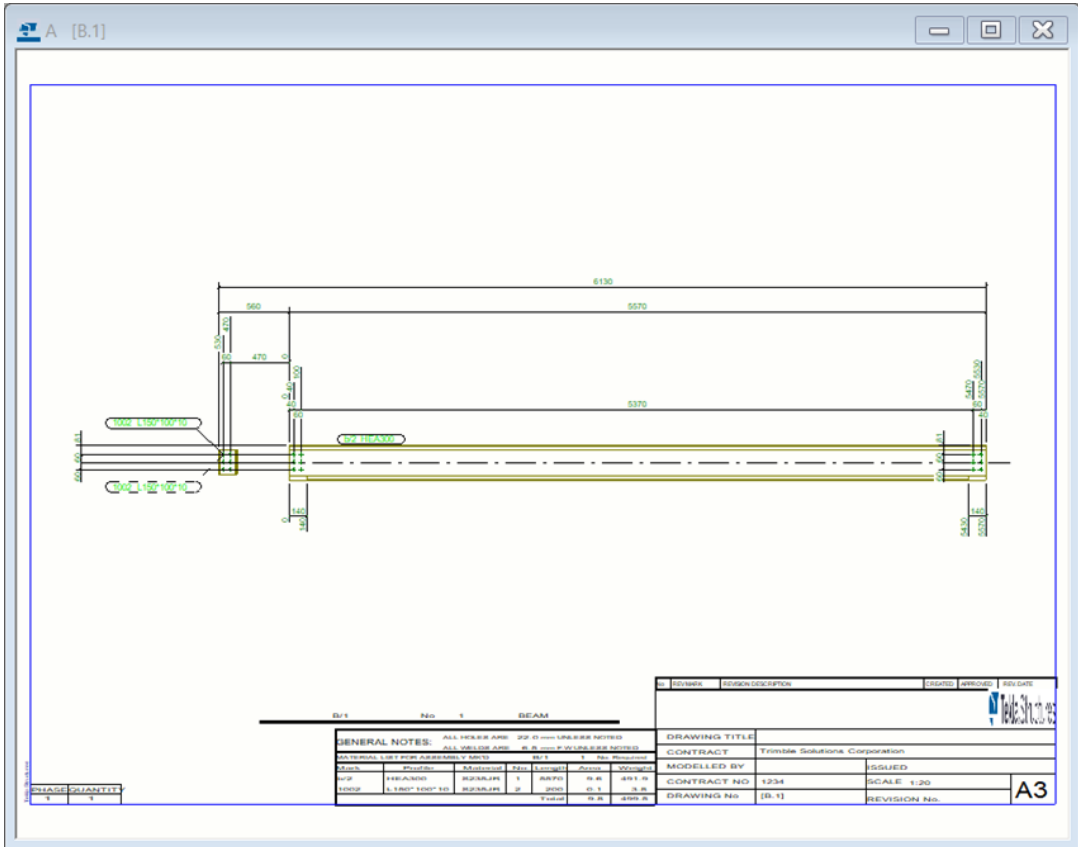
empty = create centered views

This advanced option is model specific and the setting is saved in the options database.

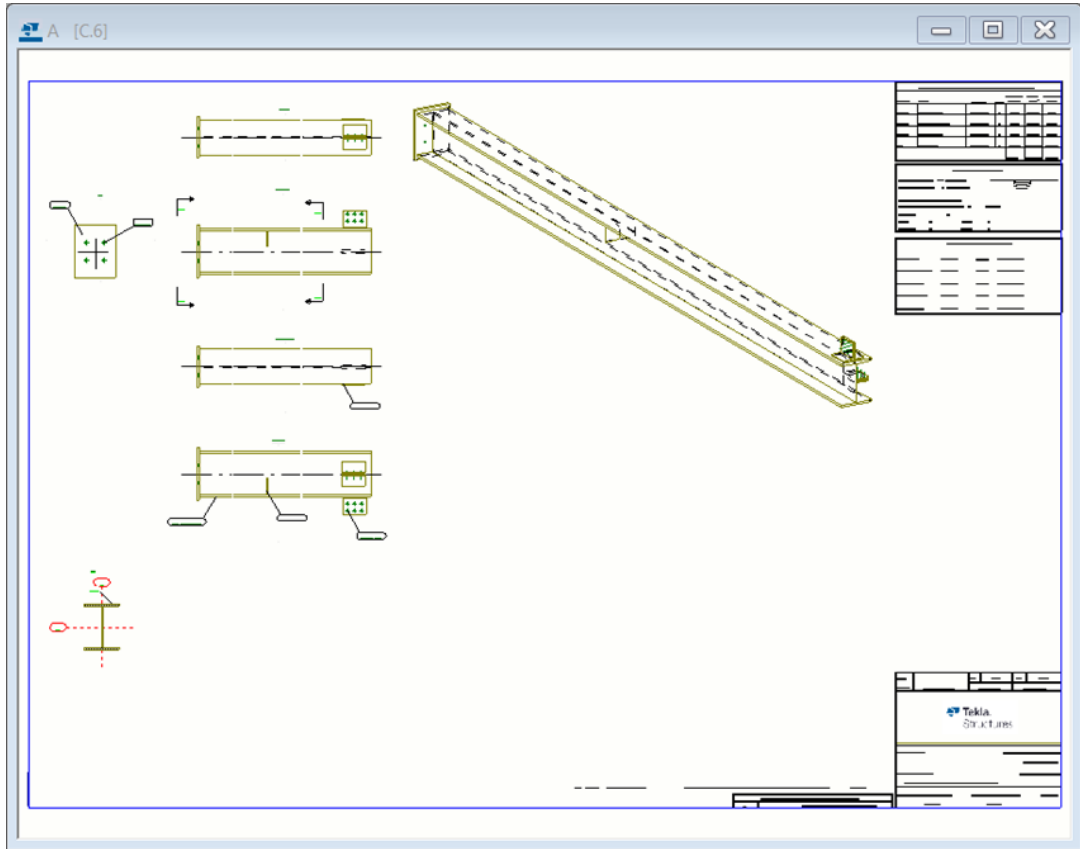
**Examples**

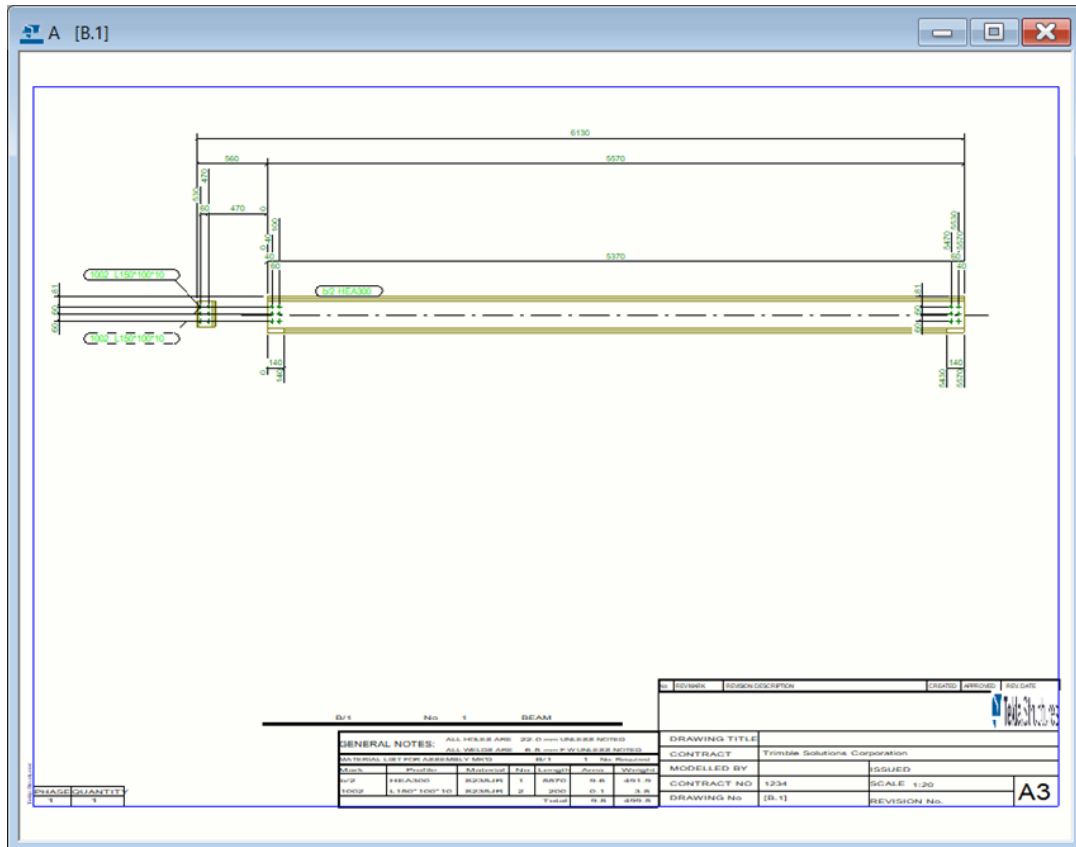
No values are used, views are centered:





Value HOR VER used, views aligned to top and left:





## See also

[XS\\_DISABLE\\_VIEW\\_CENTERING\\_GA](#) (page 144)

[XS\\_DISABLE\\_VIEW\\_CENTERING\\_MULTI](#) (page 145)

[XS\\_DISABLE\\_VIEW\\_CENTERING\\_SINGLE](#) (page 145)

## 6.54 XS\_DISABLE\_VIEW\_CENTERING\_GA

### Category in **Advanced options dialog (page 29): Drawing views**

Use this advanced option to left-align or top-align GA drawing views at drawing creation. Enter any of the following values:

HOR = align views horizontally (to left)

VER = align views vertically (to top)

TRUE = align views horizontally and vertically (to top left)

HOR VER = align views horizontally and vertically (to top left, enter both values separated by a space)

FALSE = create centered views

empty = create centered views

This advanced option is model specific and the setting is saved in the options database.

**See also**

[XS\\_DISABLE\\_VIEW\\_CENTERING\\_MULTI](#) (page 145)

[XS\\_DISABLE\\_VIEW\\_CENTERING\\_SINGLE](#) (page 145)

[XS\\_DISABLE\\_VIEW\\_CENTERING\\_ASSEMBLY](#) (page 140)

## 6.55 XS\_DISABLE\_VIEW\_CENTERING\_MULTI

**Category in [Advanced options dialog \(page 29\)](#): Drawing views**

Use this advanced option to left-align or top-align multidrawing views at drawing creation. Enter any of the following values:

HOR = align views horizontally (to left)

VER = align views vertically (to top)

TRUE = align views horizontally and vertically (to top left)

HOR VER = align views horizontally and vertically (to top left, enter both values separated by a space)

FALSE = create centered views

empty = create centered views

This advanced option is model specific and the setting is saved in the options database.

**See also**

[XS\\_DISABLE\\_VIEW\\_CENTERING\\_SINGLE](#) (page 145)

[XS\\_DISABLE\\_VIEW\\_CENTERING\\_GA](#) (page 144)

[XS\\_DISABLE\\_VIEW\\_CENTERING\\_ASSEMBLY](#) (page 140)

## 6.56 XS\_DISABLE\_VIEW\_CENTERING\_SINGLE

**Category in [Advanced options dialog \(page 29\)](#): Drawing views**

Use this advanced option to left-align or top-align single-part drawing views at drawing creation. Enter any of the following values:

HOR = align views horizontally (to left)

VER = align views vertically (to top)

TRUE = align views horizontally and vertically (to top left)

HOR VER = align views horizontally and vertically (to top left, enter both values separated by a space)

FALSE = create centered views

empty = create centered views

This advanced option is model specific and the setting is saved in the options database.

### See also

[XS\\_DISABLE\\_VIEW\\_CENTERING\\_GA \(page 144\)](#)

[XS\\_DISABLE\\_VIEW\\_CENTERING\\_MULTI \(page 145\)](#)

[XS\\_DISABLE\\_VIEW\\_CENTERING\\_ASSEMBLY \(page 140\)](#)

## 6.57 XS\_DISPLAY\_DIMENSIONS\_WHEN\_CREATING\_OBJECTS

**Category in [Advanced options dialog \(page 29\)](#): Model views**

Use this advanced option to define whether dimensions and dimension lines are displayed when model objects are created.

When set to `TRUE` (default), Tekla Structures displays the dimensions and dimension lines.

Dimensions and dimension lines are displayed when you create a new model object and pick the start point and the intermediate or end points for the object.

If you set this advanced option to `FALSE`, the dimensions are not displayed.

This advanced option is user specific and the setting

is saved in `options.bin` under the user folder,

for example, in `C:\Users\<user>\AppData\Local\Trimble\Tekla Structures\<version>\UserSettings`. Restart Tekla Structures to activate the new value.

### See also

[XS\\_DISPLAY\\_DIMENSIONS\\_WHEN\\_SELECTING\\_REBARS \(page 147\)](#)

[XS\\_DISPLAY\\_DIMENSIONS\\_WHEN\\_SELECTING\\_OBJECTS \(page 146\)](#)

## 6.58 XS\_DISPLAY\_DIMENSIONS\_WHEN\_SELECTING\_OBJECTS

Category in [Advanced options dialog \(page 29\)](#): Model views

Use this advanced option to define whether dimensions and dimension lines are displayed when you select a column or a beam in the model.

When this advanced option is set to `TRUE` (default), Tekla Structures displays the dimensions and dimension lines.

Dimensions and dimension lines are displayed when you select a single object, or when you select multiple objects by picking them. The dimensions are not displayed if a command is running, or if you select multiple objects with area selection.

When this advanced option is set to `FALSE`, the dimensions and dimension lines are not displayed.

This advanced option is user specific and the setting is saved in `options.bin` under the user folder, for example, in `C:\Users\\AppData\Local\Trimble\Tekla Structures\\UserSettings`. Restart Tekla Structures to activate the new value.

---

**NOTE** When direct modification is switched on, the standard object dimensions and dimension lines are always hidden, regardless of these settings. Only the direct modification dimensions are then shown. This makes it easier to know which dimensions can be edited.

---

**See also**

[XS\\_DISPLAY\\_DIMENSIONS\\_WHEN\\_SELECTING\\_REBARS \(page 147\)](#)

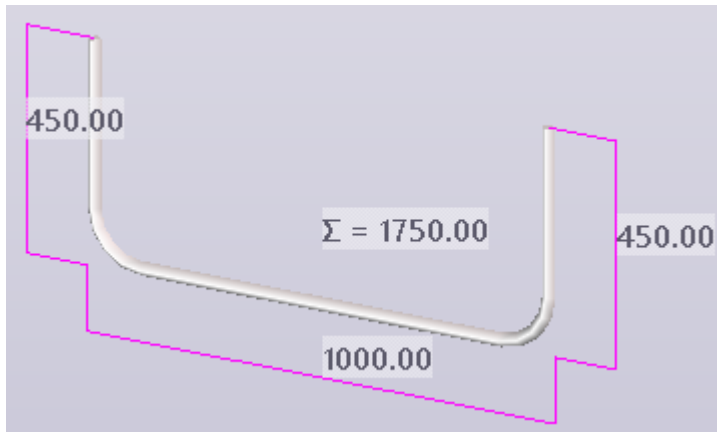
[XS\\_DISPLAY\\_DIMENSIONS\\_WHEN\\_CREATING\\_OBJECTS \(page 146\)](#)

## 6.59 XS\_DISPLAY\_DIMENSIONS\_WHEN\_SELECTING\_REBARS

Category in [Advanced options dialog \(page 29\)](#): Model views

Use this advanced option to define whether dimensions and dimension lines are displayed in the model when you select a reinforcing bar, bar group, or rebar set.

When this advanced option is set to `TRUE` (default), Tekla Structures displays the leg dimensions, total bar length ( $\Sigma$ ), and dimension lines. For bar groups, including rebar sets, the dimensions of the first bar and the last bar are displayed. If you select individual bars in rebar sets, the dimensions of all the selected rebar set bars are displayed. Dimensions are not displayed for curved or circular bars, or for hooks.



For single reinforcing bars and bar groups, these dimensions are only displayed when direct modification is switched off. When direct modification is switched on, these dimensions are always hidden, and the direct modification dimensions are shown instead. This makes it easier to know which dimensions can be edited.

Dimensions and dimension lines are displayed when you select a single object, or when you select multiple objects by picking them. The dimensions are not displayed if a command is running, or if you select multiple objects with area selection.

When this advanced option is set to `FALSE`, the dimensions and dimension lines are not displayed.

This advanced option is user specific and the setting is saved in `options.bin` under the user folder, for example, in `C:\Users\\AppData\Local\Trimble\Tekla Structures\\UserSettings`.

---

**TIP** To quickly switch between the values `TRUE` and `FALSE`, go to the **Rebar** tab on the ribbon and click **Visibility** --> **Rebar dimensions**, or use the keyboard shortcut **Alt+6**.

---

#### See also

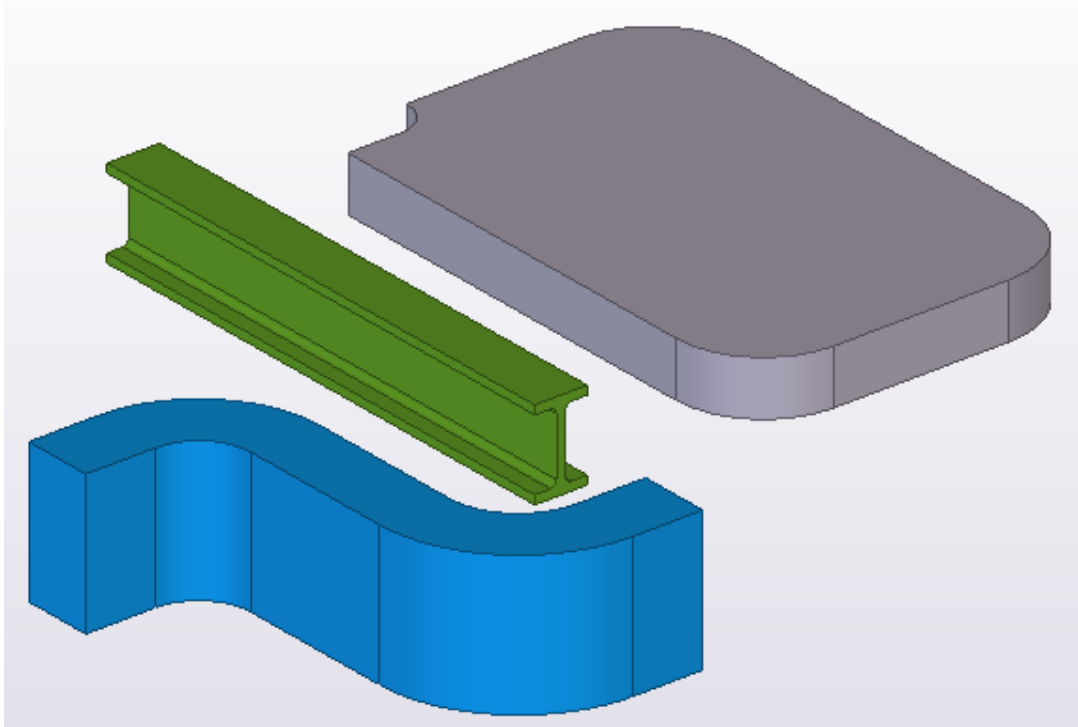
[XS\\_DISPLAY\\_DIMENSIONS\\_WHEN\\_SELECTING\\_OBJECTS \(page 146\)](#)

## 6.60 XS\_DISPLAY\_FILLET\_EDGES

Category in [Advanced options dialog \(page 29\)](#): **Model views**

Use this advanced option to show or hide fillet edges in model views. The default value is `TRUE`, which shows the fillet edges. If you do not want to show the fillet edges, set this advanced option to `FALSE`.

Fillet edges are lines that define the boundary between flat faces and curved faces in the model. Examples of model objects containing fillet edges are profiles with curved fillets, slabs or contour plates with curved chamfers, and curved polybeams.



The fillet edges in certain profiles are shown in model views only when you show parts with high accuracy.

This advanced option is user specific, and the setting is saved in `options.bin` under the user folder. Reopen the model to activate the new value.

#### See also

[XS\\_SOLID\\_USE\\_HIGHER\\_ACCURACY \(page 482\)](#)

## 6.61 XS\_DISPLAY\_RPC\_COMPONENT\_CONSOLE\_WINDOW

Category in [Advanced options dialog \(page 29\)](#): Components

Set this advanced option to `TRUE` to display the command prompt window when adding or modifying a system component in the model. The command prompt window contains information about adding or modifying the component. The default value is `FALSE`.

This advanced option is user specific and the setting is saved in `options.bin` under the user folder, for example, in `C:\Users\<user>\AppData\Local\Trimble\Tekla`

Structures\<>version>\UserSettings. Restart Tekla Structures to activate the new value.

## 6.62 XS\_DISPLAY\_ZERO\_INCHES

Category in [Advanced options dialog \(page 29\)](#): Imperial units

Set this advanced option to `TRUE` to display zero inches. The default value is `FALSE`.

Using this advanced option affects the results you get with the inquire tool, and the dimensions in the model and drawings. This advanced option affects when the distance is less than one full inch.

### Example:

`TRUE`: 0 1/4"

`FALSE`: 1/4"

This advanced option is model specific and the setting is saved in the options database.

## 6.63 XS\_DISTANT\_OBJECT\_FINDER\_TOLERANCE

Category in [Advanced options dialog \(page 29\)](#): Model views

Use this advanced option to set the minimum distance from the nearest part for the reporting of distant objects. The object must be located outside this distance for it to be listed by the **Find distant objects** tool.

The distance is measured from the nearest part. Enter the value in meters. The default value is 100.

This advanced option is model specific and the setting is saved in the options database.

## 6.64 XS\_DO\_NOT\_CREATE\_ASSEMBLY\_DRAWINGS\_FOR\_CONCRETE\_PARTS

Category in [Advanced options dialog \(page 29\)](#): Drawing properties

Use this advanced option to control the creation of single-part and assembly drawings from concrete parts.

To enable the creation of single-part and assembly drawings, set the advanced option to `FALSE`.

To disable the creation of single-part and assembly drawings, set the advanced option to `TRUE` (default).

This advanced option is model specific and the setting is saved in the options database.

## 6.65 XS\_DO\_NOT\_CREATE\_ASSEMBLY\_DRAWINGS\_FOR\_LOOSE\_PARTS

Category in [Advanced options dialog \(page 29\)](#): **Drawing properties**

Use this advanced option for defining whether assembly drawings are created for assemblies that contain only one part.

When you set this advanced option to `TRUE`, Tekla Structures does not create assembly drawings for single-part assemblies. The default value is `FALSE`.

---

**NOTE** This advanced option does not consider assemblies with only one part but with reinforcement, workshop bolts, or studs attached to it as a loose part, and you can create assembly drawings for such assemblies even though the advanced option is set to `TRUE`.

---

This advanced option is model specific and the setting is saved in the options database.

## 6.66 XS\_DO\_NOT\_CREATE\_BOLT\_MARKS\_IN\_ALL\_INCLUDED\_SINGLE\_VIEWS

Category in [Advanced options dialog \(page 29\)](#): **Single-part views in assembly drawings**

Use this advanced option to prevent the creating of bolt marks in single part views included in assembly drawings.

Enter `TRUE` to exclude the bolt marks, `FALSE` to create the bolt marks. The default is `FALSE`.

This advanced option is user specific and the setting is saved in `options.bin` under the user folder, for example, in `C:\Users\<user>\AppData\Local\Trimble\Tekla Structures\<version>\UserSettings`. Restart Tekla Structures to activate the new value.

## 6.67 XS\_DO\_NOT\_CREATE\_PART\_MARKS\_IN\_ALL\_INCLUDED\_SINGLE\_VIEWS

Category in [Advanced options dialog \(page 29\)](#): **Single-part views in assembly drawings**

Use this advanced option to prevent the creating of part marks in single part views included in assembly drawings.

Enter `TRUE` to exclude the part marks and `FALSE` to create the part marks. The default is `FALSE`.

This advanced option is user specific and the setting is saved in `options.bin` under the user folder, for example, in `C:\Users\\AppData\Local\Trimble\Tekla Structures\\UserSettings`. Restart Tekla Structures to activate the new value.

## 6.68 XS\_DO\_NOT\_CREATE\_PROFILE\_DIMENSIONS\_FOR\_CONCRETE

Category in [Advanced options dialog \(page 29\)](#): **Drawing properties**

Set this advanced option to `TRUE` to prevent Tekla Structures from automatically displaying the profile dimensions of concrete parts in cast unit drawings. If you want to display the profile dimensions, set it to `FALSE`.

This advanced option is model specific and the setting is saved in the options database.

## 6.69 XS\_DO\_NOT\_DISPLAY\_CHAMFERS

Category in [Advanced options dialog \(page 29\)](#): **Model views**

Set this advanced option to `TRUE` to draw polygon plates without chamfer lines. If you want to display the chamfer lines, set this advanced option to `FALSE`. The default value is `FALSE`.

This advanced option works with [XS\\_DRAW\\_CHAMFERS\\_HANDLES \(page 176\)](#) set to `CHAMFERS` or to `CHAMFERS_AND_HANDLES`.

This advanced option is user specific and the setting is saved in `options.bin` under the user folder, for example, in `C:\Users\\AppData\Local\Trimble\Tekla`

Structures\<>version>\UserSettings. Restart Tekla Structures to activate the new value.

## 6.70 XS\_DO\_NOT\_DRAW\_COLUMN\_MARKS\_AT\_45\_DEGREES\_IN\_GA\_DRAWING

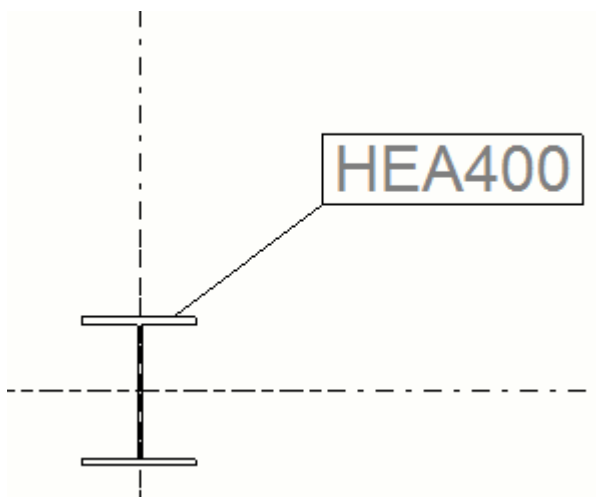
Category in [Advanced options dialog \(page 29\)](#): Marking - parts

Tekla Structures places column mark texts in general arrangement drawing plan views by default at an angle of 45 degrees in respect to the position of the column. To place the marks horizontally, set this advanced option to `TRUE`. If you set this advanced option to `FALSE`, the mark texts are placed at the angle of 45 degrees. The default value is `TRUE`.

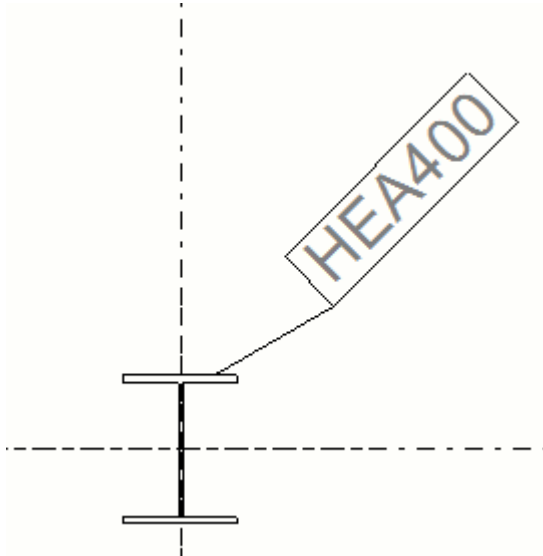
This advanced option is model specific and the setting is saved in the options database.

### Example

In the following example, the advanced option is set to `TRUE`.



In the following example, the advanced option is set to `FALSE`.

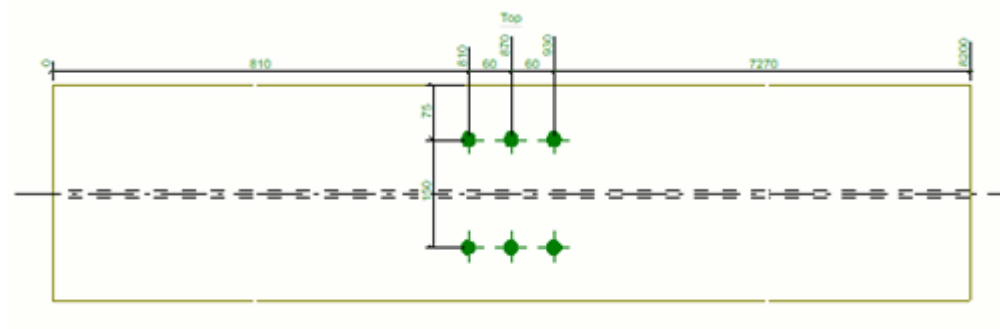


## 6.71 XS\_DO\_NOT\_EXTEND\_DIMENSION\_LINES\_THROUGH\_ALL\_HOLES

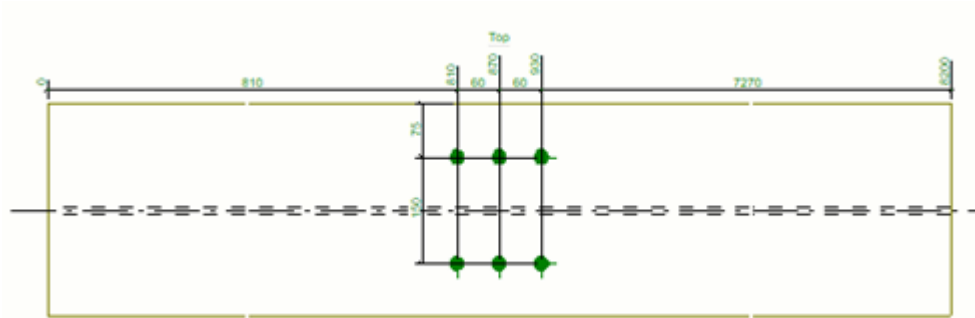
Category in [Advanced options dialog \(page 29\)](#): Dimensioning - bolts

Set this advanced option to `TRUE` (default) to prevent dimension lines from extending through all holes in a bolt group. If you wish to extend the dimension lines, set this advanced option to `FALSE`.

`TRUE`:



`FALSE`:



This advanced option is model specific and the setting is saved in the options database.

## 6.72 XS\_DO\_NOT\_PLOT\_DIMENSION\_POINT\_CIRCLES

Category in [Advanced options dialog \(page 29\)](#): **Dimensioning - general**

Set this advanced option to `TRUE` to prevent Tekla Structures from printing red dimension point invalidity symbols when you print from **Document manager**. Dimension point invalidity symbols are always printed if you have a drawing open. The default value is `FALSE`.

This advanced option is user specific and the setting is saved in `options.bin` under the user folder, for example, in `C:\Users\\AppData\Local\Trimble\Tekla Structures\\UserSettings`. Restart Tekla Structures to activate the new value.

## 6.73 XS\_DO\_NOT\_OVERWRITE\_PLUGIN\_INP\_FILE

**This advanced option must be set in an initialization (.ini) file.**

With standard settings Tekla Structures overwrites the step profile settings and replaces them with the default values every time when Tekla Structures is started. To prevent Tekla Structures from losing the step profile settings, set the advanced option `XS_DO_NOT_OVERWRITE_PLUGIN_INP_FILE` to `TRUE` in the `teklastructures.ini` file.

If you are using catalog step profiles and have set `XS_DO_NOT_OVERWRITE_PLUGIN_INP_FILE` to `TRUE` and you update Tekla Structures, do the following:

1. Set `XS_DO_NOT_OVERWRITE_PLUGIN_INP_FILE` to `FALSE` in `teklastructures.ini` file.
2. Update Tekla Structures.

3. Start Tekla Structures.
4. Set `XS_DO_NOT_OVERWRITE_PLUGIN_INP_FILE` to `TRUE` in `teklastructures.ini` file.
5. Run `Steps.exe`.
6. Restart Tekla Structures.

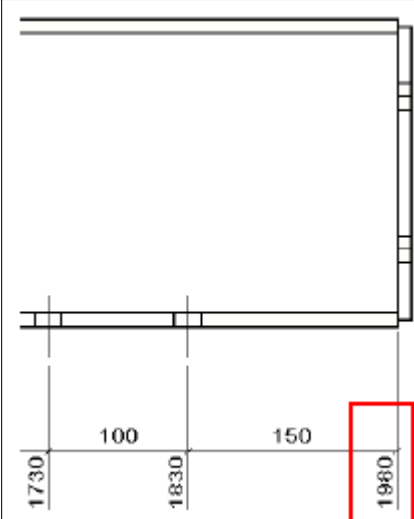
## 6.74 XS\_DO\_NOT\_REMOVE\_END\_ABSOLUTE\_DIMENSIONS

Category in [Advanced options dialog \(page 29\)](#): Dimensioning - parts

When you use absolute dimensions, Tekla Structures removes the last absolute vertical dimension. To prevent this, set this advanced option to `TRUE` (default). If you do not want to do this, set this advanced option to `FALSE`.

Note that `XS_DO_NOT_REMOVE_END_ABSOLUTE_DIMENSIONS` only works when the dimensioning type is **Integrated dimensions**.

This advanced option is model specific and the setting is saved in the options database.

| Setting | Example of appearance in drawings   |
|---------|---|
| TRUE    |  |

| Setting | Example of appearance in drawings |
|---------|-----------------------------------|
| FALSE   |                                   |

## 6.75 XS\_DO\_NOT\_USE\_FOLDED\_GUSSET\_PLATE

This advanced option must be set in an initialization (.ini) file.

Set this advanced option to `TRUE` to use part-adds to create bent plates in gusset connections. If you set it to `FALSE`, Tekla Structures creates bent gusset plates using the **Polybeam** command instead of the **Part-add** command.

## 6.76 XS\_DO\_NOT\_USE\_GLOBAL\_PLATE\_SIDE

Category in [Advanced options dialog \(page 29\)](#): **Components**

By default, connections 141, 146, 147, 149, 181, 184, 185, 186, and 187 create all shear tabs on the same side of the main part if the main part has several connections (global positioning). Set this advanced option to `TRUE` to position each shear tab according to which end of the main part the connection that creates it is closest to (local positioning). The default value is `FALSE`.

This advanced option is model specific and the setting is saved in the options database.

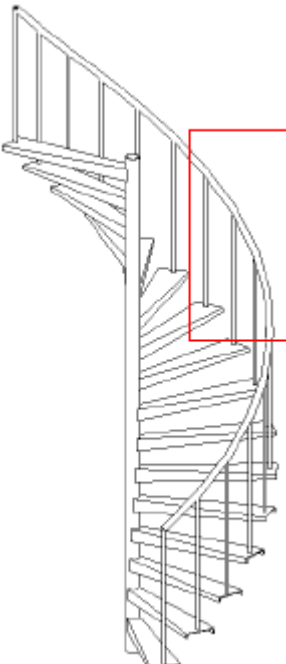
## 6.77 XS\_DONT\_SHOW\_POLYBEAM\_MID\_EDGES

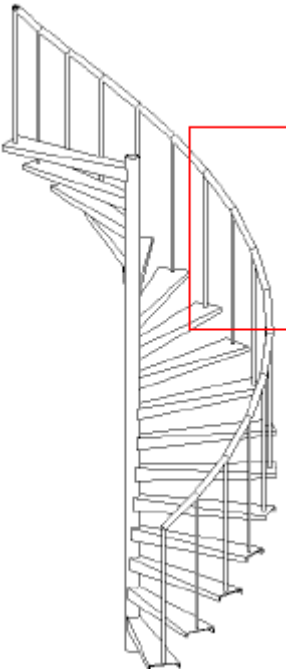
Category in [Advanced options dialog \(page 29\)](#): Drawing properties

Set this advanced option to `TRUE` to hide polybeam fold and bend lines in drawings. If you set it to `FALSE` (default), the fold and bend lines are shown.

This advanced option is user specific and the setting is saved in `options.bin` under the user folder, for example, in `C:\Users\\AppData\Local\Trimble\Tekla Structures\\UserSettings`.

### Example

| Advanced option is set to | Example  | Description   |
|---------------------------|--|---|
| TRUE                      |  | Polybeam fold and bend lines are not shown in the handrail. |

| Advanced option is set to | Example   | Description   |
|---------------------------|---|---|
| FALSE                     |  | Polybeam fold and bend lines are shown in the handrail. |

## 6.78 XS\_DRAW\_ALL\_SECTION\_EDGES\_IN\_DRAWINGS

Category in [Advanced options dialog \(page 29\)](#): Drawing properties

Set this advanced option to `TRUE` to draw the edges of a cut part in the drawing and to `FALSE` to leave the edges open. The default value is `TRUE`.

This advanced option is model specific and the setting is saved in the options database.

### See also

[XS\\_SECTION\\_LINE\\_COLOR\\_RGB \(page 429\)](#)

## 6.79 XS\_DRAW\_ANGLE\_AND\_RADIUS\_INFO\_IN\_UNFOLDING

Category in [Advanced options dialog \(page 29\)](#): Dimensioning - unfolding

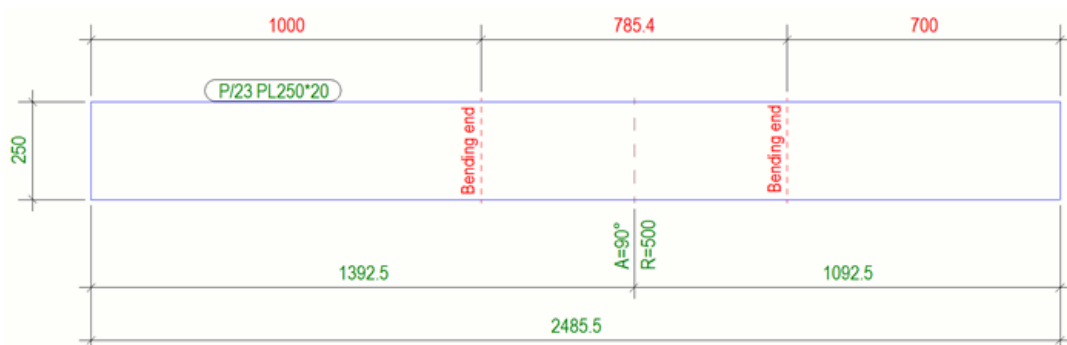
Set this advanced option to `TRUE` to show the angle and radius information on the dimension line. The default for this advanced option is that the information is shown. To hide this information, set it to `FALSE`.

This advanced option is model specific and the setting is saved in the options database.

## 6.80 XS\_DRAW\_BENDING\_END\_LINE\_DIMENSIONS\_IN\_UNFOLDING

Category in [Advanced options dialog \(page 29\)](#): Dimensioning - unfolding

Set this advanced option to `TRUE` to create bending end line dimensions when creating unfolded single-part drawings. The default value is `FALSE`.



Note that two different dimensions are created if the advanced option `XS_DRAW_BENDING_LINE_DIMENSIONS_IN_UNFOLDING` is set to `TRUE` as well.

This advanced option is model specific and the setting is saved in the options database.

**See also**

[XS\\_DRAW\\_BENDING\\_END\\_LINES\\_IN\\_UNFOLDING \(page 160\)](#)

## 6.81 XS\_DRAW\_BENDING\_END\_LINES\_IN\_UNFOLDING

Category in [Advanced options dialog \(page 29\)](#): Dimensioning - unfolding

Set this advanced option to `TRUE` to draw bending end lines when creating unfolded single part drawing of a bent plate or a polybeam. For polybeams,

the lines will be drawn only if the polybeam has circular shape chamfers. The default value is `FALSE`.

This advanced option is model specific and the setting is saved in the options database.

### See also

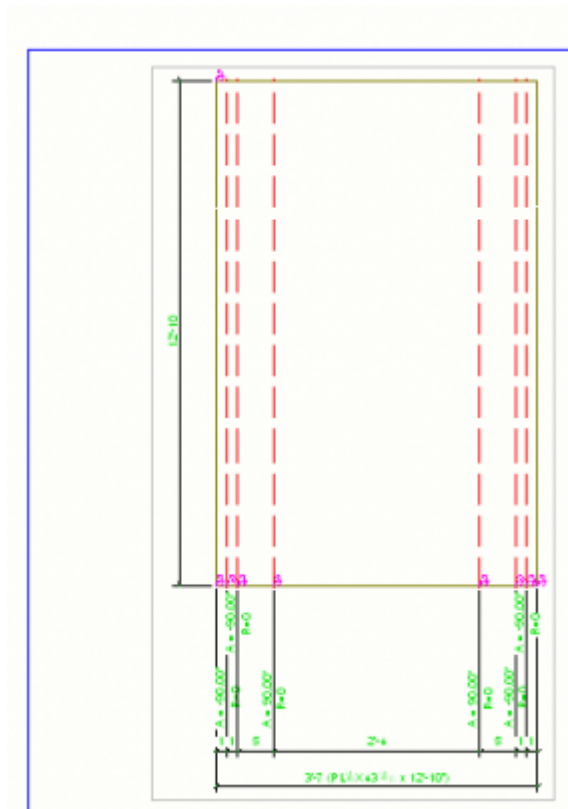
[XS\\_DRAW\\_BENDING\\_END\\_LINE\\_DIMENSIONS\\_IN\\_UNFOLDING](#) (page 160)

## 6.82 XS\_DRAW\_BENDING\_LINE\_DIMENSIONS\_IN\_UNFOLDING

Category in [Advanced options dialog \(page 29\)](#): **Dimensioning - unfolding**

Set this advanced option to `TRUE` to create bending line dimensions in a drawing.

If you do not want to create these dimensions, set this advanced option to `FALSE`. The default value is `TRUE`.



This advanced option is model specific and the setting is saved in the options database.

## 6.83 XS\_DRAW\_BOLT\_HIDDEN\_LINES

Category in [Advanced options dialog \(page 29\)](#): **Drawing properties**

Use the following advanced options to show or hide bolts that are hidden from view by other parts, in single part, assembly, and general arrangement drawings.

- 
- NOTE** • This advanced option only affects bolts with solid or exact solid representation. Bolts with symbol representation are always visible. Changing the advanced option does not affect existing drawings, but you need to recreate them.
- Tekla Structures sets the way the bolt hidden lines are shown when the bolt is added to a drawing, usually when you create the drawing or a drawing view. The hidden lines setting of the bolts cannot be changed afterwards. One way to change the setting in an old drawing is to create a new drawing view using the desired bolt hidden lines settings.
- 

The default values for each advanced option:

- XS\_DRAW\_BOLT\_HIDDEN\_LINES\_IN\_SINGLE\_DRAWINGS=AS\_PART
- XS\_DRAW\_BOLT\_HIDDEN\_LINES\_IN\_ASSEMBLY\_DRAWINGS=AS\_PART
- XS\_DRAW\_BOLT\_HIDDEN\_LINES\_IN\_GA\_DRAWINGS=FALSE

The description of values:

- AS\_PART: uses part's hidden line visibility settings (**Hidden lines on/off**).
- TRUE: always shows hidden bolts.
- FALSE: does not show hidden bolts.

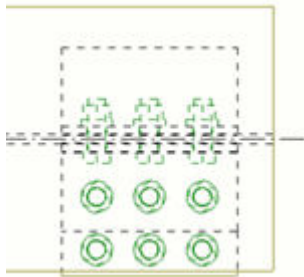
### Example

The following examples show how these advanced options can be used together with drawing property settings. This example is for assembly drawings.

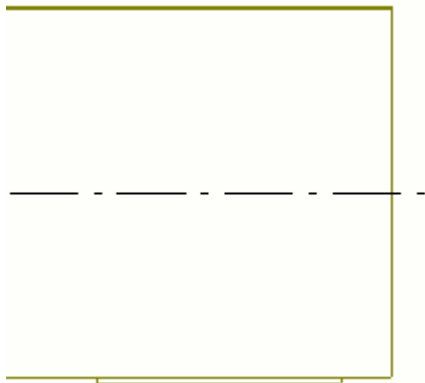
| To   | Do this   |
|--|---|
| Set the hidden lines to be always invisible in assembly drawings | <ol style="list-style-type: none"><li>1. In the assembly drawing view properties, click <b>Bolt</b> in the options tree.</li><li>2. On the <b>Content</b> tab, select <b>solid</b> from the <b>Solid/Symbol</b> list.</li><li>3. Click <b>OK</b>.</li><li>4. Go to <b>File --&gt; Settings --&gt; Advanced options --&gt; Drawing properties</b>, and set</li></ol> |

| To  | Do this  |
|---|--|
|   | <p>XS_DRAW_BOLT_HIDDEN_LINES_IN_ASSEMBLY_DRAWINGS to FALSE.</p> <p>5. Create the drawing using the view properties that you modified.</p>  |
| <p>Set the hidden lines to be visible as the assembly drawing part properties allow</p> | <ol style="list-style-type: none"> <li>1. In the assembly drawing view properties, click <b>Bolt</b> in the options tree.</li> <li>2. On the <b>Content</b> tab, select <b>solid</b> from the <b>Solid/Symbol</b> list.</li> <li>3. Click <b>OK</b>.</li> <li>4. Click <b>Part</b> in the options tree.</li> <li>5. On the <b>Content</b> tab, remove the check mark from the <b>Hidden line on/off</b> checkbox.</li> <li>6. Go to <b>File --&gt; Settings --&gt; Advanced options --&gt; Drawing properties</b>, and set XS_DRAW_BOLT_HIDDEN_LINES_IN_ASSEMBLY_DRAWINGS to AS_PART.</li> <li>7. Create the drawing using the view properties that you modified.</li> </ol> |

Example of AS\_PART, part **Hidden lines on**:



Example of AS\_PART, part **Hidden lines off**:



**See also**

[XS\\_DRAW\\_BOLT\\_OWN\\_HIDDEN\\_LINES](#) (page 168)

## 6.84 XS\_DRAW\_BOLT\_HIDDEN\_LINES\_IN\_ASSEMBLY\_DRAWINGS

**Category in [Advanced options dialog \(page 29\)](#): Drawing properties**

Use this advanced option to show or hide bolts that are hidden from view by other parts in assembly drawings.

The possible values are:

- `AS_PART`: uses part's hidden line visibility settings (**Hidden lines on/off**).
- `TRUE`: always shows hidden bolts.
- `FALSE`: does not show hidden bolts.

The default value is `AS_PART`.

- 
- NOTE**
- This advanced option only affects bolts with solid or exact solid representation. Bolts with symbol representation are always visible. Changing the advanced option does not affect existing drawings, but you need to recreate them.
  - Tekla Structures sets the way the bolt hidden lines are shown when the bolt is added to a drawing, usually when you create the drawing or a drawing view. The hidden lines setting of the bolts cannot be changed afterwards. One way to change the setting in an old drawing is to create a new drawing view using the desired bolt hidden lines settings.

---

This advanced option is role specific. When the type **SYSTEM(ROLE)** is in use, the default value is used. When the type **MODEL(ROLE)** or **DRAWING(ROLE)** is

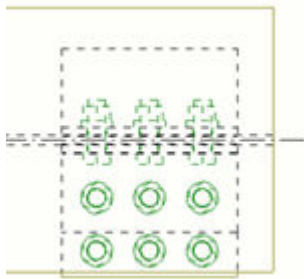
in use, you can change the value, which is then the same for all users in the current model.

### Example

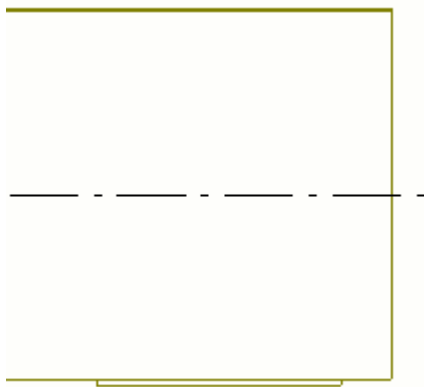
The following examples show how these advanced options can be used together with drawing property settings. This example is for assembly drawings.

| To   | Do this  |
|--|--|
| Set the hidden lines to be always invisible in assembly drawings                 | <ol style="list-style-type: none"> <li>1. In the assembly drawing view properties, click <b>Bolt</b> in the options tree.</li> <li>2. On the <b>Content</b> tab, select <b>solid</b> from the <b>Solid/Symbol</b> list.</li> <li>3. Click <b>OK</b>.</li> <li>4. Go to <b>File --&gt; Settings --&gt; Advanced options --&gt; Drawing properties</b>, and set <code>XS_DRAW_BOLT_HIDDEN_LINES_IN_ASSEMBLY_DRAWINGS</code> to <code>FALSE</code>.</li> <li>5. Create the drawing using the view properties that you modified.</li> </ol>  |
| Set the hidden lines to be visible as the assembly drawing part properties allow | <ol style="list-style-type: none"> <li>1. In the assembly drawing view properties, click <b>Bolt</b> in the options tree.</li> <li>2. On the <b>Content</b> tab, select <b>solid</b> from the <b>Solid/Symbol</b> list.</li> <li>3. Click <b>OK</b>.</li> <li>4. Click <b>Part</b> in the options tree.</li> <li>5. On the <b>Content</b> tab, remove the check mark from the <b>Hidden line on/off</b> checkbox.</li> <li>6. Go to <b>File --&gt; Settings --&gt; Advanced options --&gt; Drawing properties</b>, and set <code>XS_DRAW_BOLT_HIDDEN_LINES_IN_ASSEMBLY_DRAWINGS</code> to <code>AS_PART</code>.</li> <li>7. Create the drawing using the view properties that you modified.</li> </ol> |

Example of `AS_PART`, part **Hidden lines** on:



Example of AS\_PART, part **Hidden lines** off:



**See also**

[XS\\_DRAW\\_BOLT\\_HIDDEN\\_LINES](#) (page 162).

## 6.85 XS\_DRAW\_BOLT\_HIDDEN\_LINES\_IN\_GA\_DRAWINGS

Category in [Advanced options dialog \(page 29\)](#): **Drawing properties**

Use this advanced option to show or hide bolts that are hidden from view by other parts in general arrangement drawings.

- 
- NOTE** • This advanced option only affects bolts with solid or exact solid representation. Bolts with symbol representation are always visible. Changing the advanced option does not affect existing drawings, but you need to recreate them.
- Tekla Structures sets the way the bolt hidden lines are shown when the bolt is added to a drawing, usually when you create the drawing or a drawing view. The hidden lines setting of the bolts cannot be changed afterwards. One way to change the setting in

an old drawing is to create a new drawing view using the desired bolt hidden lines settings.

---

The possible values are:

- `AS_PART`: uses part's hidden line visibility settings (**Hidden lines on/off**).
- `TRUE`: always shows hidden bolts.
- `FALSE`: does not show hidden bolts.

The default value is `FALSE`.

This advanced option is role specific. When the type **SYSTEM(ROLE)** is in use, the default value is used. When the type **MODEL(ROLE)** or **DRAWING(ROLE)** is in use, you can change the value, which is then the same for all users in the current model.

#### See also

[XS\\_DRAW\\_BOLT\\_HIDDEN\\_LINES](#) (page 162).

## 6.86 XS\_DRAW\_BOLT\_HIDDEN\_LINES\_IN\_SINGLE\_DRAWINGS

Category in [Advanced options dialog \(page 29\)](#): **Drawing properties**

Use this advanced option to show or hide bolts that are hidden from view by other parts in single part drawings.

---

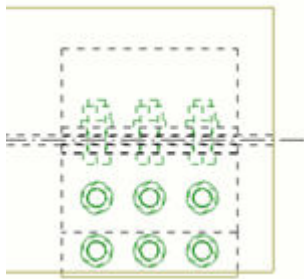
- NOTE** • This advanced option only affects bolts with solid or exact solid representation. Bolts with symbol representation are always visible. Changing the advanced option does not affect existing drawings, but you need to recreate them.
- Tekla Structures sets the way the bolt hidden lines are shown when the bolt is added to a drawing, usually when you create the drawing or a drawing view. The hidden lines setting of the bolts cannot be changed afterwards. One way to change the setting in an old drawing is to create a new drawing view using the desired bolt hidden lines settings.
- 

The possible values are:

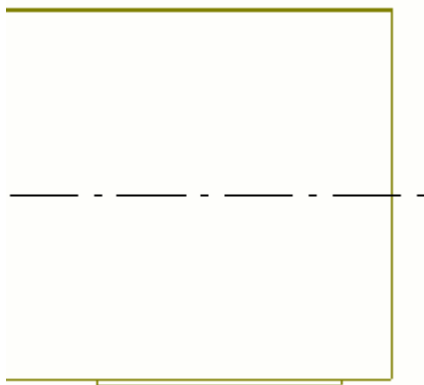
- `AS_PART`: uses part's hidden line visibility settings (**Hidden lines on/off**).
- `TRUE`: always shows hidden bolts.
- `FALSE`: does not show hidden bolts.

The default value is `AS_PART`.

Example of `AS_PART`, part **Hidden lines** on:



Example of AS\_PART, part **Hidden lines** off:



This advanced option is model specific and the setting is saved in the options database.

#### See also

[XS\\_DRAW\\_BOLT\\_HIDDEN\\_LINES](#) (page 162).

## 6.87 XS\_DRAW\_BOLT\_OWN\_HIDDEN\_LINES

Category in [Advanced options dialog \(page 29\)](#): **Drawing properties**

Use the following advanced options show or hide own hidden lines in bolts in single part, assembly, and general arrangement drawings. The *own hidden lines* are the lines of the object representation covered up by the object itself. The default values are shown for each advanced option:

- XS\_DRAW\_BOLT\_OWN\_HIDDEN\_LINES\_IN\_SINGLE\_DRAWINGS=AS\_PART
- XS\_DRAW\_BOLT\_OWN\_HIDDEN\_LINES\_IN\_ASSEMBLY\_DRAWINGS=AS\_PART
- XS\_DRAW\_BOLT\_OWN\_HIDDEN\_LINES\_IN\_GA\_DRAWINGS=FALSE

Possible values are:

- `AS_PART`: uses the visibility settings of the part's own hidden lines (**Own hidden lines on/off**).
  - `TRUE`: always shows bolts' hidden lines.
  - `FALSE`: does not show bolts' hidden lines.
- 

- NOTE** • This advanced option only affects bolts with solid or exact solid representation. Bolts with symbol representation are always visible. Changing the advanced option does not affect existing drawings, but you need to recreate them.
- Tekla Structures sets the way the bolt own hidden lines are shown when the bolt is added to a drawing, usually when you create the drawing or a drawing view. The own hidden lines setting of the bolts cannot be changed afterwards. One way to change the setting in an old drawing is to create a new drawing view using the desired bolt own hidden lines settings.
- 

**See also**

[XS\\_DRAW\\_BOLT\\_HIDDEN\\_LINES](#) (page 162)

[XS\\_DRAW\\_BOLT\\_OWN\\_HIDDEN\\_LINES\\_IN\\_SINGLE\\_DRAWINGS](#) (page 171)

[XS\\_DRAW\\_BOLT\\_OWN\\_HIDDEN\\_LINES\\_IN\\_ASSEMBLY\\_DRAWINGS](#) (page 169)

[XS\\_DRAW\\_BOLT\\_OWN\\_HIDDEN\\_LINES\\_IN\\_GA\\_DRAWINGS](#) (page 170)

## 6.88 XS\_DRAW\_BOLT\_OWN\_HIDDEN\_LINES\_IN\_ASSEMBLY\_DRAWINGS

Category in [Advanced options dialog \(page 29\)](#): **Drawing properties**

Use the following advanced options show or hide own hidden lines in assembly drawings. The *own hidden lines* are the lines of the object representation covered up by the object itself.

- `AS_PART`: uses the visibility settings of the part's own hidden lines (**Own hidden lines on/off**).
- `TRUE`: always shows bolts' own hidden lines.
- `FALSE`: does not show bolts' own hidden lines.

The default value is `AS_PART`.

---

- NOTE** • This advanced option only affects bolts with solid or exact solid representation. Bolts with symbol representation are always visible. Changing the advanced option does not affect existing drawings, but you need to recreate them.

- Tekla Structures sets the way the bolt own hidden lines are shown when the bolt is added to a drawing, usually when you create the drawing or a drawing view. The own hidden lines setting of the bolts cannot be changed afterwards. One way to change the setting in an old drawing is to create a new drawing view using the desired bolt own hidden lines settings.

---

This advanced option is role specific. When the type **SYSTEM(ROLE)** is in use, the default value is used. When the type **MODEL(ROLE)** or **DRAWING(ROLE)** is in use, you can change the value, which is then the same for all users in the current model.

**See also**

[XS\\_DRAW\\_BOLT\\_OWN\\_HIDDEN\\_LINES](#) (page 168)

## 6.89 XS\_DRAW\_BOLT\_OWN\_HIDDEN\_LINES\_IN\_GA\_DRAWINGS

Category in [Advanced options dialog \(page 29\)](#): **Drawing properties**

Use the following advanced options show or hide own hidden lines in bolts in general arrangement drawings. The *own hidden lines* are the lines of the object representation covered up by the object itself.

- **AS\_PART**: uses the visibility settings of the part's own hidden lines (**Own hidden lines on/off**).
- **TRUE**: always shows bolts' own hidden lines.
- **FALSE**: does not show bolts' own hidden lines.

The default value is **FALSE**.

- 
- NOTE** • This advanced option only affects bolts with solid or exact solid representation. Bolts with symbol representation are always visible. Changing the advanced option does not affect existing drawings, but you need to recreate them.
- Tekla Structures sets the way the bolt own hidden lines are shown when the bolt is added to a drawing, usually when you create the drawing or a drawing view. The own hidden lines setting of the bolts cannot be changed afterwards. One way to change the setting in an old drawing is to create a new drawing view using the desired bolt own hidden lines settings.

---

This advanced option is role specific. When the type **SYSTEM(ROLE)** is in use, the default value is used. When the type **MODEL(ROLE)** or **DRAWING(ROLE)** is

in use, you can change the value, which is then the same for all users in the current model.

**See also**

[XS\\_DRAW\\_BOLT\\_OWN\\_HIDDEN\\_LINES \(page 168\)](#)

## 6.90 XS\_DRAW\_BOLT\_OWN\_HIDDEN\_LINES\_IN\_SINGLE\_DRAWINGS

Category in [Advanced options dialog \(page 29\)](#): **Drawing properties**

Use the following advanced options show or hide own hidden lines in single part drawings. The *own hidden lines* are the lines of the object representation covered up by the object itself.

- `AS_PART`: uses the visibility settings of the part's own hidden lines (**Own hidden lines on/off**).
- `TRUE`: always shows bolts' own hidden lines.
- `FALSE`: does not show bolts' own hidden lines.

The default value is `AS_PART`.

- 
- NOTE**
- This advanced option only affects bolts with solid or exact solid representation. Bolts with symbol representation are always visible. Changing the advanced option does not affect existing drawings, but you need to recreate them.
  - Tekla Structures sets the way the bolt own hidden lines are shown when the bolt is added to a drawing, usually when you create the drawing or a drawing view. The own hidden lines setting of the bolts cannot be changed afterwards. One way to change the setting in an old drawing is to create a new drawing view using the desired bolt own hidden lines settings.
- 

This advanced option is model specific and the setting is saved in the options database.

**See also**

[XS\\_DRAW\\_BOLT\\_OWN\\_HIDDEN\\_LINES \(page 168\)](#)

## 6.91 XS\_DRAW\_BOLTS\_3D\_IN\_BOLT\_LAYER

Category in [Advanced options dialog \(page 29\)](#): **Model views**

When this advanced option is set to `TRUE`, which is the default value, the model views that display bolts as rendered solid objects (using the **Exact** representation option) open and update faster. This is especially useful in large models with steel structures.

This advanced option is system specific and is read from environment files. It can also be read from `teklastructures.ini`. Generally, there is no need to modify system-specific settings. Do not modify them if you are not an administrator.

After changing the value of this advanced option, first save the model. Then restart Tekla Structures to activate the new setting.

## 6.92 XS\_DRAW\_BOLTS\_PERPENDICULAR\_TO\_PART\_IN\_SINGLE\_DRAWINGS

Category in [Advanced options dialog \(page 29\)](#): **Dimensioning - bolts**

Set this advanced option to `TRUE` to draw bolts perpendicular to the part plane in single part drawings. If you do not want to do this, set it to `FALSE`. This only applies to bolt symbol types **symbol** and **symbol3**. `FALSE` is the default value.

Note that this advanced option also affects how bolts are shown in single-part drawings included in multi-drawings, and in single-part views in assembly drawings.

This advanced option is model specific and the setting is saved in the options database.

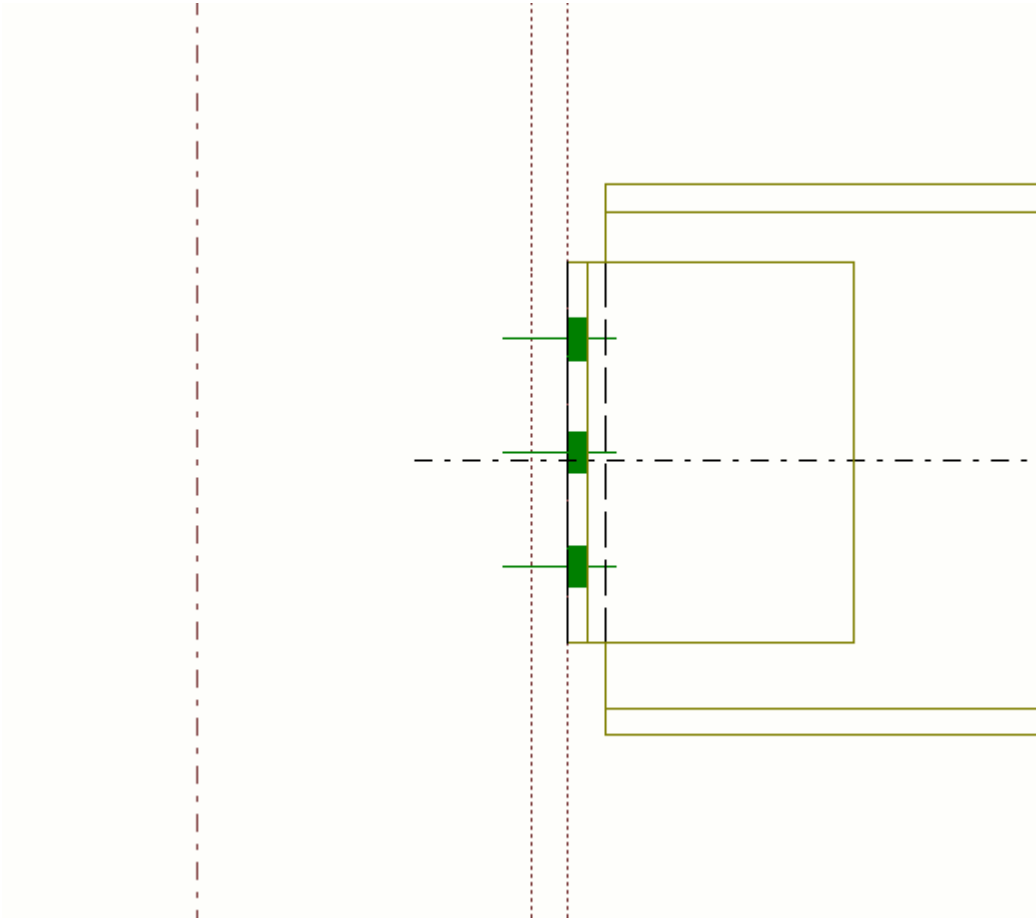
## 6.93 XS\_DRAW\_BOLTS\_THROUGH\_NEIGHBOUR\_PARTS

Category in [Advanced options dialog \(page 29\)](#): **Drawing properties**

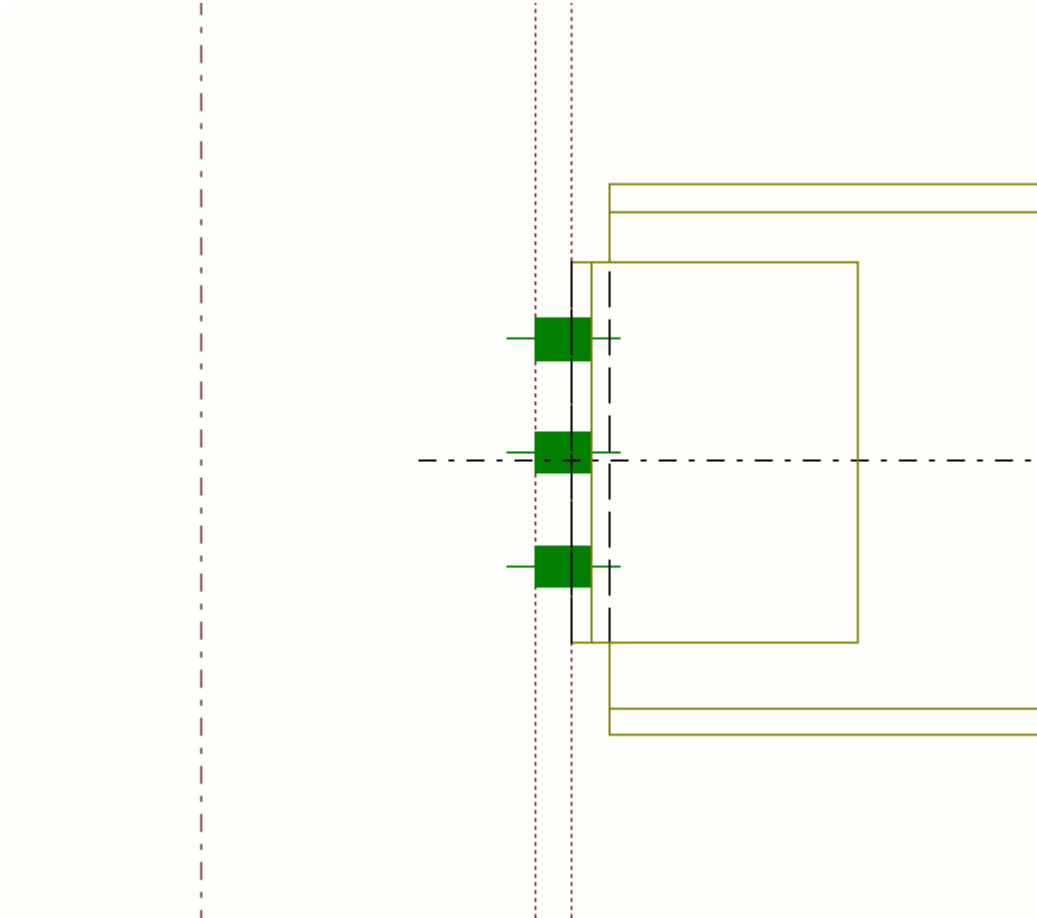
Set this advanced option to `TRUE` to draw the bolt parts that coincide with neighboring parts. If you do not want to draw these bolt parts, set it to `FALSE`. The default value is `FALSE`.

This advanced option is model specific and the setting is saved in the options database.

The following example shows how the drawing looks like when you set this advanced option to `FALSE`.



In the following example, the advanced option is set to `TRUE`.



## 6.94 XS\_DRAW\_CAST\_PHASE\_INTERNAL\_LINES

Category in [Advanced options dialog \(page 29\)](#): Concrete detailing

Use this advanced option to show or hide edge lines of (precast) concrete cast units in drawings. Set to `TRUE` (default) to show overlapping edge lines between adjacent cast units that are in the same phase.

---

**NOTE** If you are working with cast-in-place concrete parts and `XS_ENABLE_POUR_MANAGEMENT` is set to `TRUE`, the advanced options `XS_DRAW_CAST_UNIT_INTERNAL_LINES` and `XS_DRAW_CAST_PHASE_INTERNAL_LINES` do not have an effect.

If `XS_ENABLE_POUR_MANAGEMENT` is set to `FALSE`, both cast-in-place and precast concrete parts are treated in the same way and are affected by the

advanced options `XS_DRAW_CAST_UNIT_INTERNAL_LINES` and `XS_DRAW_CAST_PHASE_INTERNAL_LINES`.

---

This advanced option is role specific. When the type **SYSTEM(ROLE)** is in use, the default value is used. When the type **MODEL(ROLE)** or **DRAWING(ROLE)** is in use, you can change the value, which is then the same for all users in the current model.

**See also**

[XS\\_DRAW\\_CAST\\_UNIT\\_INTERNAL\\_LINES \(page 175\)](#)

[XS\\_ENABLE\\_POUR\\_MANAGEMENT \(page 254\)](#)

[XS\\_ENABLE\\_PRECAST\\_CONTINUOUS\\_CONCRETE \(page 255\)](#)

[Showing concrete parts in drawings using advanced options](#)

## 6.95 XS\_DRAW\_CAST\_UNIT\_INTERNAL\_LINES

Category in [Advanced options dialog \(page 29\)](#): **Concrete detailing**

Use this advanced option to show or hide concrete part lines inside (precast) cast units in drawings. Set to `TRUE` to show overlapping part lines inside cast units.

The default value is `FALSE`.

---

**NOTE** If you are working with cast-in-place concrete parts and `XS_ENABLE_POUR_MANAGEMENT` is set to `TRUE`, the advanced options `XS_DRAW_CAST_UNIT_INTERNAL_LINES` and `XS_DRAW_CAST_PHASE_INTERNAL_LINES` do not have an effect.

If `XS_ENABLE_POUR_MANAGEMENT` is set to `FALSE`, both cast-in-place and precast concrete parts are treated in the same way and are affected by the advanced options `XS_DRAW_CAST_UNIT_INTERNAL_LINES` and `XS_DRAW_CAST_PHASE_INTERNAL_LINES`.

---

This advanced option is model specific and the setting is saved in the options database.

**See also**

[XS\\_DRAW\\_CAST\\_PHASE\\_INTERNAL\\_LINES \(page 174\)](#)

[XS\\_ENABLE\\_POUR\\_MANAGEMENT \(page 254\)](#)

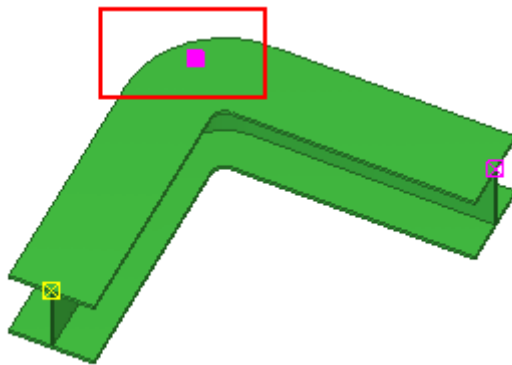
[XS\\_ENABLE\\_PRECAST\\_CONTINUOUS\\_CONCRETE \(page 255\)](#)

## 6.96 XS\_DRAW\_CHAMFERS\_HANDLES

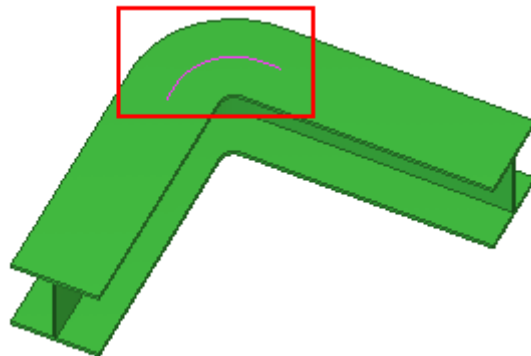
Category in [Advanced options dialog \(page 29\)](#): Model views

Use this advanced option to define whether to show the handles or the chamfers for contour plates, concrete slabs, and polybeams. The options are:

- `HANDLES`: handles are shown. Makes the selection of handles easier. This is the default value.



- `CHAMFERS`: chamfers are shown. Use this option, for example, when you want to check the status of polybeam chamfers.



- `CHAMFERS_AND_HANDLES` shows both the chamfers and handles.

### See also

[XS\\_DO\\_NOT\\_DISPLAY\\_CHAMFERS \(page 152\)](#)

## 6.97 XS\_DRAW\_CROSS\_AXIS

**Category in [Advanced options dialog \(page 29\)](#): Drawing properties**

Set this advanced option to `N` to hide the axis cross in beam cross sections.

Leave the value out to display the axis cross in beam cross sections.

This advanced option is model specific and the setting is saved in the options database.

## 6.98 XS\_DRAW\_CUT\_FACES\_WITH\_OBJECT\_COLOR

**Category in [Advanced options dialog \(page 29\)](#): Model views**

Set this advanced option to `FALSE` (default) to have cut faces shown in gray, and to `TRUE` to show the cut faces with the same color as the other object faces.

You need to redraw the model view after changing the value for the change to take effect.

This advanced option is user specific and the setting is saved in `options.bin` under the user folder, for example, in `C:\Users\\AppData\Local\Trimble\Tekla Structures\\UserSettings`.

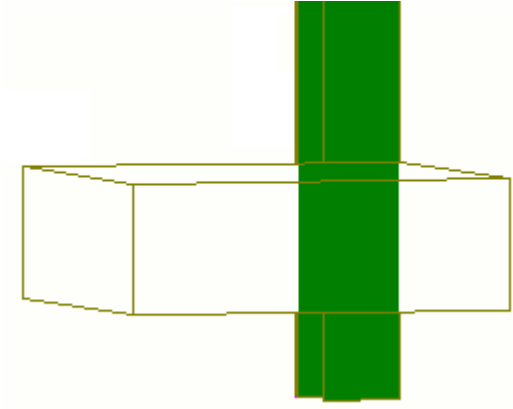
## 6.99 XS\_DRAW\_HIDDEN\_FACES

**Category in [Advanced options dialog \(page 29\)](#): Drawing properties**

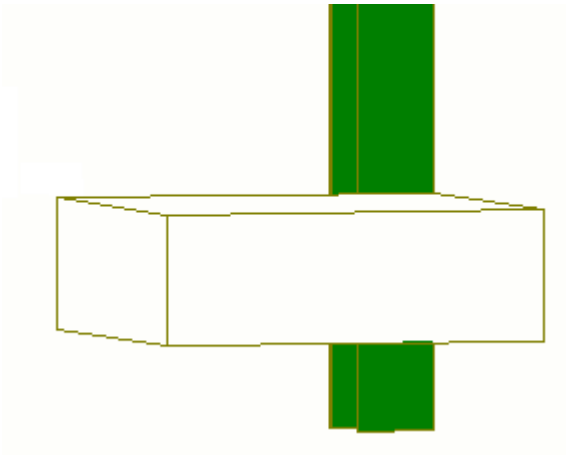
Set this advanced option to `TRUE` to draw hidden part faces in drawings. The default value is `FALSE`. This advanced option hides the hatches on the hidden part faces, for example.

This advanced option is model specific and the setting is saved in the options database.

Example of using the value `TRUE`:



Example of using the value `FALSE`:



---

**TIP** To hide hidden faces of rebars, use the advanced option [XS\\_DRAW\\_REBAR\\_HIDDEN\\_FACES](#) (page 180).

---

## 6.100 XS\_DRAW\_HORIZONTAL\_VIEW\_SHORTENING\_SYMBOLS\_TO\_PARTS

Category in [Advanced options dialog \(page 29\)](#): Drawing properties

Set this advanced option to `TRUE` to show horizontal view shortening symbols automatically. The default value is `FALSE`.

This advanced option is role specific. When the type **SYSTEM(ROLE)** is in use, the default value is used. When the type **MODEL(ROLE)** or **DRAWING(ROLE)** is in use, you can change the value, which is then the same for all users in the current model.

### Limitations

- Shortening symbols are not shown in general arrangement drawings.
- Shortening symbols are not shown in rectangular hollow sections or channel sections.

### See also

[XS\\_DRAW\\_VERTICAL\\_VIEW\\_SHORTENING\\_SYMBOLS\\_TO\\_PARTS](#) (page 184)

[XS\\_SHORTENING\\_SYMBOL\\_WITH\\_ZIGZAG](#) (page 452)

[XS\\_SHORTENING\\_SYMBOL\\_COLOR](#) (page 452)

[XS\\_SHORTENING\\_SYMBOL\\_LINE\\_TYPE](#) (page 452)

## 6.101 XS\_DRAW\_INSIDE\_ANGLE\_IN\_UNFOLDING

Category in [Advanced options dialog \(page 29\)](#): **Dimensioning - unfolding**

Set this advanced option to `TRUE` to display the interior angle instead of the exterior angle in angle text. If set this advanced option to `FALSE` (default), the exterior angle is displayed.

This advanced option is model specific and the setting is saved in the options database.

## 6.102 XS\_DRAW\_LONG\_HOLE\_DIMENSIONS

Category in [Advanced options dialog \(page 29\)](#): **Dimensioning - bolts**

Set this advanced option to `TRUE` to dimension slotted holes to the center points of the curve. If you set this advanced option to `FALSE` (default), the slotted holes are dimensioned to the center points of the holes.

This advanced option is model specific and the setting is saved in the options database.

## 6.103 XS\_DRAW\_MESH\_OUTLINE\_SYMBOL \_FROM\_BOTTOM\_LEFT\_TO\_TOP\_RIGHT

Category in [Advanced options dialog \(page 29\)](#): **Concrete detailing**

Use this advanced option to define the outline representation of reinforcement meshes in drawings. When you set this advanced option to

TRUE (default), the outline representation symbol of the mesh is always drawn from bottom left to top right.

This advanced option is model specific and the setting is saved in the options database.

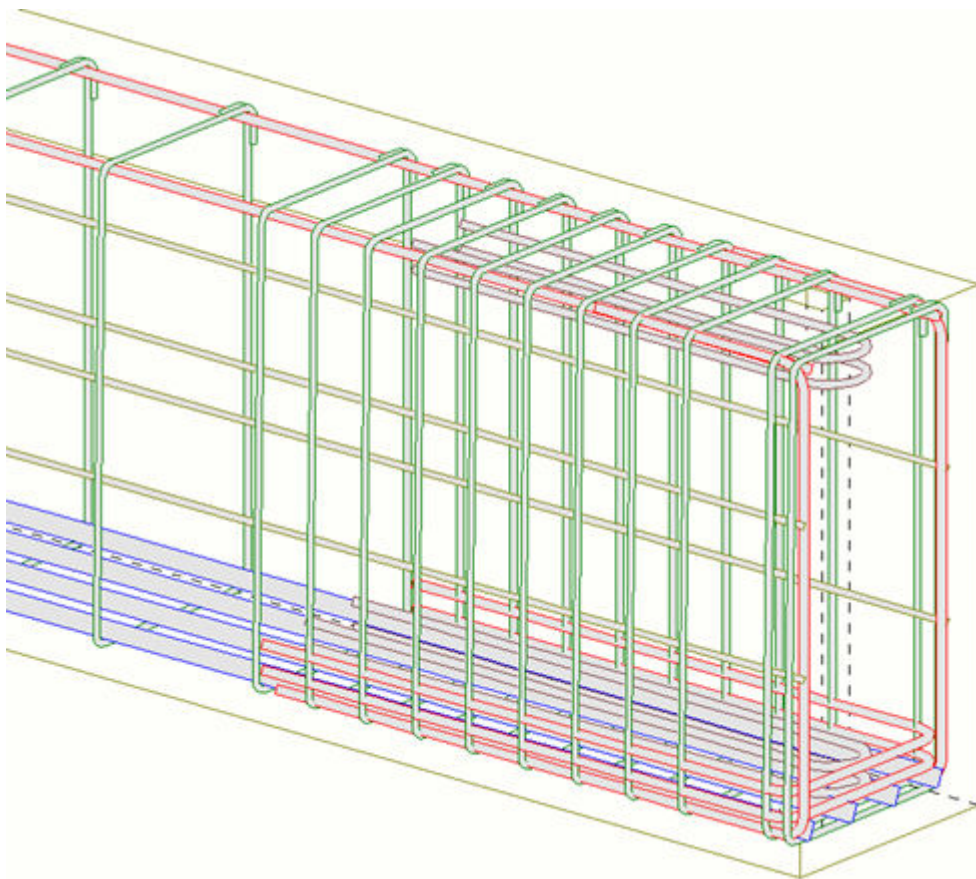
## 6.104 XS\_DRAW\_REBAR\_HIDDEN\_FACES

Category in [Advanced options dialog \(page 29\)](#): Drawing properties

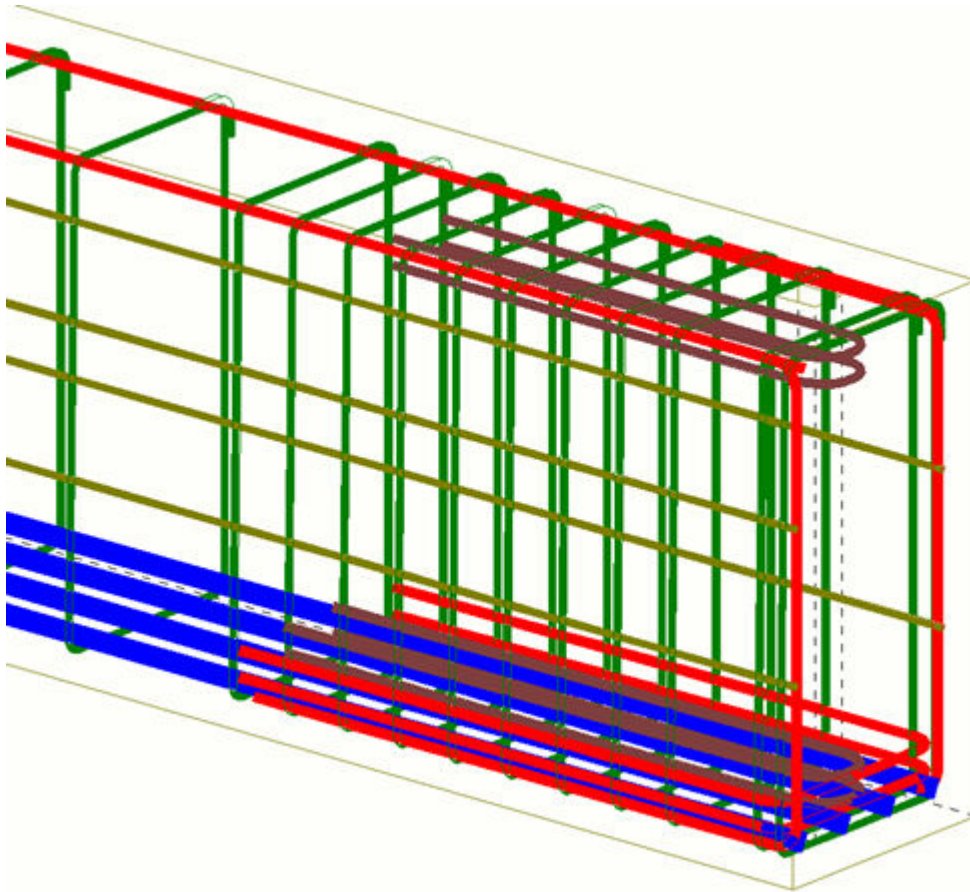
Use this advanced option to control the display of the rebar hidden faces in drawings. To show the hidden faces of the rebars, set this advanced option to TRUE. FALSE is the default value.

This advanced option is model specific and the setting is saved in the options database.

In the first image below, XS\_DRAW\_REBAR\_HIDDEN\_FACES has been set to TRUE.



In the image below, XS\_DRAW\_REBAR\_HIDDEN\_FACES has been set to FALSE.



This advanced option is model specific and the setting is saved in the options database.

**See also**

[XS\\_DRAW\\_HIDDEN\\_FACES](#) (page 177)

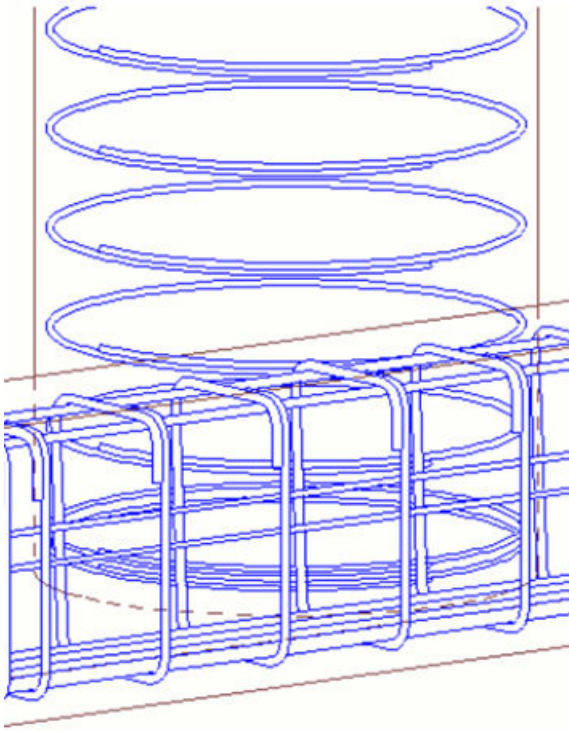
## 6.105 XS\_DRAW\_REBAR\_SELF\_INTERSECTING\_LEGS\_WITH\_OFFSET

Category in [Advanced options dialog](#) (page 29): **Drawing properties**

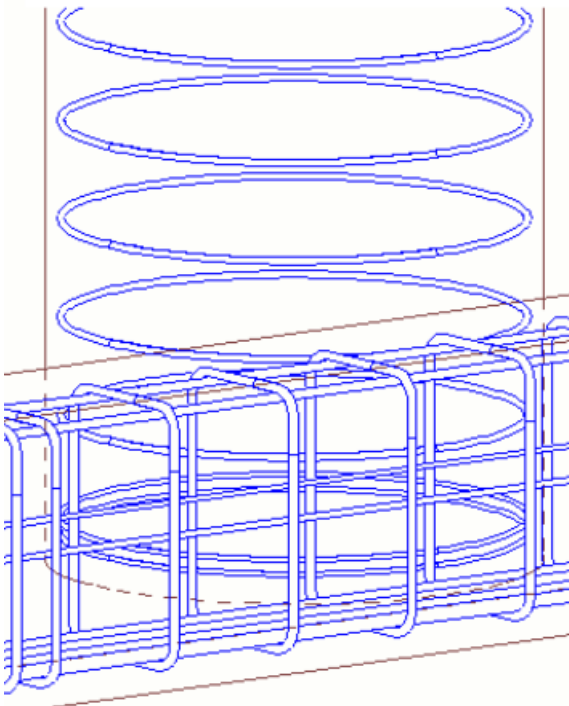
When set to `TRUE`, this advanced option displays rebars in drawings with overlap in all representations. Note that `FALSE` has no impact on the **filled line** representation. The default value is `FALSE`.

This advanced option is model specific and the setting is saved in the options database.

`XS_DRAW_REBAR_SELF_INTERSECTING_LEGS_WITH_OFFSET` set to `TRUE`:



XS\_DRAW\_REBAR\_SELF\_INTERSECTING\_LEGS\_WITH\_OFFSET set to FALSE:



## 6.106 XS\_DRAW\_ROOT\_OPENING\_EVEN\_WHEN\_ZERO

Category in [Advanced options dialog \(page 29\)](#): Welds

Set this advanced option to `TRUE` to show zero root openings in welds. The default is `TRUE`. If you set this advanced option to `FALSE`, the zero root openings are not shown.



Root opening is the space between welded parts. Root opening value is only shown for weld types 3 and 4 (bevel-groove single-V butt and bevel-groove single-bevel butt welds).

This advanced option is role specific. When the type **SYSTEM(ROLE)** is in use, the default value is used. When the type **MODEL(ROLE)** or **DRAWING(ROLE)** is in use, you can change the value, which is then the same for all users in the current model.

## 6.107 XS\_DRAW\_SHORT\_LEADER\_LINES\_OF\_PART\_MARKS

Category in [Advanced options dialog \(page 29\)](#): Marking - parts

Use this advanced option to define if a leader line is drawn when the leader line is shorter than defined with the advanced option `XS_DRAW_SHORT_LEADER_LINES_OF_PART_MARKS_MINIMUM_LENGTH`. When you set this option to `FALSE`, the leader line is not drawn. Set to `TRUE` (default) to always draw leader lines in part marks.

This advanced option is model specific and the setting is saved in the options database.

### See also

[XS\\_DRAW\\_SHORT\\_LEADER\\_LINES\\_OF\\_PART\\_MARKS\\_MINIMUM\\_LENGTH \(page 183\)](#)

## 6.108 XS\_DRAW\_SHORT\_LEADER\_LINES\_OF\_PART\_MARKS\_MINIMUM\_LENGTH

Category in [Advanced options dialog \(page 29\)](#): **Marking - parts**

Use this advanced option to define the minimum length of a leader line that Tekla Structures draws. If the leader line is shorter than the minimum length and the advanced option XS\_DRAW\_SHORT\_LEADER\_LINES\_OF\_PART\_MARKS is set to FALSE, the leader line is not drawn. The default value is 0.0. If the advanced option XS\_DRAW\_SHORT\_LEADER\_LINES\_OF\_PART\_MARKS\_MINIMUM\_LENGTH is set to TRUE, the part mark leader lines are always drawn.

This advanced option is model specific and the setting is saved in the options database.

### See also

[XS\\_DRAW\\_SHORT\\_LEADER\\_LINES\\_OF\\_PART\\_MARKS \(page 183\)](#)

## 6.109 XS\_DRAW\_SKEWED\_ELEVATIONS

Category in [Advanced options dialog \(page 29\)](#): **Dimensioning - parts**

Set this advanced option to TRUE to display skewed elevation dimensions.

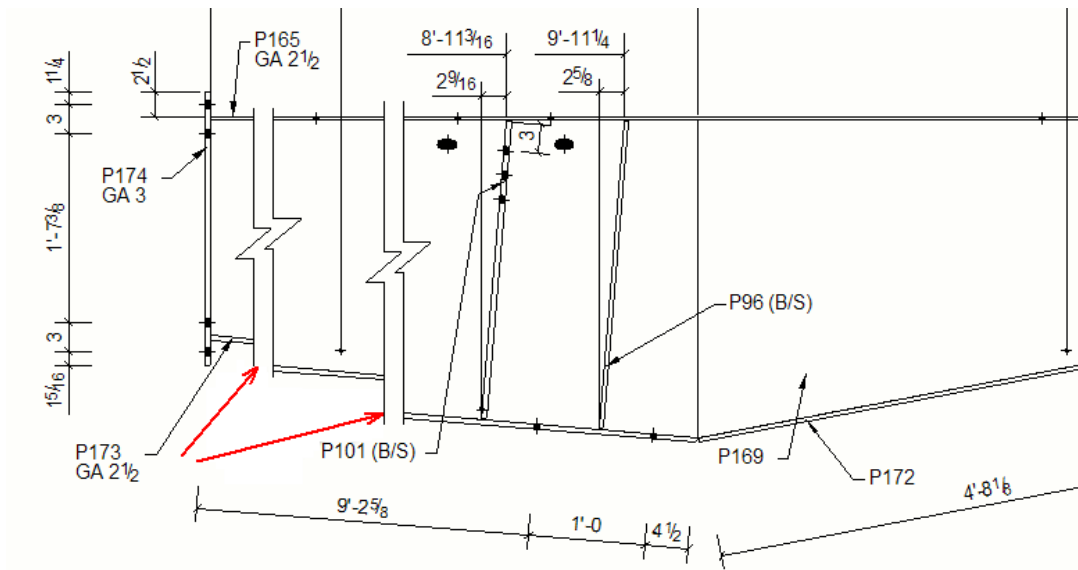
If you set it to FALSE (default), skewed elevation dimensions are not displayed in drawings.

This advanced option is model specific and the setting is saved in the options database.

## 6.110 XS\_DRAW\_VERTICAL\_VIEW\_SHORTENING\_SYMBOLS\_TO\_PARTS

Category in [Advanced options dialog \(page 29\)](#): **Drawing properties**

Set this advanced option to TRUE to show vertical view shortening symbols automatically. The default value is FALSE.



This advanced option is role specific. When the type **SYSTEM(ROLE)** is in use, the default value is used. When the type **MODEL(ROLE)** or **DRAWING(ROLE)** is in use, you can change the value, which is then the same for all users in the current model.

### Limitations

- Shortening symbols are not shown in general arrangement drawings.
- Shortening symbols are not shown in rectangular hollow sections or channel sections.

### See also

[XS\\_DRAW\\_HORIZONTAL\\_VIEW\\_SHORTENING\\_SYMBOLS\\_TO\\_PARTS](#) (page 178)

[XS\\_SHORTENING\\_SYMBOL\\_WITH\\_ZIGZAG](#) (page 452)

[XS\\_SHORTENING\\_SYMBOL\\_COLOR](#) (page 451)

[XS\\_SHORTENING\\_SYMBOL\\_LINE\\_TYPE](#) (page 452)

## 6.111 XS\_DRAWING\_ALLOW\_NEW\_SECTIONS\_IN\_REDIMENSIONING

Category in [Advanced options dialog](#) (page 29): Drawing properties

Use this advanced option to define whether new views or sections are created during redimensioning of existing drawings. The default is `FALSE`, which means that no views or sections are created.

This advanced option is role specific. When the type **SYSTEM(ROLE)** is in use, the default value is used. When the type **MODEL(ROLE)** or **DRAWING(ROLE)** is

in use, you can change the value, which is then the same for all users in the current model.

## 6.112 XS\_DRAWING\_ALLOW\_SNAPPING\_TO\_DISTANT\_POINTS

**Category in [Advanced options dialog \(page 29\)](#): Drawing properties**

Set this advanced option to `TRUE` to allow the cursor to snap to object end points in a drawing even if the cursor is not near the end point. This means that if the cursor is anywhere on the object, the cursor will snap to the object end points. If you do not want to allow this, set this advanced option to `FALSE`. Then the cursor will snap only to the snap points near the cursor.

The default value is `FALSE`.

This advanced option is user specific and the setting is saved in `options.bin` under the user folder, for example, in `C:\Users\\AppData\Local\Trimble\Tekla Structures\\UserSettings`. Restart Tekla Structures to activate the new value.

## 6.113 XS\_DRAWING\_ASSEMBLY\_HATCH\_SCHEMA

**Category in [Advanced options dialog \(page 29\)](#): Hatching**

Use this advanced option to indicate the name of the hatch schema file to use for assembly drawings.

This advanced option is model specific and the setting is saved in the options database.

### Example

To use the default hatch schema file, enter `assembly.htc`.

## 6.114 XS\_DRAWING\_CAST\_UNIT\_HATCH\_SCHEMA

**Category in [Advanced options dialog \(page 29\)](#): Hatching**

Use this advanced option to determine the name of the hatch schema file used for cast unit drawings.

This advanced option is model specific and the setting is saved in the options database.

## Example

To use the default hatch schema file, enter `cast_unit.htc`.

## 6.115 XS\_DRAWING\_CHANGE\_HIGHLIGHT\_COLOR

Category in [Advanced options dialog \(page 29\)](#): Drawing properties

Use this advanced option to change the highlight color of the automatic change symbols. Enter a numeric value or the name of the color.


The default color is magenta on screen and invisible when printing. Other colors are visible also when printing except index 152 (Invisible color).

You can enter any of the following color names: RED, DARK RED, ORANGE, DARK YELLOW, GREEN, DARK GREEN, BLUE, DARK BLUE, BLACK, GREY, DARK GREY, CYAN, DARK CYAN, and MAGENTA.






You can also enter colors as numeric values. You can enter a single color index value (such as 160 for the standard Tekla Structures red color) or a specific custom RGB color. For an RGB color, enter three numeric values separated by spaces (each value in the range 0 to 255). For example, for a specific shade of green, enter 0 220 50.














This advanced option is model specific and the setting is saved in the options database.

Legacy Tekla Structures index values and the corresponding colors:

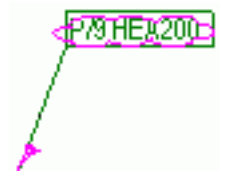
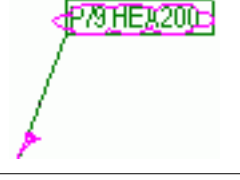


|   |   |
|---|---|
| 0 |  Black   |
| 1 |  White   |
| 2 |  Red     |
| 3 |  Green   |
| 4 |  Blue    |
| 5 |  Cyan    |
| 6 |  Yellow  |
| 7 |  Magenta |

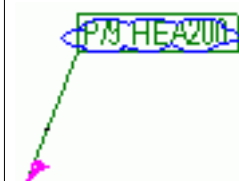
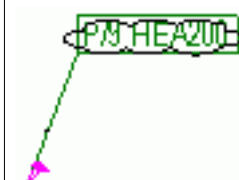
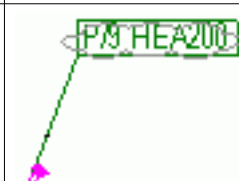
Standard Tekla Structures index values and the corresponding colors:

|     |   |
|-----|---|
| 152 |  Invisible |
| 153 |  Black     |
| 160 |  Red       |
| 161 |  Green     |
| 162 |  Blue      |

|     |  |
|-----|--|
| 163 |  Cyan       |
| 164 |  Yellow     |
| 165 |  Magenta    |
| 154 |  Brown      |
| 155 |  Dark green |
| 156 |  Dark blue  |
| 157 |  Blue-green |
| 158 |  Orange     |
| 159 |  Gray       |
| 130 |  Gray 30    |
| 131 |  Gray 50    |
| 132 |  Gray 70    |
| 133 |  Gray 90    |

### Example

| Set the advanced option to | Color on screen   | Color in printed drawings |
|----------------------------|---|---------------------------|
| no value (default)         |  | not visible               |
| MAGENTA<br>165             |  | magenta                   |
| RED<br>160                 |  | red                       |
| GREEN<br>161               |  | green                     |

| Set the advanced option to | Color on screen   | Color in printed drawings |
|----------------------------|---|---------------------------|
| BLUE<br>162                |  | blue                      |
| BLACK<br>153               |  | black                     |
| GREY<br>159                |  | gray                      |

## 6.116 XS\_DRAWING\_CLONING\_IGNORE\_CHECK

**Category in [Advanced options dialog \(page 29\)](#): Drawing properties**

Set this advanced option to `TRUE` to clone a drawing even though all the parts of the original drawing have been deleted and the position number is the same as in the original drawing. The default is `FALSE`.

Note that when `XS_DRAWING_CLONING_IGNORE_CHECK` is set to `TRUE`, Tekla Structures is able to clone a drawing with a selected part that has the same position number. But if you have selected several parts with the same position number, then only one cloned drawing is created for that position.

This advanced option is model specific and the setting is saved in the options database.

### Example

You have drawing A[A.1] in your **Document manager**. You number the model so that the assembly A.1 changes to A.2. In **Document manager**, the A[A.1] drawing is marked with an x and with the status message "All parts deleted." Then you number the model again, so that the assembly in the model changes from A.2 back to A.1. To clone, set the advanced option `XS_DRAWING_CLONING_IGNORE_CHECK` to `TRUE`, select the A[A.1] drawing (marked with x) from **Document manager** and assembly A.1 from the model, and click **Clone**.

## 6.117 XS\_DRAWING\_CLONING\_VIEW\_PLACING

Category in [Advanced options dialog \(page 29\)](#): **Drawing properties**

Use this advanced option to control how the view placing and view and sheet size scaling work in drawing cloning. If the views do not fit on the sheet, with certain values, Tekla Structures increases the sheet size using the drawing layout properties if autosizing is enabled and/or scales the views if autoscaling is enabled in the drawing properties (**Layout --> Drawing size --> Size definition mode --> Autosize** and **Layout --> Scale --> Autoscale**). Use this advanced option together with [XS\\_INTELLIGENT\\_DRAWING\\_ALLOWED \(page 299\)](#).

Available values are listed below. You can use a single value or a combination of values separated with commas.

TRUE

FALSE

SHEET

SCALE

GA

TRUE, SCALE, SHEET is the default value allowing views to be replaced and resized during cloning.

We recommend that you use default value with this advanced option. If automatic scaling of drawing views or automatic size of drawing sheets are not used in your projects, you can change default value to TRUE.

This advanced option is model specific and the setting is saved in the options database.

**Limitation:** This functionality does not affect anchor bolt plans.

See below for available values and value combinations and their descriptions:

| Value       | Description   |
|-------------|---|
| TRUE        | In drawing cloning, updates the view placing. Does not affect the sheet size or view scales.<br>No effect on GA drawings.   |
| TRUE, SCALE | In drawing cloning, updates the view placing, and also scales the views if <b>Autoscale</b> is enabled in the drawing layout properties. Does not affect the sheet size.<br>No effect on GA drawings. |

| Value                  | Description  |
|------------------------|--|
| TRUE, SHEET            | In drawing cloning, updates the view placing and, if necessary, uses different sheets if they are available and if <b>Autosize</b> is enabled in the drawing layout properties.<br><br>No effect on GA drawings.   |
| TRUE, GA, SHEET, SCALE | In drawing cloning, updates the view placing, scales the views if <b>Autoscale</b> is enabled in the drawing layout properties, and, if necessary, uses different sheets if they are available and if <b>Autosize</b> is enabled in the drawing layout properties.<br><br>Also applies to GA drawings. |
| FALSE                  | View placing, view scales, or sheet sizes are not updated in drawing cloning or update, even if you use other values with FALSE.   |

## 6.118 XS\_DRAWING\_COMBINE\_ADDED\_DIMENSIONS

Category in [Advanced options dialog \(page 29\)](#): Drawing properties

Use this advanced option to control whether added dimensions are merged to existing ones in updated or cloned drawings. If set to FALSE, added dimensions are not merged to existing ones. The default value is TRUE.

This advanced option is model specific and the setting is saved in the options database.

## 6.119 XS\_DRAWING\_CUT\_VIEW\_COMPARISON\_CRITERIA

Category in [Advanced options dialog \(page 29\)](#): Drawing views

Use this advanced option to specify the criteria used when comparing section views. If section views are different, they will be visible and will receive a unique section mark. By default, section views are compared based on the boundaries of the parts (EXTREMA) and the orientation of the parts in the view (ORIENTATION). The advanced option may contain a combination of the following options separated by a comma:

- POSITION compares position numbers of all the parts in the view (including non-dimensioned parts).
- EXTREMA compares the boundaries of the parts in the view.
- ORIENTATION compares the orientation of the parts in the view.

- `SHOWALL` considers all section views different and displays them with unique section marks.
- `EXACT` uses more rigid rules when comparing section views. Use `EXACT` only in combination with the options `EXTREMA` or `ORIENTATION`.

`EXACT, ORIENTATION` = Part x/y axes need to be the same.

`ORIENTATION` = Part x/y axes need to be the same or opposite.

`EXACT, EXTREMA` = Part extremas need to be the same in any direction.

`EXTREMA` = Part extremas need to be the same in each part's local direction.

If orientation is 90 degrees different, the extremas can still be the same if both parts have the same x and y dimension, for example.

This advanced option is role specific. When the type **SYSTEM(ROLE)** is in use, the default value is used. When the type **MODEL(ROLE)** or **DRAWING(ROLE)** is in use, you can change the value, which is then the same for all users in the current model.

## 6.120 XS\_DRAWING\_FILTER\_UDAS\_WITHOUT\_TYPE\_CHECK

Category in [Advanced options dialog \(page 29\)](#): **Drawing properties**

Set this advanced option to `FALSE` (default) to use only user-defined attributes that have been defined for the object in the `object.inp` in drawing view filtering.

This advanced option is model specific and the setting is saved in the options database.

## 6.121 XS\_DRAWING\_GA\_HATCH\_SCHEMA

Category in [Advanced options dialog \(page 29\)](#): **Hatching**

Use this advanced option to determine the name of the hatch schema file used for general arrangement drawings.

This advanced option is model specific and the setting is saved in the options database.

### Example

To use the default hatch schema file, enter `general.htc`.

## 6.122 XS\_DRAWING\_GRID\_LABEL\_FRAME\_FIXED\_WIDTH

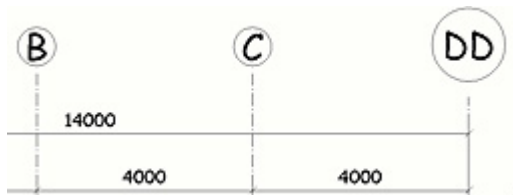
Category in [Advanced options dialog \(page 29\)](#): Drawing properties

Use this advanced option to specify a fixed size for the grid label frames in drawings. This is useful, for example, when you want all the grid label frames to be the same size no matter whether there are one or two digits in the frame. If you set this advanced option to zero (0), the width of the grid label frame depends on the width of the grid label. Enter the desired value in millimeters.

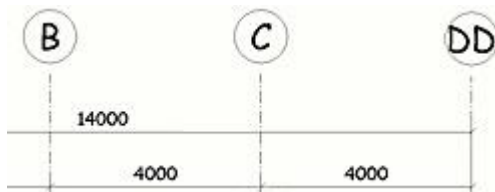
A fixed width of 18 is suggested for 5 characters (XX.XX) when the text height is 3/16. Change the fixed width to 14 for 4 characters (XX.X), 12 for 3 characters (X.X), and to 10 for 2 characters (XX). If you use a different text height than 3/16, fixed width values need to be adjusted accordingly. This advanced option overrides the automatic frame width calculation for grid labels.

If you do not set this advanced option, Tekla Structures adjusts the grid label frames to text within each frame.

Example of grid label frames when the frame size is not fixed:



Example of grid label frames when the frame size is fixed:



This advanced option is role specific. When the type **SYSTEM(ROLE)** is in use, the default value is used. When the type **MODEL(ROLE)** or **DRAWING(ROLE)** is in use, you can change the value, which is then the same for all users in the current model.

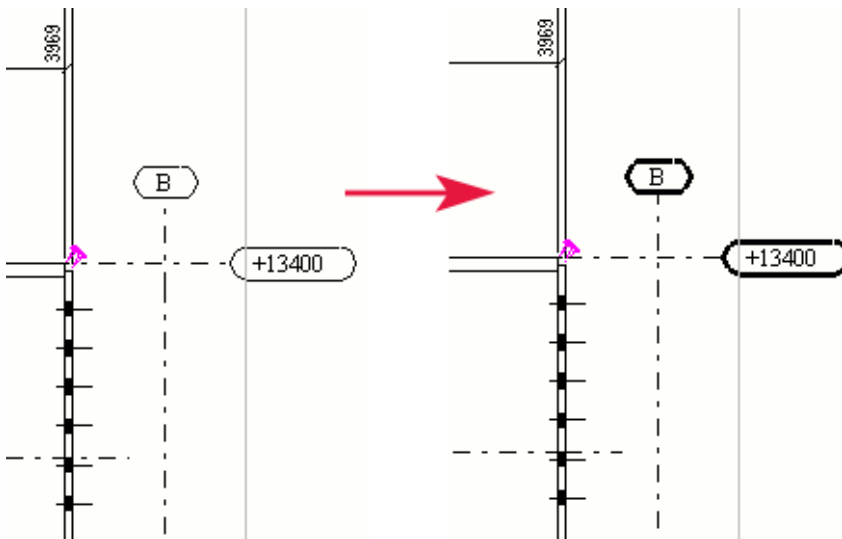
## 6.123 XS\_DRAWING\_GRID\_LABEL\_FRAME\_LINE\_WIDTH\_FACTOR

Category in [Advanced options dialog \(page 29\)](#): Drawing Properties

Use this advanced option to change the thickness of the grid label frame in drawings. You may want to emphasize the grid label frames so that they are shown with a thicker line than the rest of the grid.

### Example

`XS_DRAWING_GRID_LABEL_FRAME_LINE_WIDTH_FACTOR=1`



**NOTE** Each color has a certain line thickness. The thickness of the grid label frame on the printed black-and-white drawings depends on the color that has been defined for the grid label in the grid properties and on the value of this advanced option.

This advanced option is model specific and the setting is saved in the options database.

## 6.124 XS\_DRAWING\_HISTORY\_LOG\_TYPE

Category in [Advanced options dialog \(page 29\)](#): Drawing properties

Use this advanced option to define the contents of the drawing history log file `drawing_history.log`. You can use the following options individually or in any combination.

- ALL
- NEW

- DELETED (default)
- MODIFIED

### Example

Separate the options using the underline (\_) character, for example, NEW\_DELETED.

This advanced option is model specific and the setting is saved in the options database.

## 6.125 XS\_DRAWING\_IGNORE\_ZERO\_LEVELS\_IN\_PART\_MARKS

Category in [Advanced options dialog \(page 29\)](#): Marking - parts

Use this advanced option to control whether zero levels (+0.000) are shown or hidden in part marks. By default the advanced option is set to `FALSE`, so zero levels are shown in part marks. Set to `TRUE` to hide the zero levels in part marks.

For example, you can use this advanced option for hiding connection side marks at a specified distance from the view plane.

---

**TIP** To list level information in part marks, in part mark properties add one of the following attributes in the mark:

- ASSEMBLY\_BOTTOM\_LEVEL
- ASSEMBLY\_TOP\_LEVEL
- CAST\_UNIT\_BOTTOM\_LEVEL
- CAST\_UNIT\_TOP\_LEVEL

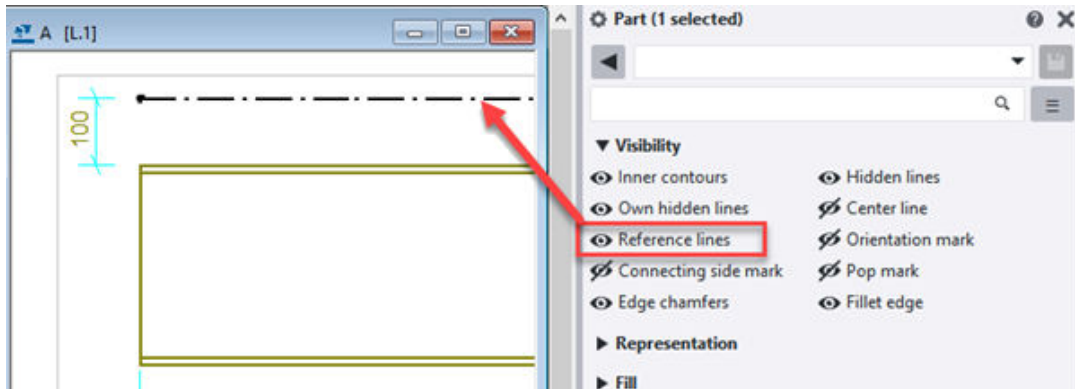
---

This advanced option is role specific. When the type **SYSTEM(ROLE)** is in use, the default value is used. When the type **MODEL(ROLE)** or **DRAWING(ROLE)** is in use, you can change the value, which is then the same for all users in the current model.

## 6.126 XS\_DRAWING\_PART\_REFERENCE\_LINE\_TYPE

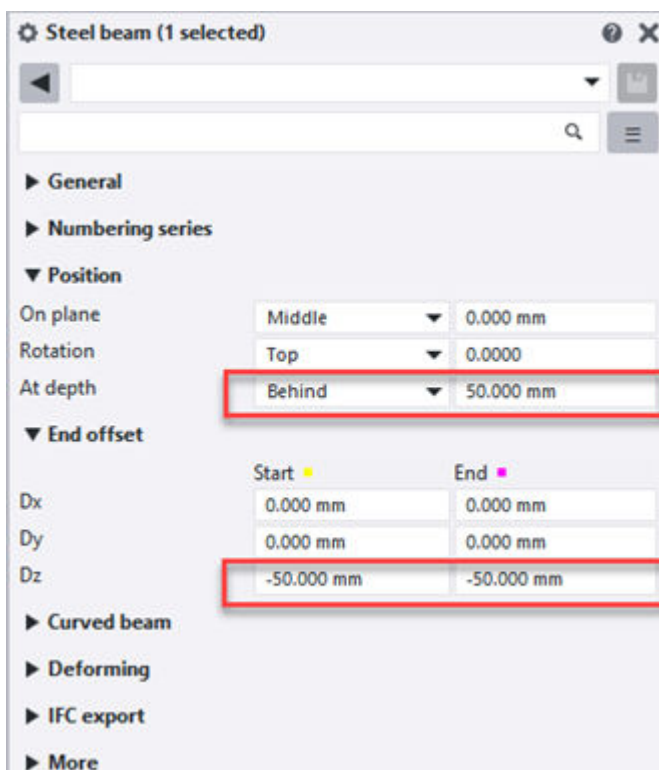
Category in [Advanced options dialog \(page 29\)](#): Drawing properties

Use this advanced option to set the reference line location in drawings.



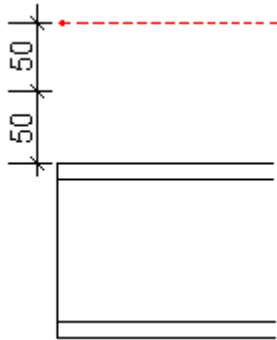
You can decide to ignore the method how the part is inserted in the model by using one of the available switches.

In the following examples the part has been created with specific position settings (**On plane, Rotation, At depth**) and end offset settings (**Dx, Dy, Dz**).

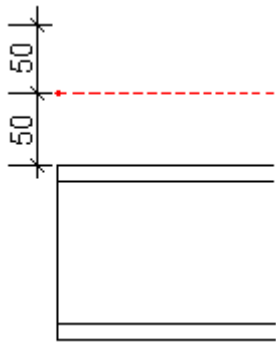


You can use the switches listed below. If you leave the value out, Tekla Structures uses `POINT_LINE`.

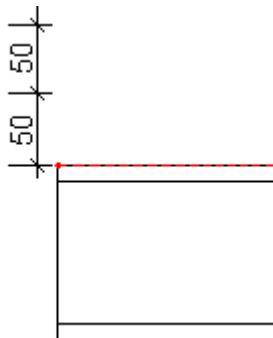
- POINT\_LINE takes into account both the position setting **At depth** 50 mm and the end offset **Dz** -50 mm, so the line is located in the same relational position as you see it in model.



- DEFINITION\_LINE creates a line between the part's definition points, takes account the position settings, but ignores the end offsets, so the reference line is drawn using the **At depth** 50 mm, but the end offset **Dz** -50 mm is ignored.



- CORNER\_REFERENCE\_LINE ignores both position settings and end offsets, and draws the reference line so that it is located on the part and not outside the part. It ignores the way that the part is inserted in the model.



This advanced option is model specific and the setting is saved in the options database.

## 6.127 XS\_DRAWING\_PART\_SYMBOL\_REPRESENTATION\_TYPE

Category in [Advanced options dialog \(page 29\)](#): **Drawing properties**

Use this advanced option for adjusting the symbol representation of parts in drawings. The value 0 (default) means by reference line, and the value 1 means by center line. This affects the part representation options **Symbol** and **Symbol with partial profile** in part properties.

This advanced option is model specific and the setting is saved in the options database.

## 6.128 XS\_DRAWING\_PLOT\_FILE\_DIRECTORY

Category in [Advanced options dialog \(page 29\)](#): **Printing**

Use this advanced option to define the folder where **Printer Catalog** creates the plot files defined in the **Print drawings** dialog. This advanced option also defines the folder where the drawing export creates the DWG, DXF, or DGN files defined in the **Export drawings as DWG/DXF/DGN** dialog. By default, `.\PlotFiles` is used as the value. You can define any folder. For example, to create the plot files in the 'Team A plotfiles' folder under the model folder, enter `.\Team A plotfiles`.

**Printer Catalog** and old printing are used only when you have set the advanced option `XS_USE_OLD_PLOT_DIALOG` to `TRUE` through **File** --> **Settings** --> **Advanced options** --> **Printing**. This advanced option has no effect to the new printing.

**See also**

[XS\\_USE\\_OLD\\_PLOT\\_DIALOG \(page 522\)](#)

## 6.129 XS\_DRAWING\_PLOT\_FILE\_NAME

**This advanced option must be set in an initialization (.ini) file.**

Use this advanced option to define print file names for drawings if the file name is missing from the **Print drawings** dialog. This advanced option is used if you have not entered a value for some of the following advanced options:

`XS_DRAWING_PLOT_FILE_NAME_A`, `XS_DRAWING_PLOT_FILE_NAME_C`, `XS_DRAWING_PLOT_FILE_NAME_G`, `XS_DRAWING_PLOT_FILE_NAME_W`, or `XS_DRAWING_PLOT_FILE_NAME_M`. This advanced option also affects how the exported DWG/DXF/DGN files are named.

Enter any combination of text and options:

| Value  | Example of the result in the print file name | Description   |
|--|--|---|
| %NAME%<br>%DRAWING_NAME%                                 | P_1  | Part, assembly, or cast unit position, using the file name format <code>prefix_number</code> .  |
| %NAME.-%<br>%DRAWING_NAME.-%                             | P-1  | Part, assembly, or cast unit position, using the file name format <code>prefix-number</code> .  |
| %NAME.%<br>%DRAWING_NAME.%                               | P1   | Part, assembly, or cast unit position, using the file name format <code>prefixnumber</code> .   |
| %REV%<br>%REVISION%<br>%DRAWING_REVISION%                | 2  | Drawing revision number.  |
| %REV_MARK%<br>%REVISION_MARK%<br>%DRAWING_REVISION_MARK% | B  | Drawing revision mark.  |
| %TITLE%<br>%DRAWING_TITLE%                               | PLATE  | Drawing name from the drawing properties dialog.  |
| %UDA:<drawing user-defined attribute>%                   | Painted                                      | Value of a user-defined drawing attribute, f For example, <code>UDA:DRAWING_USERFIELD_1</code> . The user-defined drawing attributes are defined in <code>objects.inp</code> . The actual values for the user-defined attributes are entered in the drawing-specific user-defined attributes dialog.              |
| %REV? - <text>%  | 2 - Rev                                      | Adds conditional prefixes. In this example, if <code>REV</code> exists, Tekla Structures adds the text between ? and % to the file name.<br><br>The question mark (?) can be used for querying if a <variable> is set, and if it is not set, the <text> after the question mark until the last % will be printed. |

| Value                      | Example of the result in the print file name | Description  |
|----------------------------|--|--|
| %TPL:<template attribute>% | Base plate                                   | <p>You can use template attributes that can be found in Template Editor. The actual values for these attributes are entered in the drawing properties dialog. Examples:</p> <ul style="list-style-type: none"> <li>• %TPL:TITLE1%</li> <li>• %TPL:TITLE2%</li> <li>• %TPL:TITLE3%</li> <li>• %TPL:DR_DEFAULT_HOLE_SIZE%</li> <li>• %TPL:DATE%</li> <li>• %TPL:TIME%</li> <li>• %TPL:DR_DEFAULT_WELD_SIZE%</li> </ul> |

This advanced option is model specific and the setting is saved in the options database.

### Example

`%DRAWING_NAME.% - %DRAWING_TITLE%%DRAWING_REVISION? - Rev %REVISION_MARK%`

If you define `%DRAWING_NAME.% - %DRAWING_TITLE%`  
`%DRAWING_REVISION? - Rev %%REVISION_MARK%`, a .pdf file with a name `P1 - PLATE - Rev A.pdf` will be created from a single part drawing, for example, where

`DRAWING_NAME.` = P1, which is the part position without punctuation.

`DRAWING_TITLE` = PLATE, which is the name that you have entered in the **Name** box in drawing properties.

`DRAWING_REVISION?` = Empty, if there are no revisions. If a revision exists, the text after the question mark (?) together with the revision value according to the revision information defined in **Rev.No.** in the **Revision handling** dialog are written in the plot file name.

- Rev is the text to be printed, if `DRAWING_REVISION` gives a value. If `DRAWING_REVISION` does not give a value, the text - Rev will not be printed.

In this case, the plot file name will not have `REVISION_MARK` either because the drawing has not been revised.

`REVISION_MARK = A`, because A has been defined as the revision mark in the **Revision handling** dialog.

---

**NOTE** The print file name switches `%DRAWING_NAME%` and `%NAME%` that should produce an underscore in the print file name (P\_1) do not work if `XS_ASSEMBLY_POSITION_NUMBER_FORMAT_STRING` (page 59) does not use a separator between the values (for example, `%ASSEMBLY_PREFIX%%ASSEMBLY_POS%`), or if `XS_USE_ASSEMBLY_NUMBER_FOR` (page 507) is set.

To make the switches work, do the following:

- If you want to use `XS_ASSEMBLY_POSITION_NUMBER_FORMAT_STRING`, use a dot (.) slash (/) or hyphen (-) between the values, for example, `%ASSEMBLY_PREFIX%.%ASSEMBLY_POS%`, or similar.
- Leave `XS_USE_ASSEMBLY_NUMBER_FOR` empty.

---

**NOTE** When you define a switch in the **Advanced options** dialog, you only use single percent signs around the switch `%xxx%`. When you define a switch for an advanced option in an `.ini` file, you need to use double percent signs around the switch `%%xxx%%`. For example, type `%%BOLT_NUMBER%%*D%%HOLE.DIAMETER%%` for the advanced option `XS_BOLT_MARK_STRING_FOR_SIZE` when you define it in an `.ini` file.

---

## 6.130 XS\_DRAWING\_PLOT\_FILE\_NAME\_A

Category in **Advanced options dialog (page 29)**: Printing

Use this advanced option to define print file names for assembly drawings. This advanced option also affects how the exported DWG/DXF/DGN files are named.

Enter any combination of text and options:

| Value  | Example of the result in the print file name | Description  |
|--|--|--|
| <code>%NAME%</code><br><code>%DRAWING_NAME%</code> | P_1  | Part, assembly, or cast unit position, using the file name format <code>prefix_number</code> . |

| Value  | Example of the result in the print file name | Description  |
|--|--|--|
| %NAME.-%<br>%DRAWING_NAME.-%                             | P-1  | Part, assembly, or cast unit position, using the file name format prefix-number.   |
| %NAME.%<br>%DRAWING_NAME.%                               | P1   | Part, assembly, or cast unit position, using the file name format prefixnumber.  |
| %REV%<br>%REVISION%<br>%DRAWING_REVISION%                | 2  | Drawing revision number.   |
| %REV_MARK%<br>%REVISION_MARK%<br>%DRAWING_REVISION_MARK% | B  | Drawing revision mark.   |
| %TITLE%<br>%DRAWING_TITLE%                               | PLATE  | Drawing name from the drawing properties dialog.   |
| %UDA:<drawing user-defined attribute>%                   | Painted                                      | Value of a user-defined drawing attribute, f For example, UDA:DRAWING_USERFIELD_1. The user-defined drawing attributes are defined in objects.inp. The actual values for the user-defined attributes are entered in the drawing-specific user-defined attributes dialog.                             |
| %REV? - <text>%  | 2 - Rev                                      | Adds conditional prefixes. In this example, if REV exists, Tekla Structures adds the text between ? and % to the file name.<br><br>The question mark (?) can be used for querying if a <variable> is set, and if it is not set, the <text> after the question mark until the last % will be printed. |
| %TPL:<template attribute>%                               | Base plate                                   | You can use template attributes that can be found in Template Editor. The actual values for these attributes are entered in  |

| Value | Example of the result in the print file name | Description  |
|-------|--|--|
|       |  | the drawing properties dialog.<br>Examples: <ul style="list-style-type: none"> <li>• %TPL:TITLE1%</li> <li>• %TPL:TITLE2%</li> <li>• %TPL:TITLE3%</li> <li>• %TPL:DR_DEFAULT_HOLE_SIZE%</li> <li>• %TPL:DATE%</li> <li>• %TPL:TIME%</li> <li>• %TPL:DR_DEFAULT_WELD_SIZE%</li> </ul> |

This advanced option is role specific. When the type **SYSTEM(ROLE)** is in use, the default value is used. When the type **MODEL(ROLE)** or **DRAWING(ROLE)** is in use, you can change the value, which is then the same for all users in the current model.

### Example

The example below results in the assembly drawing PDF name

E\_P1\_PLATE\_Revision=2.pdf:

E\_%NAME.>%\_TITLE%%REV?\_Revision=%%REV%

E = is the text you want to have in the beginning.

NAME. = P1, which is the part position without punctuation.

TITLE = PLATE, which is the name that you have entered in the **Name** box in drawing properties.

REV? = Empty, if there are no revisions. If a revision exists, the text after the question mark (?) together with the revision value according to the revision information defined in **Rev.No.** in the **Revision handling** dialog are written in the plot file name.

Revision= is the text to be printed, if REV gives a value. If REV does not give a value, the text Revision= will not be printed.

REV = 2, because 2 is the revision number in the **Revision handling** dialog.

---

**NOTE** The print file name switches %DRAWING\_NAME% and %NAME% that should produce an underscore in the print file name (P\_1) do not work if [XS\\_ASSEMBLY\\_POSITION\\_NUMBER\\_FORMAT\\_STRING](#) (page 59) does not use a separator between the values

(for example, %ASSEMBLY\_PREFIX%%ASSEMBLY\_POS%), or if [XS\\_USE\\_ASSEMBLY\\_NUMBER\\_FOR](#) (page 507) is set.

To make the switches work, do the following:

- If you want to use `XS_ASSEMBLY_POSITION_NUMBER_FORMAT_STRING`, use a dot (.) slash (/) or hyphen (-) between the values, for example, %ASSEMBLY\_PREFIX%.%ASSEMBLY\_POS%, or similar.
- Leave `XS_USE_ASSEMBLY_NUMBER_FOR` empty.

---

**NOTE** When you define a switch in the **Advanced options** dialog, you only use single percent signs around the switch %xxx%. When you define a switch for an advanced option in an .ini file, you need to use double percent signs around the switch %%xxx%%. For example, type %%BOLT\_NUMBER%%\*D%%HOLE.DIAMETER%% for the advanced option `XS_BOLT_MARK_STRING_FOR_SIZE` when you define it in an .ini file.

---

## 6.131 XS\_DRAWING\_PLOT\_FILE\_NAME\_W

Category in [Advanced options dialog \(page 29\)](#): **Printing**

Use this advanced option to define print file names for single part drawings. This advanced option also affects how the exported DWG/DXF/DGN files are named.

Enter any combination of text and options:

| Value                                     | Example of the result in the print file name | Description  |
|---|--|--|
| %NAME%<br>%DRAWING_NAME%                  | P_1  | Part, assembly, or cast unit position, using the file name format prefix_number. |
| %NAME.-%<br>%DRAWING_NAME.-%              | P-1  | Part, assembly, or cast unit position, using the file name format prefix-number. |
| %NAME.%<br>%DRAWING_NAME.%                | P1   | Part, assembly, or cast unit position, using the file name format prefixnumber.  |
| %REV%<br>%REVISION%<br>%DRAWING_REVISION% | 2  | Drawing revision number.   |

| Value  | Example of the result in the print file name | Description   |
|--|--|---|
| %REV_MARK%<br>%REVISION_MARK%<br>%DRAWING_REVISION_MARK% | B  | Drawing revision mark.  |
| %TITLE%<br>%DRAWING_TITLE%                               | PLATE  | Drawing name from the drawing properties dialog.  |
| %UDA:<drawing user-defined attribute>%                   | Painted                                      | Value of a user-defined drawing attribute, f For example, UDA: DRAWING_USERFIELD_1. The user-defined drawing attributes are defined in <code>objects.inp</code> . The actual values for the user-defined attributes are entered in the drawing-specific user-defined attributes dialog.   |
| %REV? - <text>%  | 2 - Rev                                      | Adds conditional prefixes. In this example, if <code>REV</code> exists, Tekla Structures adds the text between ? and % to the file name.<br><br>The question mark (?) can be used for querying if a <variable> is set, and if it is not set, the <text> after the question mark until the last % will be printed.   |
| %TPL:<template attribute>%                               | Base plate                                   | You can use template attributes that can be found in Template Editor. The actual values for these attributes are entered in the drawing properties dialog. Examples: <ul style="list-style-type: none"> <li>• %TPL:TITLE1%</li> <li>• %TPL:TITLE2%</li> <li>• %TPL:TITLE3%</li> <li>• %TPL:DR_DEFAULT_HOLE_SIZE%</li> <li>• %TPL:DATE%</li> <li>• %TPL:TIME%</li> </ul> |

| Value | Example of the result in the print file name | Description   |
|-------|--|---|
|       |  | <ul style="list-style-type: none"> <li>• %TPL:DR_DEFAULT_WELD_SIZE<br/>%</li> </ul> |

This advanced option is role specific. When the type **SYSTEM(ROLE)** is in use, the default value is used. When the type **MODEL(ROLE)** or **DRAWING(ROLE)** is in use, you can change the value, which is then the same for all users in the current model.

### Examples

%DRAWING\_NAME.% - %DRAWING\_TITLE%%DRAWING\_REVISION? - Rev %  
%REVISION\_MARK%

If you define %DRAWING\_NAME.% - %DRAWING\_TITLE%  
%DRAWING\_REVISION? - Rev %%REVISION\_MARK%, a .pdf file with a name  
P1 - PLATE - Rev A.pdf will be created from a single part drawing, where  
DRAWING\_NAME. = P1, which is the part position without punctuation.

DRAWING\_TITLE = PLATE, which is the name that you have entered in the  
**Name** box in drawing properties.

DRAWING\_REVISION? = Empty, if there are no revisions. If a revision exists, the  
text after the question mark (?) together with the revision value according to  
the revision information defined in **Rev.No.** in the **Revision handling** dialog  
are written in the plot file name.

- Rev is the text to be printed, if DRAWING\_REVISION gives a value. If  
DRAWING\_REVISION does not give a value, the text - Rev will not be printed.  
In this case, the plot file name will not have REVISION\_MARK either because  
the drawing has not been revised.

REVISION\_MARK = A, because A has been defined as the revision mark in the  
**Revision handling** dialog.

---

**NOTE** When you define a switch in the **Advanced options** dialog, you only  
use single percent signs around the switch %xxx%. When you define  
a switch for an advanced option in an .ini file, you need to use  
double percent signs around the switch %%xxx%%. For example, type  
%%BOLT\_NUMBER%%\*D%%HOLE.DIAMETER%% for the advanced option  
XS\_BOLT\_MARK\_STRING\_FOR\_SIZE when you define it in an .ini file.

---

## 6.132 XS\_DRAWING\_PLOT\_FILE\_NAME\_G

Category in [Advanced options dialog \(page 29\)](#): **Printing**

Use this advanced option to define print file names for general arrangement drawings. This advanced option also affects how the exported DWG/DXF/DGN files are named.

Enter any combination of text and options:

| Value  | Example of the result in the print file name | Description  |
|--|--|--|
| %NAME%<br>%DRAWING_NAME%                                 | P_1  | Part, assembly, or cast unit position, using the file name format <code>prefix_number</code> .   |
| %NAME.-%<br>%DRAWING_NAME.-%                             | P-1  | Part, assembly, or cast unit position, using the file name format <code>prefix-number</code> .   |
| %NAME.%<br>%DRAWING_NAME.%                               | P1   | Part, assembly, or cast unit position, using the file name format <code>prefixnumber</code> .  |
| %REV%<br>%REVISION%<br>%DRAWING_REVISION%                | 2  | Drawing revision number.   |
| %REV_MARK%<br>%REVISION_MARK%<br>%DRAWING_REVISION_MARK% | B  | Drawing revision mark.   |
| %TITLE%<br>%DRAWING_TITLE%                               | PLATE  | Drawing name from the drawing properties dialog.   |
| %UDA:<drawing user-defined attribute>%                   | Painted                                      | Value of a user-defined drawing attribute, f For example, <code>UDA:DRAWING_USERFIELD_1</code> . The user-defined drawing attributes are defined in <code>objects.inp</code> . The actual values for the user-defined attributes are entered in the drawing-specific user-defined attributes dialog. |
| %REV? - <text>%  | 2 - Rev                                      | Adds conditional prefixes. In this example, if <code>REV</code> exists, Tekla  |

| Value                      | Example of the result in the print file name | Description  |
|----------------------------|--|--|
|                            |  | <p>Structures adds the text between ? and % to the file name.</p> <p>The question mark (?) can be used for querying if a &lt;variable&gt; is set, and if it is not set, the &lt;text&gt; after the question mark until the last % will be printed.</p>   |
| %TPL:<template attribute>% | Base plate                                   | <p>You can use template attributes that can be found in Template Editor. The actual values for these attributes are entered in the drawing properties dialog. Examples:</p> <ul style="list-style-type: none"> <li>• %TPL:TITLE1%</li> <li>• %TPL:TITLE2%</li> <li>• %TPL:TITLE3%</li> <li>• %TPL:DR_DEFAULT_HOLE_SIZE%</li> <li>• %TPL:DATE%</li> <li>• %TPL:TIME%</li> <li>• %TPL:DR_DEFAULT_WELD_SIZE%</li> </ul> |

This advanced option is role specific. When the type **SYSTEM(ROLE)** is in use, the default value is used. When the type **MODEL(ROLE)** or **DRAWING(ROLE)** is in use, you can change the value, which is then the same for all users in the current model.

### Example

`%DRAWING_TITLE%%DRAWING_REVISION? - Rev %%REVISION_MARK%`

If you define `%DRAWING_TITLE%%DRAWING_REVISION? - Rev %REVISION_MARK%`, a PDF file with a name `ELEVATION1 - Rev A.pdf` will be created from a GA drawing, where

`DRAWING_TITLE` = `ELEVATION1`, which is the name that you have entered in the **Name** box in drawing properties.

`DRAWING_REVISION?` = Empty, if there are no revisions. If a revision exists, the text after the question mark (?) together with the revision value according to the revision information defined in **Rev.No.** in the **Revision handling** dialog are written in the plot file name.

- Rev is the text to be printed, if DRAWING\_REVISION gives a value. If DRAWING\_REVISION does not give a value, the text - Rev will not be printed. In this case, the plot file name will not have REVISION\_MARK either because the drawing has not been revised.

REVISION\_MARK = A, because A has been defined as the revision mark in the **Revision handling** dialog.

---

**NOTE** When you define a switch in the **Advanced options** dialog, you only use single percent signs around the switch %xxx%. When you define a switch for an advanced option in an .ini file, you need to use double percent signs around the switch %%xxx%%. For example, type %%BOLT\_NUMBER%%\*D%%HOLE.DIAMETER%% for the advanced option XS\_BOLT\_MARK\_STRING\_FOR\_SIZE when you define it in an .ini file.

---

## 6.133 XS\_DRAWING\_PLOT\_FILE\_NAME\_M

Category in **Advanced options dialog (page 29): Printing**

Use this advanced option to define print file names for multidrawings. This advanced option also affects how the exported DWG/DXF/DGN files are named.

Enter any combination of text and options:

| Value                                     | Example of the result in the print file name | Description  |
|---|--|--|
| %NAME%<br>%DRAWING_NAME%                  | P_1  | Part, assembly, or cast unit position, using the file name format prefix_number. |
| %NAME.-%<br>%DRAWING_NAME.-%              | P-1  | Part, assembly, or cast unit position, using the file name format prefix-number. |
| %NAME.-%<br>%DRAWING_NAME.-%              | P1   | Part, assembly, or cast unit position, using the file name format prefixnumber.  |
| %REV%<br>%REVISION%<br>%DRAWING_REVISION% | 2  | Drawing revision number.   |

| Value  | Example of the result in the print file name | Description  |
|--|--|--|
| %REV_MARK%<br>%REVISION_MARK%<br>%DRAWING_REVISION_MARK% | B  | Drawing revision mark.   |
| %TITLE%<br>%DRAWING_TITLE%                               | PLATE  | Drawing name from the drawing properties dialog.   |
| %UDA:<drawing user-defined attribute>%                   | Painted                                      | Value of a user-defined drawing attribute, f For example, UDA: DRAWING_USERFIELD_1. The user-defined drawing attributes are defined in <code>objects.inp</code> . The actual values for the user-defined attributes are entered in the drawing-specific user-defined attributes dialog.  |
| %REV? - <text>%  | 2 - Rev                                      | Adds conditional prefixes. In this example, if <code>REV</code> exists, Tekla Structures adds the text between ? and % to the file name.<br><br>The question mark (?) can be used for querying if a <variable> is set, and if it is not set, the <text> after the question mark until the last % will be printed.  |
| %TPL:<template attribute>%                               | Base plate                                   | You can use template attributes that can be found in Template Editor. The actual values for these attributes are entered in the drawing properties dialog.<br>Examples: <ul style="list-style-type: none"> <li>• %TPL:TITLE1%</li> <li>• %TPL:TITLE2%</li> <li>• %TPL:TITLE3%</li> <li>• %TPL:DR_DEFAULT_HOLE_SIZE%</li> <li>• %TPL:DATE%</li> <li>• %TPL:TIME%</li> </ul> |

| Value | Example of the result in the print file name | Description  |
|-------|--|--|
|       |  | <ul style="list-style-type: none"> <li>• %TPL:DR_DEFAULT_WELD_SIZE%</li> </ul> |

This advanced option is role specific. When the type **SYSTEM(ROLE)** is in use, the default value is used. When the type **MODEL(ROLE)** or **DRAWING(ROLE)** is in use, you can change the value, which is then the same for all users in the current model.

### Example

%DRAWING\_NAME.% - %DRAWING\_TITLE%%DRAWING\_REVISION? - Rev %  
%REVISION\_MARK%

If you define %DRAWING\_NAME.% - %DRAWING\_TITLE%  
%DRAWING\_REVISION? - Rev %%REVISION\_MARK%, a .pdf file with a name  
P1 - PLATE - Rev A.pdf will be created from a multidrawing where  
DRAWING\_NAME. = P1, which is the part position without punctuation.

DRAWING\_TITLE = PLATE, which is the name that you have entered in the  
**Name** box in drawing properties.

DRAWING\_REVISION? = Empty, if there are no revisions. If a revision exists, the text after the question mark (?) together with the revision value according to the revision information defined in **Rev.No.** in the **Revision handling** dialog are written in the plot file name.

- Rev is the text to be printed, if DRAWING\_REVISION gives a value. If DRAWING\_REVISION does not give a value, the text - Rev will not be printed. In this case, the plot file name will not have REVISION\_MARK either because the drawing has not been revised.

REVISION\_MARK = A, because A has been defined as the revision mark in the **Revision handling** dialog.

---

**NOTE** The print file name switches %DRAWING\_NAME% and %NAME% that should produce an underscore in the print file name (P\_1) do not work if [XS\\_ASSEMBLY\\_POSITION\\_NUMBER\\_FORMAT\\_STRING \(page 59\)](#) does not use a separator between the values (for example, %ASSEMBLY\_PREFIX%%ASSEMBLY\_POS%), or if [XS\\_USE\\_ASSEMBLY\\_NUMBER\\_FOR \(page 507\)](#) is set.

To make the switches work, do the following:

- If you want to use XS\_ASSEMBLY\_POSITION\_NUMBER\_FORMAT\_STRING, use a dot (.) slash (/) or hyphen (-) between the values, for example, %ASSEMBLY\_PREFIX%.%ASSEMBLY\_POS%, or similar.

- Leave XS\_USE\_ASSEMBLY\_NUMBER\_FOR empty.

---

**NOTE** When you define a switch in the **Advanced options** dialog, you only use single percent signs around the switch %xxx%. When you define a switch for an advanced option in an .ini file, you need to use double percent signs around the switch %%xxx%%. For example, type %%BOLT\_NUMBER%%\*D%%HOLE.DIAMETER%% for the advanced option XS\_BOLT\_MARK\_STRING\_FOR\_SIZE when you define it in an .ini file.

---

## 6.134 XS\_DRAWING\_PLOT\_FILE\_NAME\_C

Category in [Advanced options dialog \(page 29\)](#): **Printing**

Use this advanced option to define print file names for cast unit drawings. This advanced option also affects how the exported DWG/DXF/DGN files are named.

Enter any combination of text and options:

| Value  | Example of the result in the print file name | Description  |
|--|--|--|
| %NAME%<br>%DRAWING_NAME%                                 | P_1  | Part, assembly, or cast unit position, using the file name format prefix_number. |
| %NAME.-%<br>%DRAWING_NAME.-%                             | P-1  | Part, assembly, or cast unit position, using the file name format prefix-number. |
| %NAME.-%<br>%DRAWING_NAME.-%                             | P1   | Part, assembly, or cast unit position, using the file name format prefixnumber.  |
| %REV%<br>%REVISION%<br>%DRAWING_REVISION%                | 2  | Drawing revision number.   |
| %REV_MARK%<br>%REVISION_MARK%<br>%DRAWING_REVISION_MARK% | B  | Drawing revision mark.   |
| %TITLE%<br>%DRAWING_TITLE%                               | PLATE  | Drawing name from the drawing properties dialog.                                 |

| Value                                  | Example of the result in the print file name | Description  |
|--|--|--|
| %UDA:<drawing user-defined attribute>% | Painted                                      | Value of a user-defined drawing attribute, f For example, UDA:DRAWING_USERFIELD_1. The user-defined drawing attributes are defined in <code>objects.inp</code> . The actual values for the user-defined attributes are entered in the drawing-specific user-defined attributes dialog.   |
| %REV? - <text>%                        | 2 - Rev                                      | Adds conditional prefixes. In this example, if <code>REV</code> exists, Tekla Structures adds the text between ? and % to the file name.<br><br>The question mark (?) can be used for querying if a <variable> is set, and if it is not set, the <text> after the question mark until the last % will be printed.  |
| %TPL:<template attribute>%             | Base plate                                   | You can use template attributes that can be found in Template Editor. The actual values for these attributes are entered in the drawing properties dialog. Examples:<br><ul style="list-style-type: none"><li>• %TPL:TITLE1%</li><li>• %TPL:TITLE2%</li><li>• %TPL:TITLE3%</li><li>• %TPL:DR_DEFAULT_HOLE_SIZE%</li><li>• %TPL:DATE%</li><li>• %TPL:TIME%</li><li>• %TPL:DR_DEFAULT_WELD_SIZE%</li></ul> |

This advanced option is role specific. When the type **SYSTEM(ROLE)** is in use, the default value is used. When the type **MODEL(ROLE)** or **DRAWING(ROLE)** is in use, you can change the value, which is then the same for all users in the current model.

## Example

`%DRAWING_NAME.% - %DRAWING_TITLE%%DRAWING_REVISION? - Rev %  
%REVISION_MARK%`

If you define `%DRAWING_NAME.% - %DRAWING_TITLE%`  
`%DRAWING_REVISION? - Rev %%REVISION_MARK%`, a `.pdf` file with a name  
`S1 - SLAB - Rev A.pdf` will be created from a cast unit drawing, where  
`DRAWING_NAME. = S1`, which is the part position without punctuation.

`DRAWING_TITLE = SLAB`, which is the name that you have entered in the  
**Name** box in drawing properties.

`DRAWING_REVISION? = Empty`, if there are no revisions. If a revision exists, the  
text after the question mark (?) together with the revision value according to  
the revision information defined in **Rev.No.** in the **Revision handling** dialog  
are written in the plot file name.

- `Rev` is the text to be printed, if `DRAWING_REVISION` gives a value. If  
`DRAWING_REVISION` does not give a value, the text - `Rev` will not be printed.  
In this case, the plot file name will not have `REVISION_MARK` either because  
the drawing has not been revised.

`REVISION_MARK = A`, because A has been defined as the revision mark in the  
**Revision handling** dialog.

---

**NOTE** The print file name switches `%DRAWING_NAME%` and `%NAME%` that  
should produce an underscore in the print file name (`P_1`)  
do not work if `XS_ASSEMBLY_POSITION_NUMBER_FORMAT_STRING`  
(page 59) does not use a separator between the values  
(for example, `%ASSEMBLY_PREFIX%%ASSEMBLY_POS%`), or if  
`XS_USE_ASSEMBLY_NUMBER_FOR` (page 507) is set.

To make the switches work, do the following:

- If you want to use  
`XS_ASSEMBLY_POSITION_NUMBER_FORMAT_STRING`, use a dot  
(.) slash (/) or hyphen (-) between the values, for example,  
`%ASSEMBLY_PREFIX%.%ASSEMBLY_POS%`, or similar.
- Leave `XS_USE_ASSEMBLY_NUMBER_FOR` empty.

---

**NOTE** When you define a switch in the **Advanced options** dialog, you only  
use single percent signs around the switch `%xxx%`. When you define  
a switch for an advanced option in an `.ini` file, you need to use  
double percent signs around the switch `%%xxx%%`. For example, type  
`%%BOLT_NUMBER%%*D%%HOLE.DIAMETER%%` for the advanced option  
`XS_BOLT_MARK_STRING_FOR_SIZE` when you define it in an `.ini` file.

---

## 6.135 XS\_DRAWING\_POINT\_SCALE

Category in [Advanced options dialog \(page 29\)](#): **Drawing properties**

Use this advanced option to scale the points Tekla Structures uses to create reference lines. Enter the scale as a decimal. The default value is 0.5.

This advanced option is model specific and the setting is saved in the options database.

## 6.136 XS\_DRAWING\_RENDERING\_ENGINE

Category in [Advanced options dialog \(page 29\)](#): **Drawing views**

Use this advanced option to select the drawing rendering engine. The options are GDI and FOG.

Originally, the need for new drawing rendering was caused by a Windows update that could cause serious issues in drawing rendering in Tekla Structures. This was related to the Windows GDI and depended on the hardware used. Later Windows updates or updates of your hardware might have diminished or even removed the problem.

By default, this advanced option is set to GDI, which means that the Windows Graphics Device Interface (GDI) rendering is used.

When set to FOG:

- The overall rendering is faster, which can be seen when you pan or zoom, for example.
- FOG rendering does not use GPU.
- There are some limitations in FOG rendering, which may cause the need to use the GDI rendering instead:
  - The line widths are sometimes inconsistent.
  - Lines and fonts are sometimes less distinctive than when using GDI.
  - In FOG rendering, there is a slight offset in the placing of texts.

You can change the rendering engine while in an open drawing. The drawing is immediately redrawn using the current rendering engine.

This advanced option is user specific and the setting is saved in `options.bin` under the user folder, for example, in `C:\Users\\AppData\Local\Trimble\Tekla Structures\\UserSettings`.

---

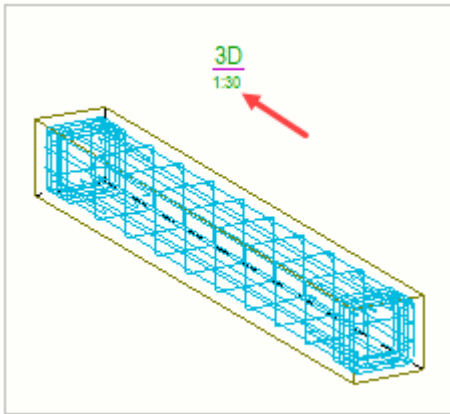
**NOTE** Setting the [XS\\_USE\\_SMART\\_PAN \(page 531\)](#) advanced option to `TRUE` is useful for the Windows GDI only and has no effect on FOG rendering.

---

## 6.137 XS\_DRAWING\_SCALE\_SEPARATOR\_CHAR

Category in [Advanced options dialog \(page 29\)](#): Drawing properties

This advanced option defines the separator character used in drawing scales. The default character is colon (:).



This advanced option is model specific and the setting is saved in the options database.

## 6.138 XS\_DRAWING\_SHEET\_HEIGHT

Category in [Advanced options dialog \(page 29\)](#): Drawing views

Use this advanced option to define the default height of a drawing sheet. The default value is 800.

This advanced option is user specific and the setting is saved in `options.bin` under the user folder, for example, in `C:\Users\\AppData\Local\Trimble\Tekla Structures\\UserSettings`. Restart Tekla Structures to activate the new value.

### See also

[XS\\_DRAWING\\_SHEET\\_POSITION\\_X \(page 216\)](#)

## 6.139 XS\_DRAWING\_SHEET\_POSITION\_X

**Category in [Advanced options dialog \(page 29\)](#): Drawing views**

Use this advanced option to define the initial position of the drawing sheet. This is useful when using a dual display. The default value is 0.

You can set this in the following ways:

```
XS_DRAWING_SHEET_POSITION_X=50XS_DRAWING_SHEET_POSITION_Y=50XS_DRAWING_SHEET_HEIGHT=600XS_DRAWING_SHEET_WIDTH=900
```

X and Y are the coordinates of the upper left corner of the drawing view, measured from the upper left corner of the MDI client window (the dark gray area in the Tekla Structures window).

This advanced option is user specific and the setting is saved in `options.bin` under the user folder, for example, in `C:\Users\\AppData\Local\Trimble\Tekla Structures\\UserSettings`. Restart Tekla Structures to activate the new value.

### See also

[XS\\_DRAWING\\_SHEET\\_POSITION\\_Y \(page 217\)](#)

[XS\\_DRAWING\\_SHEET\\_HEIGHT \(page 216\)](#)

[XS\\_DRAWING\\_SHEET\\_WIDTH \(page 218\)](#)

## 6.140 XS\_DRAWING\_SHEET\_POSITION\_Y

**Category in [Advanced options dialog \(page 29\)](#): Drawing views**

Use this advanced option to define the initial position of the drawing sheet. This is useful when using a dual display. The default value is 0.

You can set this in the following ways:

```
XS_DRAWING_SHEET_POSITION_X=50 XS_DRAWING_SHEET_POSITION_Y=50  
XS_DRAWING_SHEET_HEIGHT=600 XS_DRAWING_SHEET_WIDTH=900
```

X and Y are the coordinates of the upper left corner of the drawing view, measured from the upper left corner of the MDI client window (the dark gray area in the Tekla Structures window).

This advanced option is user specific and the setting is saved in `options.bin` under the user folder, for example, in `C:\Users\\AppData\Local\Trimble\Tekla Structures\\UserSettings`. Restart Tekla Structures to activate the new value.

**See also**

[XS\\_DRAWING\\_SHEET\\_POSITION\\_X \(page 216\)](#)

[XS\\_DRAWING\\_SHEET\\_HEIGHT \(page 216\)](#)

[XS\\_DRAWING\\_SHEET\\_WIDTH \(page 218\)](#)

## 6.141 XS\_DRAWING\_SHEET\_WIDTH

**Category in [Advanced options dialog \(page 29\)](#): Drawing views**

Use this advanced option to define the default width of a drawing sheet. The default value is 1000.

This advanced option is user specific and the setting is saved in `options.bin` under the user folder, for example, in `C:\Users\\AppData\Local\Trimble\Tekla Structures\\UserSettings`. Restart Tekla Structures to activate the new value.

**See also**

[XS\\_DRAWING\\_SHEET\\_POSITION\\_X \(page 216\)](#)

[XS\\_DRAWING\\_SHEET\\_POSITION\\_Y \(page 217\)](#)

[XS\\_DRAWING\\_SHEET\\_HEIGHT \(page 216\)](#)

## 6.142 XS\_DRAWING\_SINGLE\_PART\_HATCH\_SCHEMA

**Category in [Advanced options dialog \(page 29\)](#): Hatching**

Use this advanced option to determine the name of the hatch schema file used for single part drawings.

This advanced option is model specific and the setting is saved in the options database.

**Example**

To use the default hatch schema file, enter `single.htc`.

## 6.143 XS\_DRAWING\_SNAPSHOT\_CREATION

Category in [Advanced options dialog \(page 29\)](#): **Drawing properties**

If you set the this advanced option to `FALSE`, the snapshots are not created automatically when you save a drawing. The default value is `TRUE`, which means that snapshots are created automatically when you save a drawing.

This advanced option is model specific and the setting is saved in the options database.

**See also**

[XS\\_DRAWING\\_CREATE\\_SNAPSHOT\\_ON\\_DRAWING\\_CREATION \(page 110\)](#)

## 6.144 XS\_DRAWING\_SOLID\_MERGE\_TOLERANCE

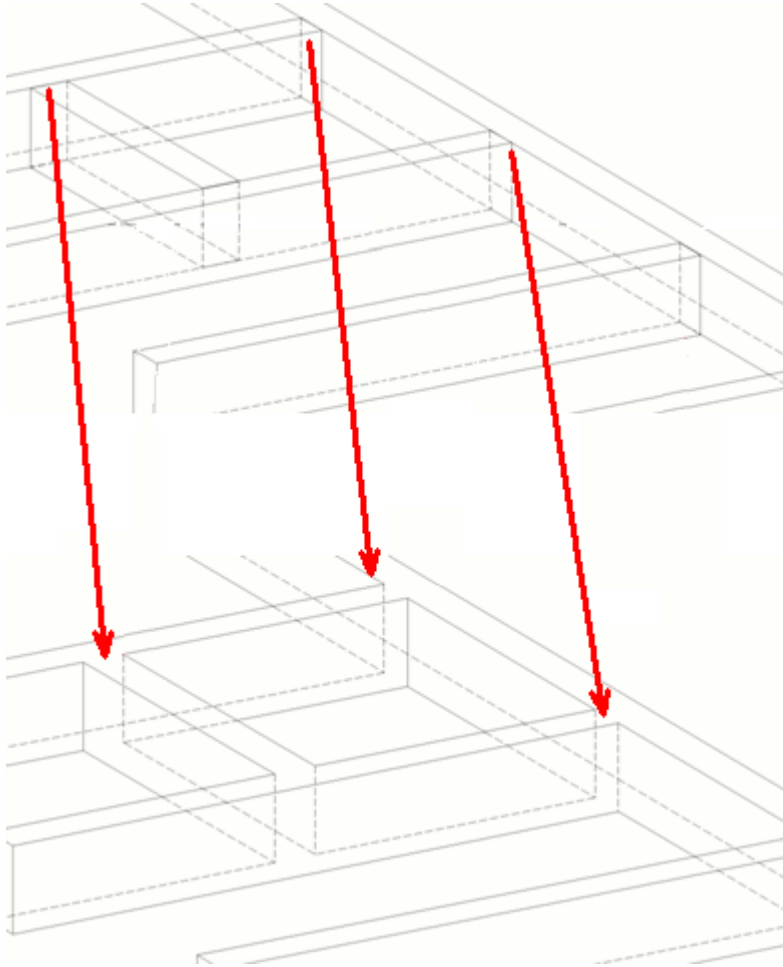
Category in [Advanced options dialog \(page 29\)](#): **Drawing views**

Use this advanced option to define the limit that determines whether some objects in a cast unit are merged in the drawing view. Enter the value in millimeters. The default value is `6.0`.

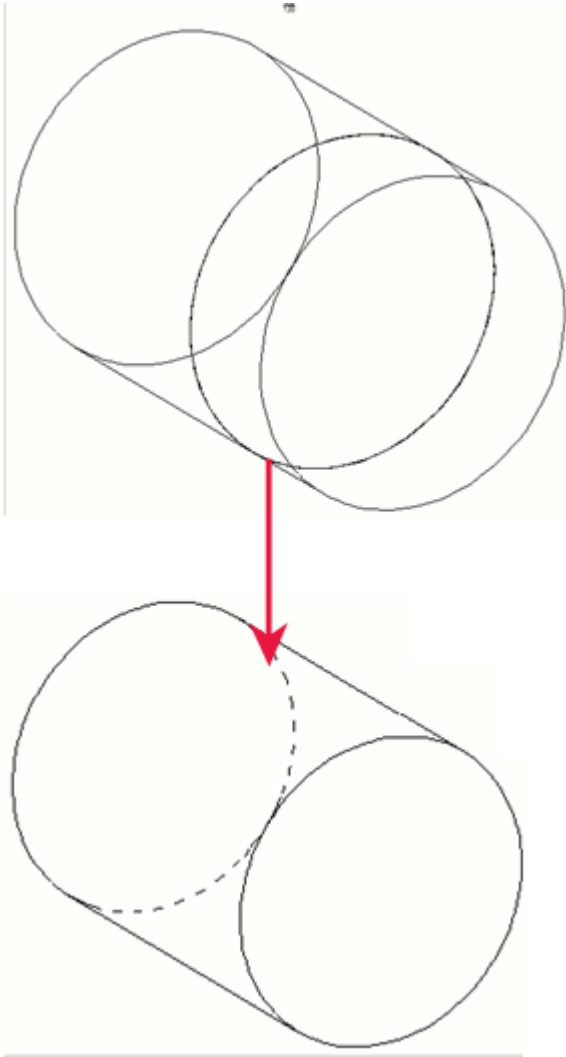
This advanced option is role specific. When the type **SYSTEM(ROLE)** is in use, the default value is used. When the type **MODEL(ROLE)** or **DRAWING(ROLE)** is in use, you can change the value, which is then the same for all users in the current model.

**Example**

The following example shows the result of merging parts.



In the following example, unnecessary segments of curved parts that are one above another are removed.



## 6.145 XS\_DRAWING\_STUD\_REPRESENTATION

Category in [Advanced options dialog \(page 29\)](#): Drawing properties

Use this advanced option to define the representation for bolts and studs in drawings.

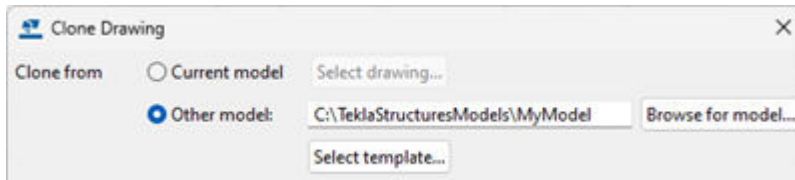
Set the advanced option to `SOLID` (default) to have the studs drawn as solid objects regardless of the selected bolt representation, and to `AS_BOLT` to have the studs drawn according to the representation selected in the bolt properties.

This advanced option is role specific. When the type **SYSTEM(ROLE)** is in use, the default value is used. When the type **MODEL(ROLE)** or **DRAWING(ROLE)** is in use, you can change the value, which is then the same for all users in the current model.

## 6.146 XS\_DRAWING\_TEMPLATES\_LIBRARY

### Category in [Advanced options dialog \(page 29\)](#): Drawing properties

Set this advanced option to point to the model folder that the **Clone** command in **Document manager** uses by default to get the drawing templates when you have selected to use drawing templates in another model.



This advanced option is model specific and the setting is saved in the options database. .

### Example

```
C:\TeklaStructuresModels\MyModel
```

(where `MyModel` is the model name).

To use the a drawing template library and the drawing template:

1. Open the `user.ini` file located in the folder `..\Users\<user>\AppData\Local\Trimble\TeklaStructures\<version>\UserSettings` in a text editor.
2. Set the advanced option `XS_DRAWING_TEMPLATES_LIBRARY` to point to the model folder that contains the drawing templates (template library):

```
set XS_DRAWING_TEMPLATES_LIBRARY=%XS_RUNPATH%\<drawing_template_model>
```

For example:

```
set  
XS_DRAWING_TEMPLATES_LIBRARY=C:\TeklaStructuresModels\MyModel
```

(where `MyModel` is the model name).

3. To open the **Clone Drawing** dialog, click **Clone** in **Document manager**.
4. Use the **Objects and actions in cloning** options to define the drawing objects to be cloned and the actions for each cloned object.
5. Select the **Clone from > Other model** option. You can see that the `MyModel` folder is displayed in the box.
6. Click the **Select template...** button.
7. In the **Drawing Templates** dialog, select the drawing template.
8. Leave the list open and clone the drawing by clicking **Clone selected**.

---

**NOTE** There is another advanced option with a similar name, [XS\\_CLONING\\_TEMPLATE\\_DIRECTORY \(page 96\)](#). This advanced option defines the parent folders that contain all the models that have the cloning templates that you want to show in the **Master Drawing Catalog**.

---

## 6.147 XS\_DRAWING\_TEXT\_FILE\_OBJECT\_USE\_EXTERNAL\_EDITOR

Category in [Advanced options dialog \(page 29\)](#): **Drawing properties**

Use this advanced option to control which editor opens when you select to edit a linked .txt or .rtf file in a text editor. Set this advanced option to `TRUE` to always use the associated external application for viewing and editing the .txt and .rtf files. Set it to `FALSE` to use the Tekla Structures built-in text editor. `FALSE` is the default value.

This advanced option is model specific and the setting is saved in the options database.

## 6.148 XS\_DRAWING\_UDAS\_MODIFY\_ALL\_DRAWING\_TYPES

Category in [Advanced options dialog \(page 29\)](#): **Drawing properties**

Use this advanced option allow the modification of the user-defined attributes of all the selected drawings in **Document manager** at the same time, even if the drawings are of different types.

- To allow the modification of user-defined attributes for all drawings types at the same time, set the advanced option to `TRUE`. `TRUE` is the default value.
- To allow the modification of user-defined attributes only for one drawing type at a time, set the advanced option to `FALSE`.

This advanced option is user specific and the setting is saved in `options.bin` under the user folder, for example, in `C:\Users\\AppData\Local\Trimble\Tekla Structures\\UserSettings`. Restart Tekla Structures to activate the new value.

## 6.149 XS\_DRAWING\_UPDATE\_VIEW\_PLACING

Category in [Advanced options dialog \(page 29\)](#): **Drawing properties**

Use this advanced option to control how the view placing and view and sheet size scaling work in drawing update. If the views do not fit on the sheet, with certain values, Tekla Structures increases the sheet size using the drawing layout properties if autosizing is enabled and/or scales the views if autoscaling is enabled in the drawing properties (**Layout --> Drawing size --> Size definition mode --> Autosize** and **Layout --> Scale --> Autoscale**). Use this advanced option together with [XS\\_INTELLIGENT\\_DRAWING\\_ALLOWED \(page 299\)](#).

Available values are listed below. You can use a single value or a combination of values separated with commas.

TRUE

FALSE

SHEET

SCALE

GA

This advanced option is model specific and the setting is saved in the options database.

**Limitation:** This functionality does not affect anchor bolt plans.

See below for available values and value combinations and their descriptions:

| Value                  | Description   |
|------------------------|---|
| TRUE                   | In drawing update, updates the view placing. Does not affect the sheet size or view scales.<br><br>TRUE is the default value.<br><br>No effect on GA drawings.  |
| TRUE, SCALE            | In drawing update, updates the view placing, also scales the views if <b>Autoscale</b> is enabled in the drawing layout properties. Does not affect the sheet size.<br><br>No effect on GA drawings.            |
| TRUE, SHEET            | In drawing update, updates the view placing and, if necessary, uses different sheets if they are available and if <b>Autosize</b> is enabled in the drawing layout properties.<br><br>No effect on GA drawings. |
| TRUE, GA, SHEET, SCALE | In drawing updates, updates the view placing, scales the views if <b>Autoscale</b> is enabled in the drawing layout properties, and, if necessary, uses different sheets if they                                |

| Value | Description  |
|-------|--|
|       | are available and if <b>Autosize</b> is enabled in the drawing layout properties.<br>Also applies to GA drawings.                |
| FALSE | View placing, view scales, or sheet sizes are not updated in drawing cloning or update, even if you use other values with FALSE. |

## 6.150 XS\_DRAWING\_USE\_WORKSHOP\_FORM \_FOR\_DOUBLE\_PARTS\_IN\_SINGLE\_PART\_DRAWINGS

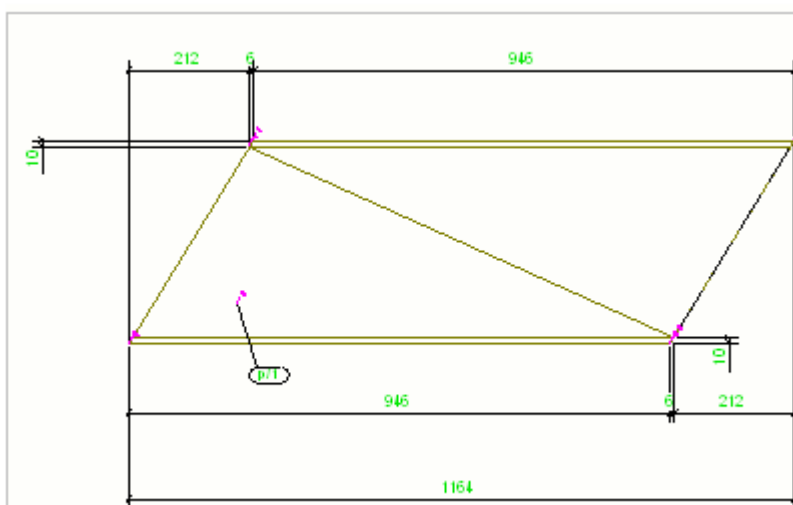
Category in **Advanced options dialog (page 29)**: Drawing properties

Set this advanced option to `TRUE` to show haunch profiles always in workshop form as double parts in single part drawings. `TRUE` is the default value. To show the haunch profiles using the part representation selected in the part properties, set this advanced option to `FALSE`. This setting affects only part representation, not dimensioning or other part properties.

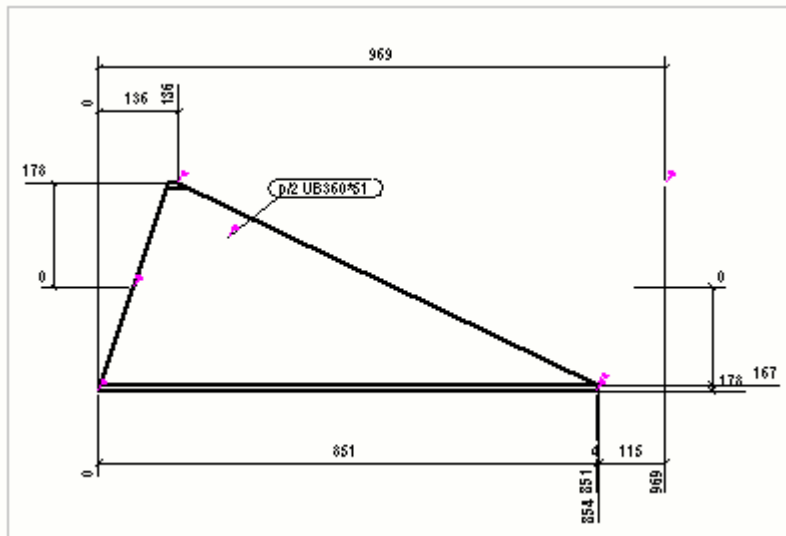
By default, a haunch (translations checked in `drawing.ail`) has different length calculations and uses different part presentation in drawings than a beam. The calculation routine checks the part name, and when the name "HAUNCH" or translations of it is found, the haunch calculation is used.

You can add additional names for haunch profiles in the `drawing.ail` file under the `\messages` folder. Use the strings like `drawing_haunch_2` or `drawing_haunch_3`.

Below is an example of the workshop form representation.



Below is an example of the outline representation.



This advanced option is model specific and the setting is saved in the options database.

## 6.151 XS\_DRAWING\_VIEW\_DIRECTION\_MARK\_SYMBOL\_FRONT

Category in [Advanced options dialog \(page 29\)](#): Drawing properties

Use the following advanced options to define the arrow symbol used in section and end view direction marks, for each basic view type (front, top, back, bottom):

- XS\_DRAWING\_VIEW\_DIRECTION\_MARK\_SYMBOL\_FRONT
- XS\_DRAWING\_VIEW\_DIRECTION\_MARK\_SYMBOL\_TOP
- XS\_DRAWING\_VIEW\_DIRECTION\_MARK\_SYMBOL\_BACK
- XS\_DRAWING\_VIEW\_DIRECTION\_MARK\_SYMBOL\_BOTTOM

By default Tekla Structures uses the symbol no 66  in the `xsteel.sym` file (located usually in the folder `\environments\common\symbols\`).

This advanced option is user specific and the setting is saved in `options.bin` under the user folder, for example, in `C:\Users\\AppData\Local\Trimble\Tekla Structures\\UserSettings`. Restart Tekla Structures to activate the new value.

## 6.152 XS\_DRAWING\_VIEW\_DIRECTION\_MARK\_SYMBOL\_TOP

Category in [Advanced options dialog \(page 29\)](#): Drawing properties

Use the following advanced options to define the arrow symbol used in section and end view direction marks, for each basic view type (front, top, back, bottom):

- XS\_DRAWING\_VIEW\_DIRECTION\_MARK\_SYMBOL\_FRONT
- XS\_DRAWING\_VIEW\_DIRECTION\_MARK\_SYMBOL\_TOP
- XS\_DRAWING\_VIEW\_DIRECTION\_MARK\_SYMBOL\_BACK
- XS\_DRAWING\_VIEW\_DIRECTION\_MARK\_SYMBOL\_BOTTOM

By default Tekla Structures uses the symbol no 66  in the `xsteel.sym` file (located usually in the folder `\environments\common\symbols\`).

This advanced option is user specific and the setting is saved in `options.bin` under the user folder, for example, in `C:\Users\\AppData\Local\Trimble\Tekla Structures\\UserSettings`. Restart Tekla Structures to activate the new value.

## 6.153 XS\_DRAWING\_VIEW\_DIRECTION\_MARK\_SYMBOL\_BACK

Category in [Advanced options dialog \(page 29\)](#): Drawing properties

Use the following advanced options to define the arrow symbol used in section and end view direction marks, for each basic view type (front, top, back, bottom):

- XS\_DRAWING\_VIEW\_DIRECTION\_MARK\_SYMBOL\_FRONT
- XS\_DRAWING\_VIEW\_DIRECTION\_MARK\_SYMBOL\_TOP
- XS\_DRAWING\_VIEW\_DIRECTION\_MARK\_SYMBOL\_BACK
- XS\_DRAWING\_VIEW\_DIRECTION\_MARK\_SYMBOL\_BOTTOM

By default Tekla Structures uses the symbol no 66  in the `xsteel.sym` file (located usually in the folder `\environments\common\symbols\`).

This advanced option is user specific and the setting is saved in `options.bin` under the user folder, for example, in `C:\Users\\AppData\Local\Trimble\Tekla Structures\\UserSettings`. Restart Tekla Structures to activate the new value.

## 6.154 XS\_DRAWING\_VIEW\_DIRECTION\_MARK\_SYMBOL\_BOTTOM

Category in [Advanced options dialog \(page 29\)](#): Drawing properties

Use the following advanced options to define the arrow symbol used in section and end view direction marks, for each basic view type (front, top, back, bottom):

- XS\_DRAWING\_VIEW\_DIRECTION\_MARK\_SYMBOL\_FRONT
- XS\_DRAWING\_VIEW\_DIRECTION\_MARK\_SYMBOL\_TOP
- XS\_DRAWING\_VIEW\_DIRECTION\_MARK\_SYMBOL\_BACK
- XS\_DRAWING\_VIEW\_DIRECTION\_MARK\_SYMBOL\_BOTTOM

By default Tekla Structures uses the symbol no 66  in the `xsteel.sym` file (located usually in the folder `\environments\common\symbols\`).

This advanced option is user specific and the setting is saved in `options.bin` under the user folder, for example, in `C:\Users\\AppData\Local\Trimble\Tekla Structures\\UserSettings`. Restart Tekla Structures to activate the new value.

## 6.155 XS\_DRAWING\_VIEW\_REFERENCE\_SYMBOL

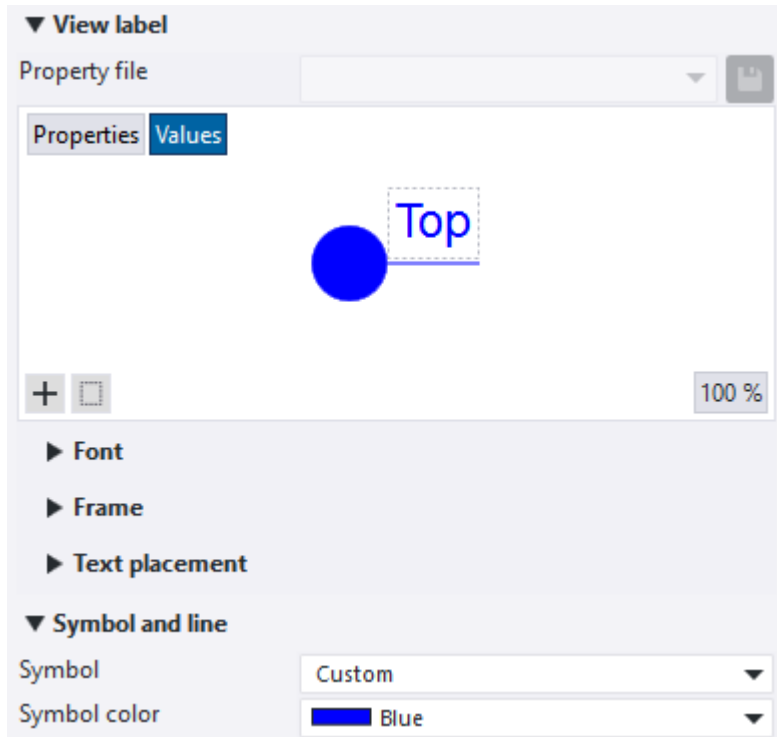
Category in [Advanced options dialog \(page 29\)](#): Drawing properties

Use to define the symbol that is displayed in drawing view labels, when you have selected the option **Custom** in the **Symbol** list in the drawing view label properties of section, detail, or main view properties. For example, if you enter `xsteel@3`, Tekla Structures uses the symbol number 3 in the `xsteel.sym` symbol file.

In the following example, `xsteel@3` has been defined as the value:



The view label properties have been defined as follows:



This advanced option is model specific and the setting is saved in the options database.

## 6.156 XS\_DRAWINGS\_LINE\_CAP\_STYLE

**Category in [Advanced options dialog \(page 29\)](#): Printing**

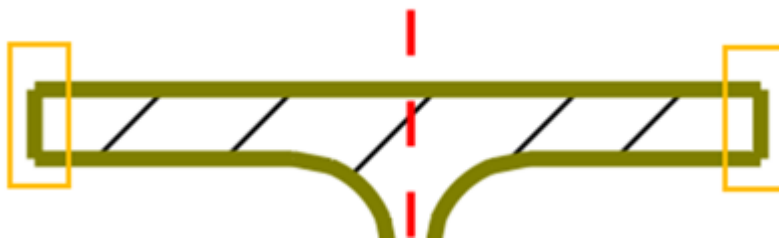
Use this advanced option to adjust the shape of the line ends in PDF printouts by defining the line cap style. Enter one of the following values:

0 = Lines break in corners. This is the default value and the old way of printing the line ends.

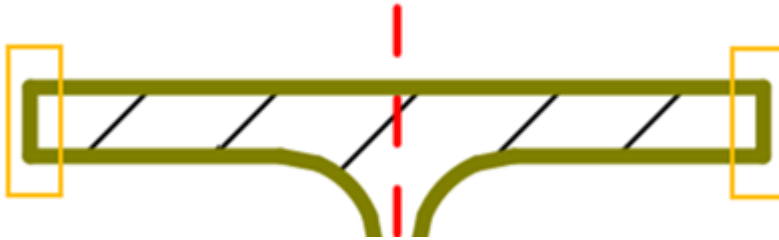
1 = Round corners (recommended)

2 = Rectangular corners

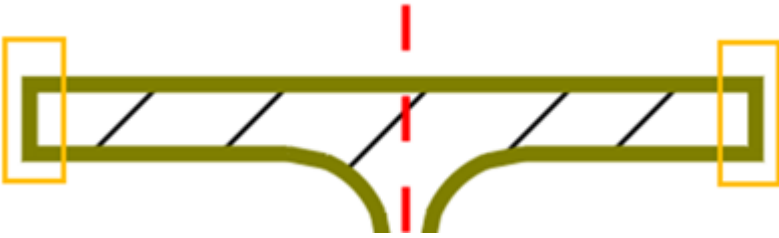
Value 0:



Value 1:



Value 2:



This advanced option is model specific and the setting is saved in the options database.

## 6.157 XS\_DRAWINGS\_USE\_CAP\_HEIGHT\_FOR\_FONT\_HEIGHT

Category in [Advanced options dialog \(page 29\)](#): Drawing properties

**Limitation:** Text file object `rtf` file content in drawings ignores the advanced option `XS_DRAWINGS_USE_CAP_HEIGHT_FOR_FONT_HEIGHT` and behaves as in previous versions.

This advanced option controls which font height system is used drawings.

- When you set this advanced option to `TRUE`, CAP height is used in the drawing export (DGN, DWG, and DXF) and printing (paper, plot files, PDF), and the font height is the same as the height of the capital letters of a specific font. When you use CAP height, the font height set in the Tekla Structures drawing is the same when you open the drawing in Autodesk AutoCAD or Bentley MicroStation, or print the drawing to paper or to a PDF.
- When you set this advanced option to `FALSE`, the em font height is used. When you use em height, and export the drawing from Tekla Structures to a DWG file, for example, the font height is converted from one unit to another (em to CAP), and the result is many times an incorrect font height.
- The default value is `FALSE`, and you may need to change the value to `TRUE` in your environment or for some of your projects.

Traditionally, the height of text in Tekla Structures drawings has been based on em (point size) font height metric only. However, some projects require the

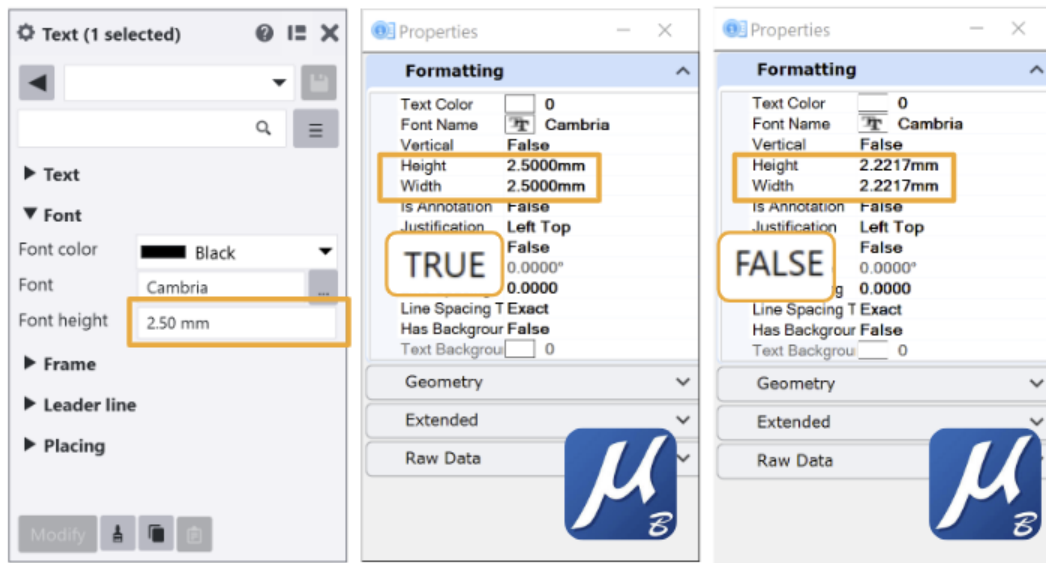
height of the text to be determined using another industry standard, CAP font height. CAP height represents the height of a capital letter more accurately than em height.



**(1)** CAP height

**(2)** point size (em)

The image below illustrates the difference in the font height in an exported DWG file when the advanced option is set to `TRUE` (CAP height is used) or `FALSE` (em height is used):



**NOTE** You can also apply the CAP font height in drawing templates. Texts in drawings created by the drawing templates in Template Editor are not directly affected by the `XS_DRAWINGS_USE_CAP_HEIGHT_FOR_FONT_HEIGHT` advanced option. The reason for this is that the change in the font height might cause overlapping in the template fields.

This advanced option is model specific and the setting is saved in the options database.

## 6.158 XS\_DRIVER

**Category in [Advanced options dialog \(page 29\)](#): File locations**

This advanced option is only used in the old printing functionality, which can be activated using the advanced option [XS\\_USE\\_OLD\\_PLOT\\_DIALOG \(page 522\)](#).

The print device definitions you create in the **Printer Catalog (File --> Printing --> Printer catalog)** are located in the `plotdev.bin` file. This file is located in the system folder defined for the advanced option `XS_SYSTEM`.

The definitions in the system folder are accessible to all users. You can also save printer definitions in the current model folder or in the project and firm folders, and in a folder indicated by this advanced option. Tekla Structures

searches first for `plotdev.bin` in the model, project and firm folders, then in the folder indicated by the advanced option `XS_DRIVER`.

This advanced option is system specific and is read from environment files. Generally, there is no need to modify system-specific settings. Do not modify them if you are not an administrator.

## 6.159 XS\_DSTV\_CREATE\_AK\_BLOCK\_FOR\_ALL\_PLATES

**Category in [Advanced options dialog \(page 29\)](#): CNC**

Set this advanced option to `TRUE` (default) to create AK blocks in DSTV files also for rectangular plates, combined NC files and part lists.

When you set the advanced option to `FALSE`, Tekla Structures checks whether an AK block needs to be created for the plate, and creates the AK block when needed.

The DSTV standard does not require the creation of AK blocks if the part is completely described by its length, its dimensions and its skewed cuts in the header data. This advanced option allows you to create AK blocks for plates even if the header data already covers all the information of the plate.

This advanced option is model specific and the setting is saved in the options database.

## 6.160 XS\_DSTV\_CREATE\_AK\_BLOCK\_FOR\_ALL\_PROFILES

**Category in [Advanced options dialog \(page 29\)](#): CNC**

When you set this advanced option to `TRUE`, Tekla Structures creates AK blocks in the NC file creation in DSTV files for all profiles, combined NC files, and part lists. The default value is `TRUE`.

When you set the advanced option to `FALSE`, Tekla Structures checks whether an AK block needs to be created for the part, and creates the AK block when needed.

The DSTV standard does not require the creation of AK blocks if the profile is completely described by its length, its dimensions, and its skewed cuts in the header data. This advanced option allows you to create AK blocks for profiles even if the header data already covers all the information of the profile.

To control whether to write sawing angles for profiles to NC files, use the advanced option [XS\\_DSTV\\_NO\\_SAWING\\_ANGLES\\_FOR\\_PROFILES\\_NEEDED](#) (page 239).

This advanced option is model specific and the setting is saved in the options database.

## 6.161 XS\_DSTV\_CREATE\_NOTCH\_ONLY\_ON\_BEAM\_CORNERS

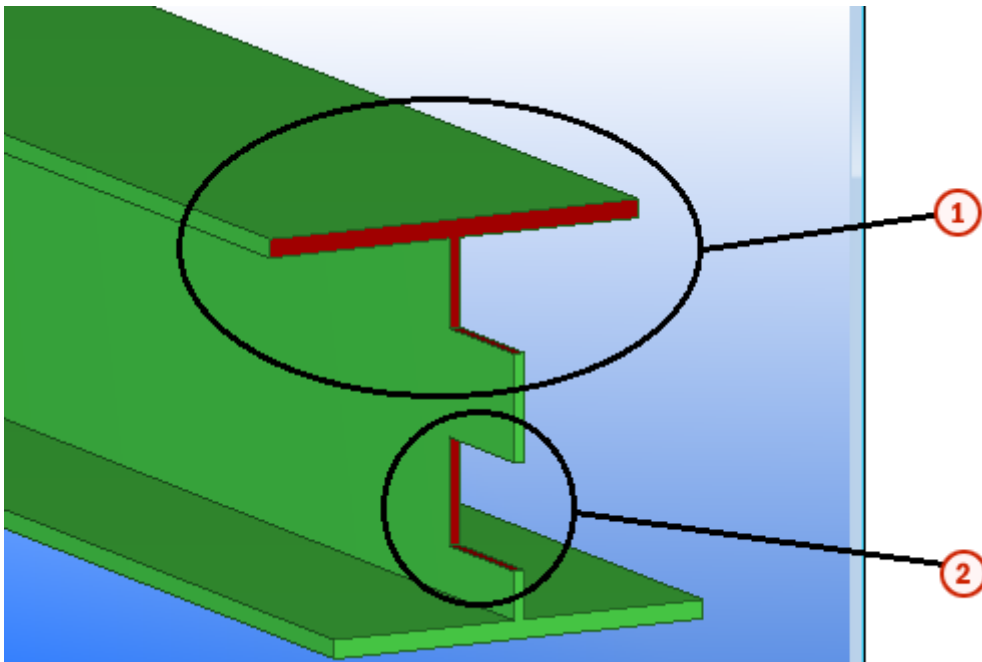
Category in [Advanced options dialog](#) (page 29): CNC

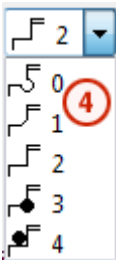
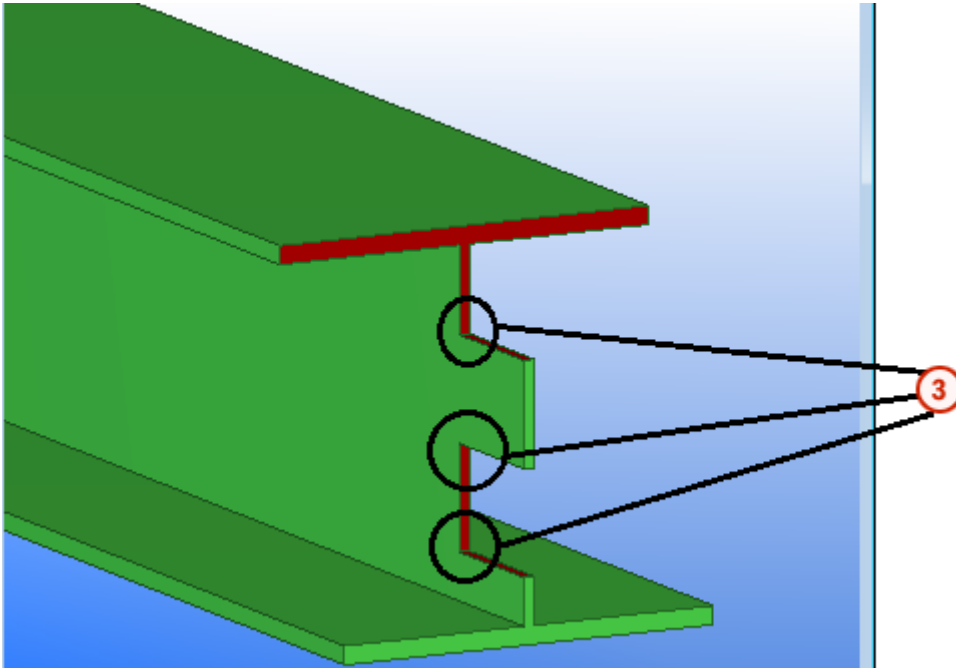
Use this advanced option to control the rounding of the notch corners in NC files. The default is `FALSE`.

This advanced option is model specific and the setting is saved in the options database.

### Examples

The following example describes the concepts of notches, notch corners, notch corner roundings, and beam corners:

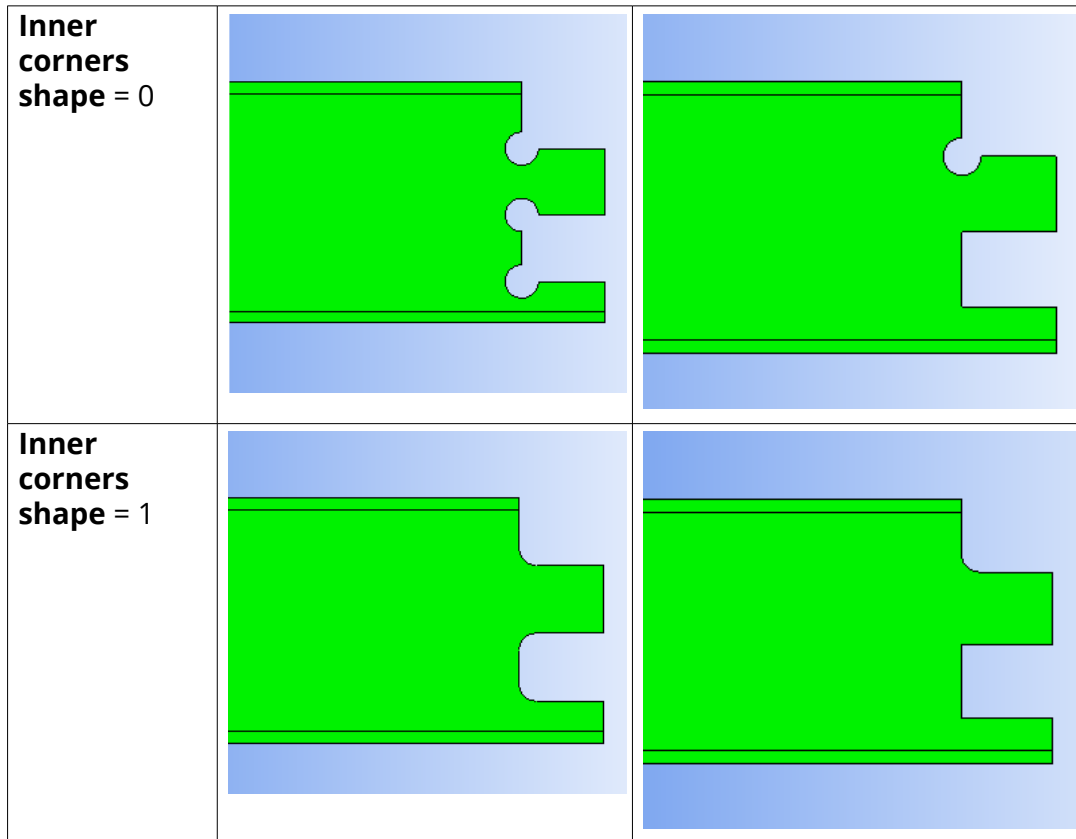




1. The notch is at the beam corner
2. The notch is not at the beam corner
3. Three notches, other corners are ordinary corners
4. Notch corner inner shape (or notch corner rounding) options in the **NC file settings** dialog

The table below shows how the `XS_DSTV_CREATE_NOTCH_ONLY_ON_BEAM_CORNERS` setting (TRUE/FALSE) and the **Inner corners shape** setting affect the NC file.

|  |   |  |
|--|---|--|
|  | <code>XS_DSTV_CREATE_NOTCH_ONLY_ON_BEAM_CORNERS</code> set to FALSE | <code>XS_DSTV_CREATE_NOTCH_ONLY_ON_BEAM_CORNERS</code> set to TRUE |
|--|---|--|



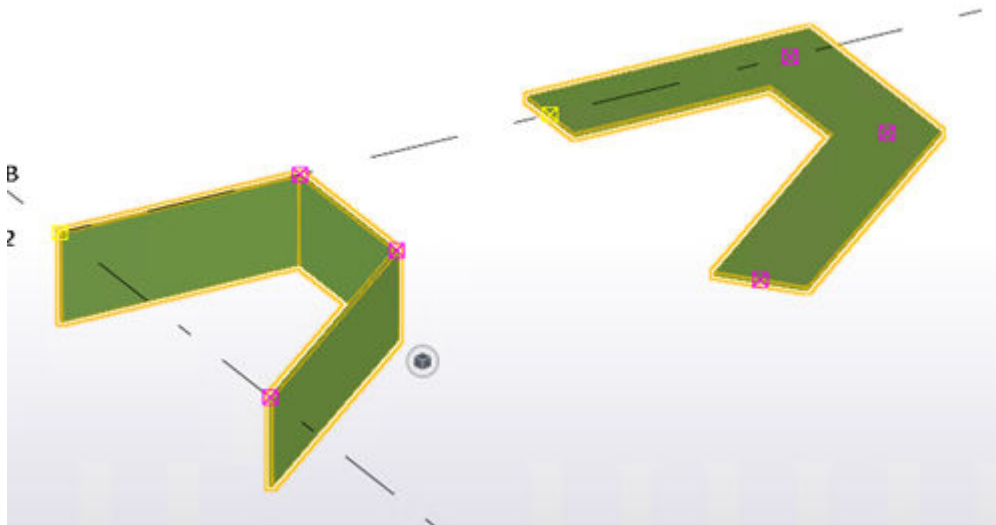
## 6.162 XS\_DSTV\_DO\_NOT\_UNFOLD\_POLYBEAM\_PLATES

Category in [Advanced options dialog \(page 29\)](#): CNC

Set this advanced option to `TRUE` if you do not want to unfold polybeam plates when you create DSTV files. This means that the polybeam plates will be handled as “cut into shape” instead of “bent into shape” regardless of the modeling method. For this advanced option to work, the polybeam plate must lie in XY plane of the material.

If you set this advanced option to `FALSE`, Tekla Structures writes the unfolded geometry of the polybeam plates to the DSTV files. The default value is `FALSE`.

In the image below, the polybeam plate on the right lies in XY plane, and setting this advanced option to `TRUE` works. The polybeam plate on the left does not lie in XY plane and the unfolded geometry is written to the DSTV files even if this advanced option is set to `TRUE`.



This advanced option is model specific and the setting is saved in the options database.

## 6.163 XS\_DSTV\_LIST\_SEPARATOR

**Category in [Advanced options dialog \(page 29\)](#): CNC**

Use this advanced option to define the separator used in DSTV lists exported in MIS list export. By default the separator is the # character.

This advanced option is model specific and the setting is saved in the options database.

## 6.164 XS\_DSTV\_LIST\_WEIGHT

**Category in [Advanced options dialog \(page 29\)](#): CNC**

NET weight is primarily required for plates and GROSS weight for profiles. Use this advanced option to specify whether gross weight or net weight is used the part lists in the NC export. There are three options available:

`WEIGHT` - Checks if the part is a plate, and uses net weight for plates and gross weight for profiles in part list export.

`WEIGHT_NET` - Uses net weight in part list export

`WEIGHT_GROSS` - User gross weight in part list export.

The value of the advanced option `XS_DSTV_LIST_WEIGHT` overrules the value of the existing advanced option `XS_DSTV_LIST_NET_WEIGHT`.

See also MIS list export.

This advanced option is model specific and the setting is saved in the options database.

## 6.165 XS\_DSTV\_NET\_LENGTH

**Category in [Advanced options dialog \(page 29\)](#): CNC**

Set this advanced option to `TRUE` to make cuts affect the part length in the NC file header. Set this advanced option to `FALSE` to make only fittings affect the length.

Using this advanced option also affects MIS values, such as KISS and EJE.

This advanced option is model specific and the setting is saved in the options database.

### For advanced users

The AK block of the NC file always contains the correct net length. Using this advanced option writes the net length, instead of the length, to the header block. Some NC machines take the length information either from the header or AK-block. Check with the workshop if you are uncertain which method to use.

---

**NOTE** Using this advanced option may damage cutting machines if the part contains cuts and fittings and the longest length is not at the edge of the part (machine tries to start cutting in the middle of the part):



---

### See also

[XS\\_DSTV\\_PRINT\\_NET\\_AND\\_GROSS\\_LENGTH \(page 240\)](#)

## 6.166 XS\_DSTV\_NO\_SAWING\_ANGLES\_FOR\_PLATES\_NEEDED

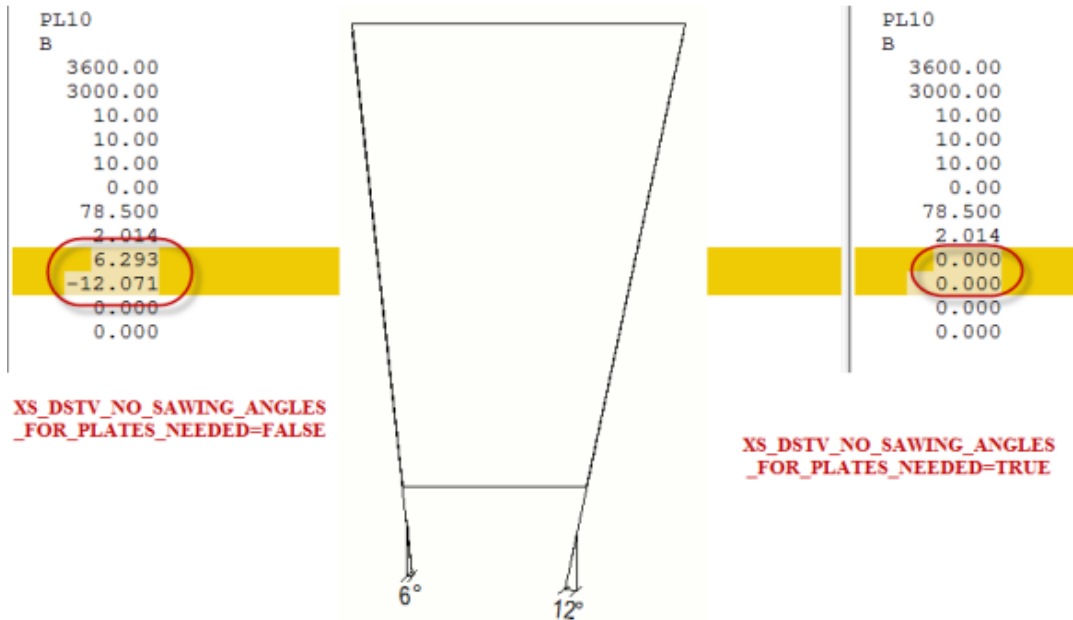
**Category in [Advanced options dialog \(page 29\)](#): CNC**

Use this advanced option to define whether to specify skew angles in the NC file header for plates. `TRUE` does not write the skew angles in the file header.

If you want to specify skew angles, set this advanced option to `FALSE`. The default value is `TRUE`.

This advanced option is model specific and the setting is saved in the options database.

See below for an example:



## 6.167 XS\_DSTV\_NO\_SAWING\_ANGLES\_FOR\_PROFILES\_NEEDED

Category in [Advanced options dialog \(page 29\)](#): CNC

Use this advanced option to define whether to write skew angles in the NC file header for profiles. Set this advanced option to `TRUE` exclude skew angles from the NC file headers for profiles. If you want to write skew angles to NC files for profiles, set this advanced option to `FALSE`. `FALSE` is the default value.

This advanced option is model specific and the setting is saved in the options database.

## 6.168 XS\_DSTV\_NUMBER\_OF\_PARTS\_BY\_SELECTION

Category in [Advanced options dialog \(page 29\)](#): CNC

Use this advanced option to specify the number of parts in the header of the exported NC file on the basis of the number of parts that you have selected in the model.

When you set this advanced option to `TRUE`, and select the **Selected parts** option in the **NC files** dialog, the number of parts in the header of the NC file matches the number of the parts you select.

The default value is `FALSE`.

This advanced option is model specific and the setting is saved in the options database.

## 6.169 XS\_DSTV\_PLATE\_PROFILE\_WITH\_WIDTH

Category in [Advanced options dialog \(page 29\)](#): CNC

Set this advanced option to `TRUE` to have both the plate thickness and the plate profile width written in the DSTV file header. Set this advanced option to `FALSE` to have only the plate thickness written in the DSTV file header. The default value is `FALSE`.

This advanced option is model specific and the setting is saved in the options database.

## 6.170 XS\_DSTV\_PRINT\_NET\_AND\_GROSS\_LENGTH

Category in [Advanced options dialog \(page 29\)](#): CNC

Set this advanced option to `TRUE` to insert two length values in NC DSTV files:

- Gross length
- Net length

If you do not want to do this, set this advanced option to `FALSE`. `FALSE` is the default value.



(1) Gross length

## (2) Net length

This advanced option is model specific and the setting is saved in the options database.

---

**NOTE** Net and gross length may switch places in the NC file if the advanced option `XS_CHECK_FLAT_LENGTH_ALSO` is set. Then Tekla Structures may use the length value it finds in the `fltprops.inp` file instead.

---

### See also

[XS\\_DSTV\\_NET\\_LENGTH \(page 238\)](#)

Fittings and line cuts in NC files

[XS\\_CHECK\\_FLAT\\_LENGTH\\_ALSO \(page 93\)](#)

## 6.171 XS\_DSTV\_REAL\_WIDTH\_INTO\_HEADER\_PROFILE\_FOR\_PLATES

Category in [Advanced options dialog \(page 29\)](#): CNC

Set this advanced option to `TRUE` to have the real plate width instead of the nominal plate width in the header information of DSTV files. The default is `FALSE`.

Here is an example of the difference between the real plate width and the nominal plate width: A user models a plate beam using the profile `PL200*10`, but then uses part or line cuts to create a 5 mm cut along the length of the plate, for example, to create a root opening for a weld, so that the end result is a plate which is only 195 mm wide. In this case, the real plate width would be 195 mm, and the nominal plate width 200 mm.

---

**NOTE** This advanced option only affects the profile definition, such as `PL10*200`, and it only affects if you have included the width into the profile definition by setting [XS\\_DSTV\\_PLATE\\_PROFILE\\_WITH\\_WIDTH \(page 240\)](#) to `TRUE`.

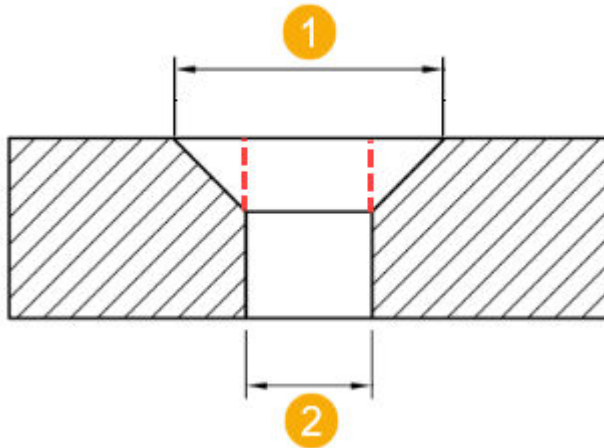
---

This advanced option is model specific and the setting is saved in the options database.

## 6.172 XS\_DSTV\_USE\_COUNTERSUNK\_HOLES

Category in [Advanced options dialog \(page 29\)](#): CNC

If you set this advanced option to `FALSE`, the countersunk holes are written to DSTV as straight holes (pilot holes) without the conical countersunk part, which means that the bolt's nominal diameter and tolerance are used. If you set the advanced option to `TRUE`, the countersunk holes are written to DSTV including the conical countersunk part. The default value is `TRUE`.



(1) Countersunk diameter

(2) Pilot hole diameter

This advanced option is model specific and the setting is saved in the options database.

## 6.173 XS\_DSTV\_USE\_EQUAL\_ACCURACY\_FOR\_PLATE\_PROFILE\_AND\_WIDTH

Category in [Advanced options dialog \(page 29\)](#): CNC

Set this advanced option to `TRUE` if you want the plate profile width value, plate width value in the header, and y coordinate values in the AK and IK blocks to be rounded to the nearest millimeter in the NC files. The default value is `FALSE`.

This advanced option is model specific and the setting is saved in the options database.

## 6.174 XS\_DSTV\_USE\_ONE\_VERTEX\_SHARP\_INNER\_CORNER

Category in [Advanced options dialog \(page 29\)](#): CNC

Set this advanced option to `TRUE` if you do not need additional vertex points in the AK block of your DSTV file, for example, when you do not define the rounding radius in the NC settings. By default, this advanced option is set to `FALSE`, which means that additional vertex points are added.

This advanced option is model specific and the setting is saved in the options database.

### Example

Results in the DSTV file when the advanced option is set to `TRUE`:

| AK |         |         |      |        |      |      |      |
|----|---------|---------|------|--------|------|------|------|
| v  | 0.00s   | 0.00    | 0.00 | 0.00   | 0.00 | 0.00 | 0.00 |
|    | 4000.00 | 0.00    | 0.00 | 0.00   | 0.00 | 0.00 | 0.00 |
|    | 4000.00 | 200.00  | 0.00 | 0.00   | 0.00 | 0.00 | 0.00 |
|    | 123.88  | 200.00  | 0.00 | -14.03 | 9.00 | 0.00 | 0.00 |
|    | 123.88  | 150.00w | 0.00 | 0.00   | 0.00 | 0.00 | 0.00 |
|    | 0.00    | 150.00  | 0.00 | 0.00   | 0.00 | 0.00 | 0.00 |
|    | 0.00    | 0.00    | 0.00 | 0.00   | 0.00 | 0.00 | 0.00 |

Results in the DSTV file when the advanced option is set to `FALSE`.

| AK |         |         |      |        |      |      |      |
|----|---------|---------|------|--------|------|------|------|
| v  | 0.00s   | 0.00    | 0.00 | 0.00   | 0.00 | 0.00 | 0.00 |
|    | 4000.00 | 0.00    | 0.00 | 0.00   | 0.00 | 0.00 | 0.00 |
|    | 4000.00 | 200.00  | 0.00 | 0.00   | 0.00 | 0.00 | 0.00 |
|    | 123.88  | 200.00  | 0.00 | -14.03 | 9.00 | 0.00 | 0.00 |
|    | 123.88  | 150.00  | 0.00 | 0.00   | 0.00 | 0.00 | 0.00 |
|    | 125.00  | 150.00w | 0.00 | 0.00   | 0.00 | 0.00 | 0.00 |
|    | 0.00    | 150.00  | 0.00 | 0.00   | 0.00 | 0.00 | 0.00 |
|    | 0.00    | 0.00    | 0.00 | 0.00   | 0.00 | 0.00 | 0.00 |

## 6.175 XS\_DSTV\_USE\_REAL\_DIMENSIONS\_IN\_HEADER

Category in [Advanced options dialog \(page 29\)](#): CNC

Set this advanced option to `TRUE` to have bounding box values of the height and width written to the profile header data in the NC file, for example `HI300-15-30*250-20*350`. The default value is `FALSE`.

For an example, see [How to set realistic profile dimensions in the NC file header](#).

This advanced option is model specific and the setting is saved in the options database.

## 6.176 XS\_DSTV\_WRITE\_BEHIND\_FACE\_FOR\_PLATE

Category in [Advanced options dialog \(page 29\)](#): CNC

Set this advanced option to `TRUE` to write (AK + IK) contours for front (v) and back (h) faces of plates in DSTV/NC files. Set it to `FALSE` to only write the front face for plate profiles. The default value is `FALSE`.

This advanced option is user specific and the setting is saved in `options.bin` under the user folder, for example, in `C:\Users\\AppData\Local\Trimble\Tekla Structures\\UserSettings`. Restart Tekla Structures to activate the new value.

## 6.177 XS\_DUPLICATE\_CHECK\_LIMIT\_FOR\_COPY\_AND\_MOVE

Category in [Advanced options dialog \(page 29\)](#): Modeling properties

Use this advanced option to define the maximum number of objects that are checked for duplicates while copying or moving objects.

If the selection contains too many objects, Tekla Structures does not check for duplicates. Enter an integer value. The default value is 100.

This advanced option is user specific and the setting is saved in `options.bin` under the user folder, for example, in `C:\Users\\AppData\Local\Trimble\Tekla Structures\\UserSettings`. Restart Tekla Structures to activate the new value.

## 6.178 XS\_DWG\_EXPORT\_UPDATE\_TS\_LINEWORK\_OPTION

Category in [Advanced options dialog \(page 29\)](#): Export

The setting **Update Tekla Structures linework only** is only shown in the **Export drawings as DWG/DXF/DGN** dialog if you have set this advanced option to `TRUE`. The default value is `FALSE`.

**Update Tekla Structures linework only** updates the Tekla Structures drawing content only and keeps other content that is created in the CAD software intact at the same time. Blocks (groups), created by Tekla Structures will be updated. Note that you need to have the same drawing exported already, and the layer or level setup and the layer or level template must be the same as during the previous export. All CAD lines that were added previously will stay in the file and only Tekla Structures content will get updated, unless editing was done in the CAD block editor.

This setting is user specific, and it is saved in the `options.bin` under the user folder.

Note that if you edit content of a block (CAD object), and then select the **Update Tekla Structures linework only** option, the whole block will be re-written, and the changes made in CAD will not be kept. To keep the changes in CAD, you need to explode a block before editing it.

For example, you may want to use this option if you have added drawing title blocks in the CAD software after the first export of the drawing from Tekla Structures, and want to keep these tables as they are, and update only the objects that exported from Tekla Structures.

## 6.179 XS\_DWG\_IMPORT\_IGNORE\_UNITS

**This advanced option must be set in an initialization (.ini) file.**

If a DWG reference file is created with imperial settings, it will import to Tekla Structures in too large scale. You can use this advanced option to prevent this.

If you want all coordinates to be meters, set this advanced option to `TRUE`.

If you want to take the unit from the DWG file based on the measurement and `$insunit` definitions in the file header, leave the value out. By default, this advanced option is not set to any value.

## 6.180 XS\_DWG\_EXPORT\_3D\_MODEL\_COORDINATES

**Category in [Advanced options dialog \(page 29\)](#): Export**

When you set this advanced option to `TRUE`, the drawing export tries to place objects in the model space in the X, Y, Z coordinates so that they fully match the location of the model objects.

When you set this advanced option to `FALSE`, the export follows the settings defined in the DWG export dialog. `FALSE` is the default value.

This advanced option is user specific and the setting is saved in `options.bin` under the user folder, for example, in `C:\Users\\AppData\Local\Trimble\Tekla Structures\\UserSettings`.

## 6.181 XS\_DXF\_FONT\_CONVERSION\_FILE

Category in [Advanced options dialog \(page 29\)](#): **Printing**

---

**NOTE** This advanced option only applies to the old DWG or DXF drawing export.

---

Use this advanced option to specify a font conversion file for the old Tekla Structures drawing DWG and DXF export and printing. The font conversion file defines which font file will be connected to the created AutoCAD style, and optional font width and height correction factors. You can use both True Type font files and AutoCAD .SHX font files.

If only the file name of the font conversion file is given, the file is read from the model folder. To use a font conversion file from another location, give the file name with relative or full path. If `XS_DXF_FONT_CONVERSION_FILE` is not set, Tekla Structures will try to use the default font conversion file (`dxfontools.cnv`) from the folder defined by `DXK_FONTPATH`. `DXK_FONTPATH` is defined in `teklastructures.ini`.

If the font conversion file is not found or if it does not contain a mapping for a certain font, the font name used in Tekla Structures is used to form the name of the text style in AutoCAD. Spaces are replaced with underscores and lowercase letters are replaced with uppercase ones. For example, font name Arial Narrow in Tekla Structures will become a style named `ARIAL_NARROW` in AutoCAD.

In addition to the font-specific width and height correction factors defined in the font conversion file, there are general variables `XS_DXF_TEXT_HEIGHT_FACTOR` and `XS_DXF_TEXT_WIDTH_FACTOR`, which apply to all exported texts regardless of the font. If both font specific factors and general variables are used, they are multiplied.

Syntax used in font mapping:

```
Font name in Tekla Structures = Font file name in AutoCAD [*  
width correction factor [* height correction factor]]
```

Examples of font mappings in a .cnv file:

```
Arial Narrow = ARIALN.TTF
```

```
Arial Narrow Bold Italic = ARIALNBI.TTF * 0.5 * 1.0
```

---

- NOTE**
- The names in the font conversion file are case sensitive.
  - The font conversion file is used for drawings in DWG and DXF export and printing only, it does not affect drawings DWG and DXF import or model import or export.
- 

**See also**

[DXK\\_FONTPATH \(page 247\)](#)

[XS\\_DXF\\_TEXT\\_HEIGHT\\_FACTOR \(page 247\)](#)

[XS\\_DXF\\_TEXT\\_WIDTH\\_FACTOR \(page 247\)](#)

## 6.182 XS\_DXF\_FONT\_NAME

Category in [Advanced options dialog \(page 29\)](#): **Printing**

Use this advanced option to specify a font other than the default for 2D DXF files. By default, this advanced option is not set to any value.

This advanced option is model specific and the setting is saved in the options database.

## 6.183 XS\_DXF\_TEXT\_HEIGHT\_FACTOR

Category in [Advanced options dialog \(page 29\)](#): **Printing**

---

**NOTE** This advanced option only applies to the old DWG or DXF drawing export.

---

Use this advanced option to set a scale factor for 2D DXF text height. Enter the factor as a decimal. The default value is 1.0.

This advanced option is model specific and the setting is saved in the options database.

## 6.184 XS\_DXF\_TEXT\_WIDTH\_FACTOR

Category in [Advanced options dialog \(page 29\)](#): **Printing**

---

**NOTE** This advanced option only applies to the old DWG or DXF drawing export.

---

Use this advanced option to set the scale factor for 2D DXF text width. Enter the factor as a decimal. The default value is 1.0.

This advanced option is model specific and the setting is saved in the options database.

## 6.185 DXK\_FONTPATH

**This advanced option must be set in an initialization (.ini) file.**

This advanced option is system specific and is read from `teklastructures.ini`. It can also be set locally, see your environment `.ini` file (`env_<environment_name>.ini`). Generally, there is no need to modify system-specific settings. Do not modify them if you are not an administrator.

Use this advanced option to point to the folder containing Tekla Structures graphic fonts. The Template editor, for example, uses graphic fonts.

`DXK_FONTPATH` is defined in `teklastructures.ini`.

Always end the path with the backslash character.

### Example

```
set DXK_FONTPATH=%XSDATADIR%\environments\common\fonts\
```

## 6.186 DXK\_SYMBOLPATH

**This advanced option must be set in an initialization (.ini) file.**

This advanced option is system specific and is read from `teklastructures.ini`. It can also be set locally, see your environment `.ini` file (`env_<environment_name>.ini`). Generally, there is no need to modify system-specific settings. Do not modify them if you are not an administrator.

This advanced option points to one or several folders containing Tekla Structures symbol libraries. These folders also contain the DWG files used in snap symbols and handles. The order of folders in `DXK_SYMBOLPATH` is significant: If there are duplicate files, the first one found is used. All files are read from all defined folders. The model folder is searched first and then the folders defined for `DXK_SYMBOLPATH`. The file search order for symbols is explained in "Symbol file search order" in "Add symbols to drawings".

The `DXK_SYMBOLPATH` is defined in the environment initialization file `env_<environment_name>.ini`, located in `..\Trimble\Tekla Structures\<version>\<environments>\<your_environment>`, and in the Tekla Structures initialization file `teklastructures.ini` located in the `..\Tekla Structures\<version>\bin\` folder.

Separate different folder paths with a semicolon (;). Always end a folder path with a backslash character.

### Example

Example with one folder:

```
DXK_SYMBOLPATH=C:\ProgramData\Trimble\Tekla Structures\<version>\environments\common\symbols\
```

Example with several folders:

```
DXK_SYMBOLPATH=%XS_FIRM%;%XSDATADIR%  
\environments\uk\General\symbols\;%XSDATADIR%  
\environments\common\symbols\
```

In the latter example, Tekla Structures first checks your own symbol files in your firm folder, then the symbol files in the UK environment symbols folder, and last the symbol files in the common environment symbols folder. If a duplicate file exists, the one that Tekla Structures finds first is used.

### **Using a firm folder for images and symbols**

You can define a firm folder where Tekla Structures always searches for the images and symbols. When you store the images and symbols in this folder, you do not have to move them from folder to folder when you install a new version of Tekla Structures. Installing a new version does not replace the files in the firm folder.

# 7 Advanced options - E

## 7.1 XS\_ENABLE\_FAST\_CUSTOM\_PROPERTY\_LOADING

### This advanced option must be set in startup .ini files

To switch off the functionality of loading custom properties from the extension folder `..common\extensions\custom\properties\`, set the advanced option `XS_ENABLE_FAST_CUSTOM_PROPERTY_LOADING` to `FALSE` in a startup `.ini` file using the following command:

```
set XS_ENABLE_FAST_CUSTOM_PROPERTY_LOADING=FALSE
```

When you do this, the custom properties are loaded from all folders and subfolders in `..common\extensions`, and from the locations defined in `XS_EXTENSION_DIRECTORY`. This may cause performance issues and loading failures when custom properties are used.

Loading custom properties

from `..common\extensions\custom\properties\` speeds up the loading process and solves loading problems caused by other software components in other extension folders.

## 7.2 XS\_ENABLE\_INNER\_CONTOURS\_IN\_CUT\_PARTS

Category in [Advanced options dialog \(page 29\)](#): Speed and accuracy

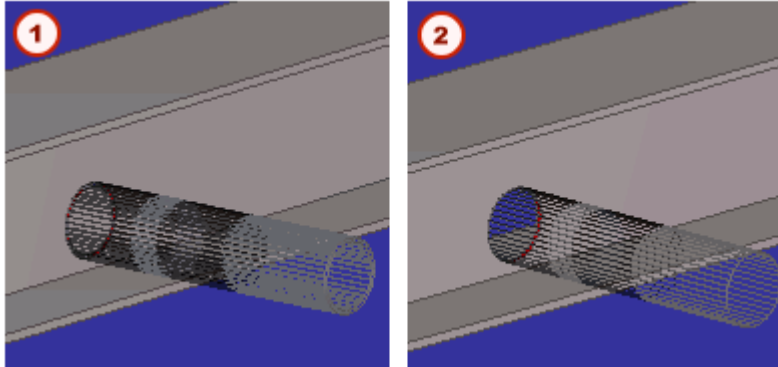
Set this advanced option to `TRUE` to have Tekla Structures create a part cut according to the inner and outer surfaces of the cutting part.

When the advanced option is set to `FALSE`, Tekla Structures creates the cut according to the outer surface of the cutting part. This is the default.

This advanced option is model specific and the setting is saved in the options database.

### Example

Here a beam has been cut with a round tube.



(1) Advanced option set to `TRUE`

(2) Advanced option set to `FALSE`

## 7.3 `XS_ENABLE_MIDDLE_BUTTON_DOUBLE_CLICK_ZOOM_ORIGINAL`

**This advanced option must be set in an initialization (.ini) file.**

When you set this advanced option to `TRUE` and double-click the middle mouse button in a drawing, Tekla Structures zooms the open drawing to its original size.

### Example

```
XS_ENABLE_MIDDLE_BUTTON_DOUBLE_CLICK_ZOOM_ORIGINAL=TRUE
```

## 7.4 `XS_ENABLE_MODEL_EDITING_IN_GA`

**Category in [Advanced options dialog \(page 29\)](#): Modeling properties**

Use this advanced option to control whether it is possible to edit a model while having a general arrangement (GA) drawing open. The default value of the advanced option is `TRUE`, which means that editing the model is possible. Set to `FALSE` to prevent the editing.

This advanced option is user specific and the setting is saved in `options.bin` under the user folder,

for example, in C:\Users\\AppData\Local\Trimble\Tekla Structures\\UserSettings. Restart Tekla Structures to activate the new value.

## 7.5 XS\_ENABLE\_OVERLAPPING\_CUT\_LINE\_REMOVAL

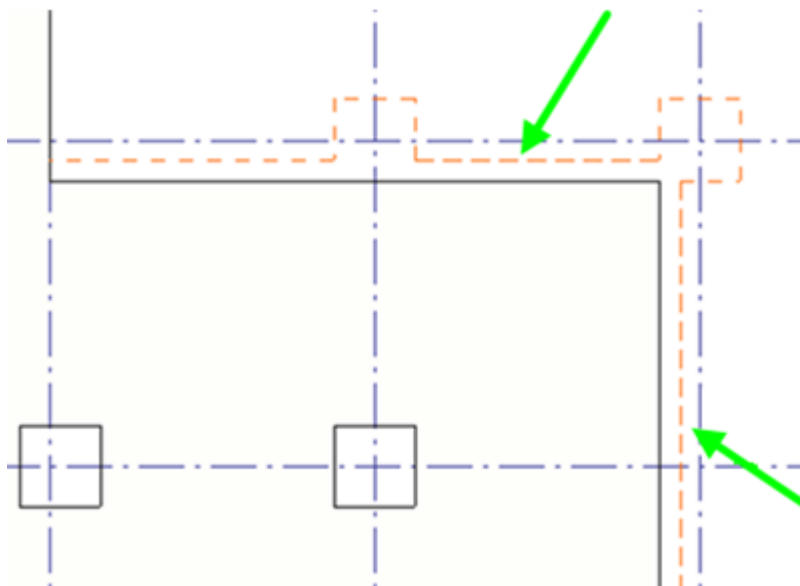
Category in [Advanced options dialog \(page 29\)](#): Drawing properties

This advanced option controls the removal of overlapping cut or non-solid lines. It is by default set to `TRUE`, and the overlapping cut and non-solid (dashed, dash-and-dot) lines are removed.

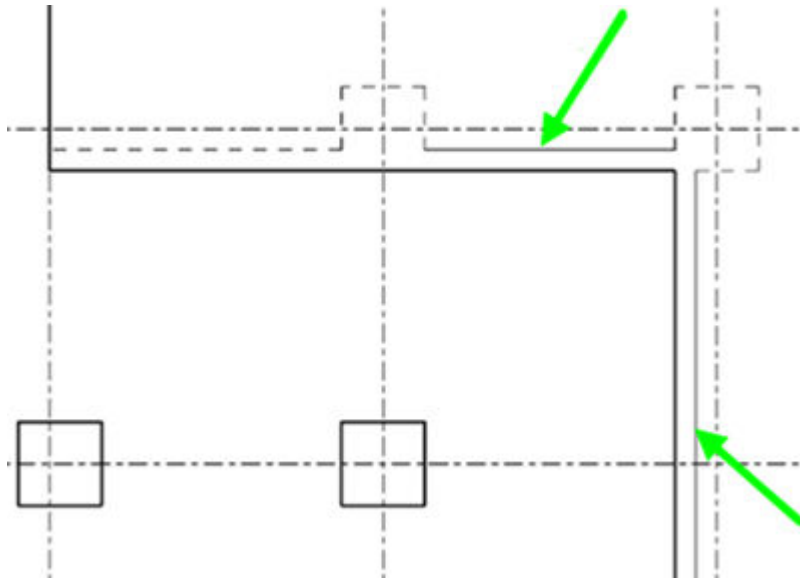
Do not set this advanced option to `FALSE`. If you do that, the cut and non-solid lines may become misaligned and look like solid lines in drawings, and hidden objects may be presented as not hidden, for example.

Note that this advanced option does not remove cut or non-solid lines that are added manually to the drawing.

`XS_ENABLE_OVERLAPPING_CUT_LINE_REMOVAL` set to `TRUE`:



`XS_ENABLE_OVERLAPPING_CUT_LINE_REMOVAL` set to `FALSE`:



This advanced option is model specific and the setting is saved in the options database.

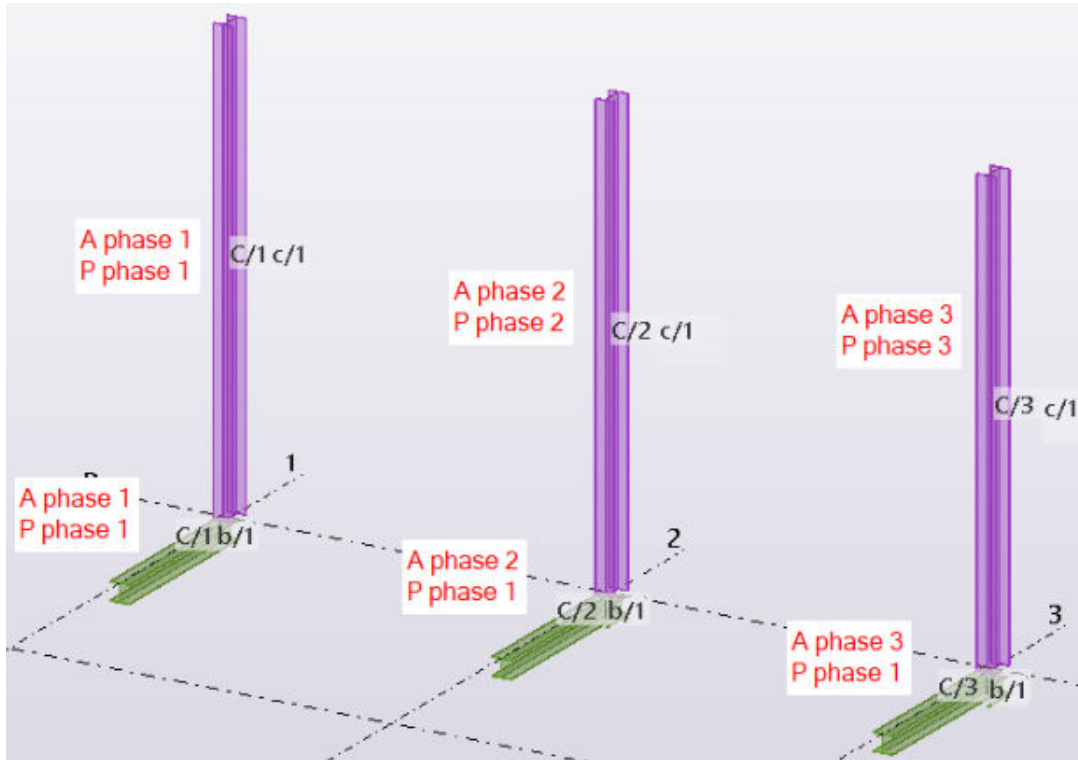
## 7.6 XS\_ENABLE\_PHASE\_OPTION\_IN\_NUMBERING

Category in [Advanced options dialog \(page 29\)](#): **Numbering**

When this advanced option is set to `FALSE` (which is the default value), the **Assembly phase** checkbox is disabled in the **Numbering Setup** dialog. This means that changing an object's phase does not affect numbering or trigger change alerts.

If this advanced option is set to `TRUE`, the **Assembly phase** checkbox is enabled in the **Numbering Setup** dialog. This is the recommended setting for Tekla Model Sharing users.

If you select the **Assembly phase** checkbox, only the assembly phase of each assembly is compared in numbering. This means that otherwise identical objects with different assembly phase get the same part position number.



Note! Even if you **do not** select the **Assembly phase** checkbox, but you change the phase of an object when `XS_ENABLE_PHASE_OPTION_IN_NUMBERING` is set to `TRUE`:

- A question mark (?) is added to the object's position number indicating that numbering is needed.
- After renumbering, the **Document manager** indicates that the drawings need updating.
- In shared models, the **Changes** list shows the changed parts and assemblies.

This happens even if you are using the Project Viewer configuration.

This advanced option is model specific and the setting is saved in the options database.

## 7.7 XS\_ENABLE\_POUR\_MANAGEMENT

**Category in [Advanced options dialog \(page 29\)](#): Concrete Detailing**

Set this advanced option to `TRUE` to enable pour management in the currently open model and to show cast-in-place concrete structures as continuous. The commands that show and create pour objects and pour breaks in the model and drawings are only available when pour management is enabled.

The default value for new models in the **Concrete contractor** role is `TRUE`. In the other standard roles, the default value for new models is `FALSE`.

This advanced option is model specific and the setting is saved in the options database.

---

**WARNING** If pour management is enabled in the model, do not disable it using `XS_ENABLE_POUR_MANAGEMENT`, especially in the middle of the project. This may cause problems if you have drawings containing pour objects, and if you are sharing your model. The pour objects and pour breaks in the model and in the drawings may get invalid, and you may lose pour-related modeling work.

---

## 7.8 XS\_ENABLE\_PRECAST\_CONTINUOUS\_CONCRETE

**This advanced option must be set in an initialization (.ini) file.**

Set this advanced option to `TRUE` to show precast concrete structures as continuous in model views. Showing precast concrete structures as continuous means that, within each cast unit, the concrete parts with the same material grade and the cast unit type **Precast** are shown as merged so that the part outlines between touching or overlapping parts are not visible.

Note that you also need to set [XS\\_ENABLE\\_POUR\\_MANAGEMENT \(page 254\)](#) to `TRUE` in the **Advanced options** dialog.

The default value of `XS_ENABLE_PRECAST_CONTINUOUS_CONCRETE` is `FALSE`, which means that the outlines of precast concrete parts within each cast unit are visible.

Restart Tekla Structures after changing the value to activate the new setting.

When `XS_ENABLE_PRECAST_CONTINUOUS_CONCRETE` is set to `TRUE`, you can adjust how the precast concrete structures appear in each model view by using the following display settings of cast-in-place concrete structures in **View properties** --> **Display**:

- Ensure that **Cast in place** is set to **Parts**.
- In the **Cast in place parts** list, select either **Merged** or **Separated** to hide or show the touching or overlapping part outlines.

## 7.9 XS\_ENABLE\_PULLOUT\_PLACEHOLDERS

Category in [Advanced options dialog \(page 29\)](#): **Concrete detailing**

This advanced option only affects if you are creating or updating reinforcement marks in an open drawing.

Set this advanced option to `TRUE` to add placeholders instead of dimensions in pull-out pictures. This advanced option adds the option **Placeholders** in the **Pullout picture** dialog.

Pullout picture

Scale by

Auto

One factor: 1.0

Two factors: x: 1.0 y: 1.0

Rotation:  Plane

End marks:

Dimensions

Exaggeration

Bending radius

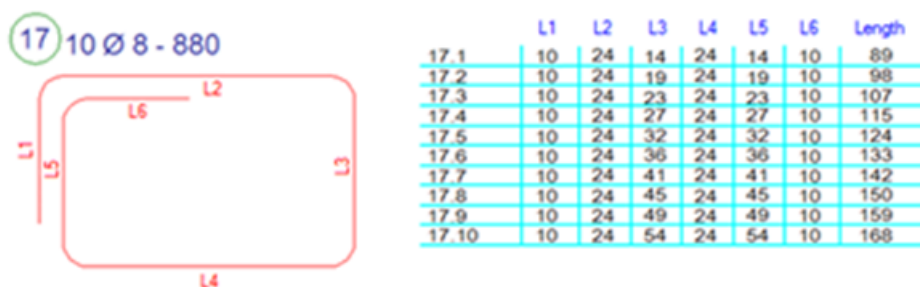
Bending angle

Couplers/end anchor symbols Scale: 0.00

Placeholders

OK Modify Cancel

The following example shows how the placeholders are used:



This advanced option is model specific and the setting is saved in the options database.

## 7.10 XS\_ENABLE\_REBAR\_MARK\_LEADER\_LINE\_BASE\_POINT\_OPTIMIZATION

Category in [Advanced options dialog \(page 29\)](#): **Concrete detailing**

Use this advanced option to select an optimal place for the associativity point of the reinforcing bar mark leader line. If set to `TRUE`, Tekla Structures selects an optimal place for the associativity point. The associativity point only points to one reinforcing bar instead of an intersection or overlap of multiple bars.

The optimization is only applied to the marks that have the **Placing method** value **Free**. In practice, this prevents the optimization from moving manually moved marks, because moving a mark manually changes the value of its **Placing method** to **Fixed**. The default value is `TRUE`.

This advanced option is model specific and the setting is saved in the options database.

## 7.11 XS\_ENABLE\_US\_SURVEY\_UNIT

Category in [Advanced options dialog \(page 29\)](#): **Imperial units**

Set this advanced option to `TRUE` to change the measurement system in the model from international/imperial feet to U.S. survey feet. The unit symbol is the same for both.

U.S. survey feet are widely used by many Departments of Transportation (DOT) in the USA, primarily for infrastructure projects, such as roads, tunnels, and bridges, encompassing all phases from design and surveying to construction.

After setting this advanced option to `TRUE` and saving the model, go to **File --> Settings --> Options --> Units and decimals** and select one of the following options for **Length: in (decimal), ft (decimal), or ft-in**.

The default value of this advanced option is `FALSE`.

This advanced option is model specific and the setting is saved in the options database.

## 7.12 XS\_ENTER\_FINALIZES\_COMMANDS

Category in [Advanced options dialog \(page 29\)](#): **Modeling properties**

Use this advanced option to set the **Enter** key as a shortcut for completing commands. This advanced option applies also to the direct modification commands.

By default, the advanced option is set to `TRUE`.

## 7.13 XS\_EQUAL\_SHAPE\_DIMENSIONS\_TO\_BOTH\_ENDS\_LIMIT

Category in [Advanced options dialog \(page 29\)](#): **Dimensioning - parts**

Shape dimensions are automatically shown on both ends of a beam, even if the dimensions are the same. You can change this by entering a value in millimeters for this advanced option.

This advanced option is role specific. When the type **SYSTEM(ROLE)** is in use, the default value is used. When the type **MODEL(ROLE)** or **DRAWING(ROLE)** is in use, you can change the value, which is then the same for all users in the current model.

### Example

If you set this advanced option to 300, and a part is 300 mm shorter in one direction, Tekla Structures only displays the dimension in the longer direction. Use millimeters in all environments.

## 7.14 XS\_ERASE\_UA\_VALUE\_WITH\_ATTRIBUTE\_IMPORT\_NULL\_AND\_BLANK

**This advanced option must be set in an initialization (.ini) file.**

Set this advanced option to `TRUE` to erase the values of selected user-defined attributes in attribute import.

To select which values of user-defined attributes are erased, enter any of the following values at the end of the file to be imported, in the same order as the user-defined attributes are entered in the file:

- `NULL`
- `null`
- No value (two consecutive delimiters)

## Example

If the content of the input file is the following:

```
ID; USER_FIELD_1; USER_FIELD_2; USER_FIELD_3; USER_FIELD_4;  
12345;NULL;nul1;;4
```

The result is:

User-defined attribute values for 1 - 3 are erased in the attribute import.  
User-defined attribute 4 has the value 4 in the attribute import.

---

**NOTE** Space and tab are not recommended as delimiters in the input file when this functionality is used.

---

## 7.15 XS\_EXCLUDED\_PARTS\_IN\_ORIENTATIONAL\_NUMBERING

Category in [Advanced options dialog \(page 29\)](#): **Numbering**

This advanced option can be used in conjunction with the orientation numbering setting. Similar parts will be numbered the same even if their orientation is different and the orientation setting has been selected in the **Numbering Setup** dialog. You can enter the desired part names separated by spaces. Wildcards are also allowed. This advanced option is model specific and the setting is saved in the options database.

## 7.16 XS\_EXPORT\_BREP\_AS\_EXACT\_SOLID

Category in [Advanced options dialog \(page 29\)](#): **Export**

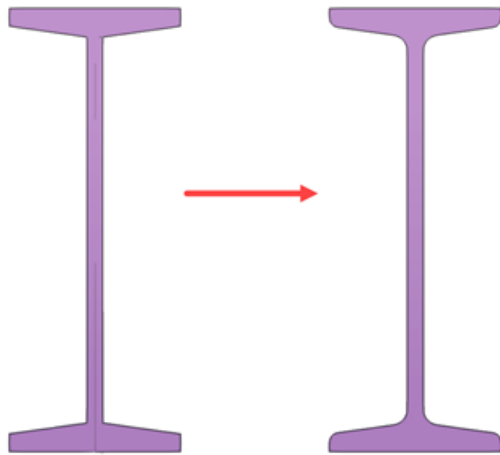
Set this advanced option to `TRUE` to export B-rep objects as exact solids in the IFC2x3 export. `FALSE` is the default value.

Note that if you export B-reps as exact solids, the IFC file size increases, and the export takes more time.

---

**TIP** To get smoother edges to the export, you may need to set the advanced option [XS\\_CS\\_CHAMFER\\_DIVIDE\\_ANGLE \(page 259\)](#) to 10.

In the following example, on the left, you can see a native type I profile, and on the right the IFC object surface geometry when both advanced options are used:



---

This advanced option is model specific and the setting is saved in the options database.

**See also**

[XS\\_CS\\_CHAMFER\\_DIVIDE\\_ANGLE](#) (page 111)

## 7.17 XS\_EXPORT\_CODEPAGE

Category in [Advanced options dialog \(page 29\)](#) **Export**

---

**NOTE** This advanced option is used in the old drawing DWG/DXF export. The newer DWG/DXF export is able to show the character sets correctly in the exported drawings, and this advanced option is not needed.

---

Tekla Structures sets the codepage automatically so that exported files are displayed correctly. If the proper codepage cannot be found, the codepage is set to `ansi_1252` by default. You can set the codepage manually by using this advanced option, which overrides the automatic selection of the codepage in export. By default, this advanced option is not set to any value.

This advanced option is user specific and the setting is saved in `options.bin` under the user folder, for example, in `C:\Users\\AppData\Local\Trimble\Tekla Structures\\UserSettings`. Restart Tekla Structures to activate the new value.

To set the advanced option to the required codepage, use one of the following values:

- `ascii`
- `iso8859-1`

- iso8859-2
- iso8859-3
- iso8859-4
- iso8859-5
- iso8859-6
- iso8859-7
- iso8859-8
- iso8859-9
- dos437
- dos850
- dos852
- dos855
- dos857
- dos860
- dos861
- dos863
- dos864
- dos865
- dos869
- dos932
- mac-roman
- big5
- ksc5601
- johab
- dos866
- ansi\_1250
- ansi\_1251
- ansi\_1252
- gb2312
- ansi\_1253
- ansi\_1254
- ansi\_1255
- ansi\_1256

- ansi\_1257
- ansi\_874
- ansi\_932
- ansi\_936
- ansi\_949
- ansi\_950
- ansi\_1361
- ansi\_1200
- ansi\_1258

## 7.18 XS\_EXPORT\_DGN\_COORDINATE\_SCALE

**Category in [Advanced options dialog \(page 29\)](#): Export**

Use this advanced option to set the coordinate scale to use in the 3D DGN v7 export.

The DGN coordinate scale does not actually scale the model, but changes the model precision. If you set this advanced option to 100, the accuracy is 1/100 mm.

This advanced option is model specific and the setting is saved in the options database.

### See also

[Coordinate scaling of the model at DGN export](#)

## 7.19 XS\_EXPORT\_DGN\_INCLUDE\_CUTS

**Category in [Advanced options dialog \(page 29\)](#): Export**

Use this advanced option to define the cuts to include in DGN exports. You can use the following values:

| Value | Use to                                   |
|-------|--|
| FALSE | Exclude all cuts.                        |
| TRUE  | Include all cuts (default value).        |
| CLASH | Include all cuts but skip hole cut ends. |

| Value                       | Use to   |
|-----------------------------|--|
| CLASH_NOR<br>MAL_PLATE<br>S | Same as TRUE for contour plates and CLASH for all other parts. |

This advanced option is model specific and the setting is saved in the options database.

## 7.20 XS\_EXPORT\_DGN\_USE\_VOLUMETRIC

**Category in [Advanced options dialog \(page 29\)](#): Export**

Set this advanced option to TRUE to define plates that have a profile type plate or polygon plate to DGN type attribute 92 (0x05C in DGN cell header) and all other beams to DGN type attribute 91 (0x05B in DGN cell header) in DGN export. If you set it to FALSE, all beams get 91 as the type attribute in the DGN export. The default value is FALSE.

When this advanced option is set to TRUE, mapping to Microstation is successful and the attribute report in Tekla Structures is correct.

This advanced option is model specific and the setting is saved in the options database.

## 7.21 XS\_EXPORT\_DRAWING\_TRY\_TO\_KEEP\_LOCATION

**This advanced option must be set in an initialization (.ini) file.**

If you set the advanced option

XS\_EXPORT\_DRAWING\_TRY\_TO\_KEEP\_LOCATION to TRUE (default), Tekla Structures tries to keep the DWG, DXF, or DGN origin in the same position in the drawing export as the drawing view origin. This can only be done in plan views and elevation views. If the drawing has more than one plan view or elevation view, Tekla Structures places the DWG, DXF, or DGN origin in the bottom-left corner of the drawing frame.

If you set this advanced option to FALSE, the origin (0,0) is set to the bottom-left corner of the drawing frame.






This advanced option is system specific and is read from `teklastructures.ini`. Generally, there is no need to modify system-specific settings. Do not modify them if you are not an administrator.

## 7.22 XS\_EXPORT\_FILLMODE

Category in [Advanced options dialog \(page 29\)](#): Export

Use this advanced option to control how fills are exported to the DWG and DXF formats. This advanced option only affects the old DWG/DXF export.

This advanced option is model specific and the setting is saved in the options database.

| Value  | Description  | Appearance in exported DWG/DXF   | Appearance in Tekla Structures  |
|--------|--|--|---|
| HATCH  | Fills are drawn as hatches in the exported DWG/DXF. This is the default value. |    |  |
| BORDER | Only the border lines of fills are drawn in the exported DWG/DXF.              |    |   |
| FILL   | Fills are drawn as filled triangles in the exported DWG/DXF.                   |  |   |
| NONE   | Fills are not drawn in the exported DWG/DXF.                                   |  |   |

## 7.23 XS\_EXPORT\_IFC\_REBARSET\_INDIVIDUAL\_BARS

Category in [Advanced options dialog \(page 29\)](#): Export

Use this advanced option to control how rebars created by rebar sets are exported in the IFC2x3 and IFC4 export. To export the bars in groups, set this advanced option to `FALSE` (default), and to export the bars as individual bars, set it to `TRUE`.

---

**NOTE** In the IFC file, 'Total number' always shows 1 for groups created by rebar sets and 'Total weight' and 'Weight' show one bar weight.

Use the `NUMBER_OF_BARS_IN_GROUP` and `WEIGHT_TOTAL_IN_GROUP` properties to export the values of the group to the IFC file.

---

This advanced option is model specific and the setting is saved in the options database.

## 7.24 XS\_EXPORT\_LINE\_TYPE\_DEFINITION\_FILE

Category in [Advanced options dialog \(page 29\)](#): **Export**

For this advanced option, enter the name of the line type definition file that contains the line type definitions and is used in line type mapping for the old drawing export, for example.

The file name extension of the line type definition file is `.lin`. The advanced option is set to point to the file `TeklaStructures.lin` by default.

This advanced option is user specific and the setting is saved in `options.bin` under the user folder, for example, in `C:\Users\<user>\AppData\Local\Trimble\Tekla Structures\<version>\UserSettings`. Restart Tekla Structures to activate the new value.

## 7.25 XS\_EXPORT\_STEEL2000\_PRIMARY\_IDS

Category in [Advanced options dialog \(page 29\)](#): **Drawing properties**

Set this advanced option to `TRUE` to have Tekla Structures include main part IDs in MIS export files. IDs appear on separate rows in the file. The default value is `FALSE`.

This advanced option is model specific and the setting is saved in the options database.

## 7.26 XS\_EXTENSION\_DIRECTORY

**This advanced option must be set in an initialization (.ini) file.** We recommend setting this advanced option in an `env_<environment>.ini` or `role_<role>.ini` file, but it can be set in any `.ini` file. To ensure that all users have the same tools, we recommend that you do not set this advanced option in the `user.ini` file.

Use the advanced option `XS_EXTENSION_DIRECTORY` to define additional installation folders for extensions, or customer tools developed on top of Open API. You can use folders on any local drives or mapped network drives.

Extensions from the default `%XSDATADIR%\environments\common\extensions` folder are installed before extensions or tools from the additional installation folders are installed.

## 7.27 XS\_EXTERNAL\_EXCEL\_DESIGN\_PATH

**This advanced option must be set in an initialization (.ini) file.**

Use this advanced option to point to the location of the Excel spreadsheet used in connection design. If you want to change the location, set the advanced option in the `user.ini` file.

This advanced option is system specific and is read from `teklastructures.ini`. It can also be set locally, see your environment `.ini` file (`env_<environment_name>.ini`). Generally, there is no need to modify system-specific settings. Do not modify them if you are not an administrator.

# 8

## Advanced options - F

### 8.1 XS\_FILTER\_SEPARATOR\_CHAR

Category in [Advanced options dialog \(page 29\)](#): **Modeling properties**

Use this advanced option to define the separator to be used between filter strings, for example, in the view filters. Enter the separator character. Any characters are allowed. By default, Tekla Structures uses a space.

#### Example

To use a semi-colon as a separator, set this advanced option as follows:

```
XS_FILTER_SEPARATOR_CHAR=;
```

This advanced option is model specific and the setting is saved in the options database.

### 8.2 XS\_FIRM

Category in [Advanced options dialog \(page 29\)](#): **File locations**

---

**NOTE** This advanced option is system-specific and only meant for administrators.

---

Set the advanced options `XS_PROJECT` and `XS_FIRM` along with `XS_SYSTEM` to point to the folders Tekla Structures searches for property files. Tekla Structures always saves properties in the current `<model>\attributes` folder. You can then copy or move them to the `XS_FIRM` or the `XS_PROJECT` folder if the same settings are needed in other models. You can also create user-defined sub-folders under the `XS_FIRM` and the `XS_PROJECT` folders, and copy or move property files from the `<model>\attributes` folder to these sub-folders.

You can also use a Trimble Connect project as the project or the firm folder. Note that you can define one path only, not a list of paths.

---

**WARNING** Changing an advanced option value in `.ini` files located outside the model folder does not affect the existing models. You can only update advanced options in the **Advanced Options** dialog or in the `options.ini` file located in model folder; not from an `options.ini` file located in folders defined for the advanced options `XS_FIRM` or `XS_PROJECT`. The `.ini` files are read also when you open an existing model, but only new advanced options that do not exist in `options_model.db` or `options_drawings.db` are inserted, for example, such options that are not yet in the **Advanced Options** dialog but have been added in the software.

---

### 8.3 XS\_FIX\_FRAME\_OF\_FIXED\_MODELVIEW

Category in [Advanced options dialog \(page 29\)](#): **Drawing properties**

This advanced option prevents the changing of the view size and location especially in general arrangement drawings.

Set to `TRUE` to fix the frames of the views that have the **Place** setting set to **Fixed** in the view properties. The default value is `FALSE`.

This advanced option is model specific and the setting is saved in the options database.

### 8.4 XS\_FLAT\_PREFIX

Category in [Advanced options dialog \(page 29\)](#): **Plate work**

Use this advanced option to set the flat bar prefix for output, reports, and marks. If Tekla Structures finds a matching flat bar in the `fltprops.inp` file, the plate name will consist of the prefix you enter here, followed by the thickness X width, for example `FLAT5X100`. The default value is `FLAT`.

By default `PL` and `PLT` profiles get the prefix `FL` or `FLT` if a matching plate is found in the `fltprops.inp`.

This advanced option is role specific. When the type **SYSTEM(ROLE)** is in use, the default value is used. When the type **MODEL(ROLE)** or **DRAWING(ROLE)** is in use, you can change the value, which is then the same for all users in the current model.

---

**NOTE** In Imperial version, if `XS_FLAT_PREFIX` is not included in `profitab.inp` as similar profile as PL (valid parametric profile name), the profile is shown with metric units.

---

## 8.5 XS\_FLAT\_THICKNESS\_TOLERANCE

Category in [Advanced options dialog \(page 29\)](#): **Plate work**

Use this advanced option to set the checking tolerance for flat bars. Tekla Structures uses this value to check plate thickness to determine whether to convert it to a flat bar. Enter a decimal value. The default value is 0.1 mm.

This advanced option is model specific and the setting is saved in the options database.

## 8.6 XS\_FLAT\_TOLERANCE

Category in [Advanced options dialog \(page 29\)](#): **Plate work**

Use this advanced option to set a value that Tekla Structures uses to check plate width to determine whether to convert it to a flat bar. Enter a decimal value. The default value is 0.1 mm.

This advanced option is model specific and the setting is saved in the options database.

## 8.7 FLEXLM\_TIMEOUT

**This advanced option must be set in an initialization (.ini) file.**

This is a Windows environment variable used by Tekla Structures. This variable reduces the delay in starting Tekla Structures. Enter the value in microseconds. For Tekla Structures, the maximum value of this variable is 100 000.

### Example

```
set FLEXLM_TIMEOUT=100000
```

## 8.8 XS\_FRACTION\_HEIGHT\_FACTOR

**Category in [Advanced options dialog \(page 29\)](#): Imperial units**

Use this advanced option to control the total height of fractions. The default value in the US environment Imperial role is 1.3.

This advanced option is model specific and the setting is saved in the options database.

## 8.9 XS\_FS\_POSTFIX\_FOR\_MERGED\_PART\_MARK

**Category in [Advanced options dialog \(page 29\)](#): Marking - parts**

Use this advanced option to define the far side (FS) postfix in merged part marks. This postfix is visible for identical parts on far side. FS is the default value.

This advanced option is model specific and the setting is saved in the options database.

In merging part marks, you may also find the following advanced options useful:

[XS\\_MULTIPLIER\\_SEPARATOR\\_FOR\\_MERGED\\_PART\\_MARK \(page 340\)](#)

[XS\\_NSFS\\_POSTFIX\\_FOR\\_MERGED\\_PART\\_MARK \(page 345\)](#)

[XS\\_NS\\_POSTFIX\\_FOR\\_MERGED\\_PART\\_MARK \(page 347\)](#)

[XS\\_PART\\_MERGE\\_MAX\\_DISTANCE \(page 357\)](#)

[XS\\_MIN\\_MERGE\\_PART\\_COUNT \(page 334\)](#)

# 9 Advanced options - G

## 9.1 XS\_GA\_CONNECTING\_SIDE\_MARK\_SYMBOL

**This advanced option must be set in an initialization (.ini) file.**

Use this advanced option to change the symbol for a connecting side mark in general arrangement drawings. By default, the side mark symbol is the symbol number 34 in the `xsteel.sym` symbol file. To change the symbol, set this advanced option to a different symbol number.

Symbol 34 in `xsteel.sym`:



Restart Tekla Structures after changing the value to activate the new setting.

**See also**

[XS\\_CONNECTING\\_SIDE\\_MARK\\_SYMBOL](#) (page 102)

## 9.2 XS\_GA\_DRAWING\_VIEW\_TITLE

**Category in [Advanced options dialog \(page 29\)](#): Drawing properties**

Use this advanced option to define a title for a general arrangement drawing view in a multidrawing.

Enter any combination of text and options, and enclose each option in percent symbols (%). The possible options are `DRAWING_BASE_NAME` and `DRAWING_NAME`.

By default the value is defined as follows:

Drawing %DRAWING\_BASE\_NAME%.

This advanced option is model specific and the setting is saved in the options database.

### 9.3 XS\_GAGE\_OF\_OUTSTANDING\_LEG\_STRING

Category in [Advanced options dialog \(page 29\)](#): Marking - bolts

Use this advanced option to display the gage of outstanding leg (GOL) information in bolt marks (element **Gage of outstanding leg**) in the following ways:

- If there is no %VALUE% in the string then Tekla Structures adds the GOL value to the end of the string.
- You can enter any combination of text together with option %VALUE%. For example, %VALUE% GOL or GOL%VALUE%.
- If you do not set this advanced option, Tekla Structures only uses %VALUE%.
- If Tekla Structures cannot calculate the value, nothing is added to the mark.
- The default value is GOL%VALUE%.

This advanced option is model specific and the setting is saved in the options database.

#### Example

Here, the value for the gage of outstanding leg is 5½.

| In the Advanced Options dialog | In bolt mark |
|--------------------------------|--------------|
| %VALUE% GOL                    | 5½ GOL       |
| GOSL %VALUE%                   | GOSL 5½      |
| GOL =                          | GOL = 5½     |
|                                | 5½           |

### 9.4 XS\_GA\_HIDDEN\_NORTH\_MARK\_SYMBOL

Category in [Advanced options dialog \(page 29\)](#): Marking - parts

By default, the symbol for hidden North marks in general arrangement drawings is number 32 in the `xsteel.sym` symbol file. To change the symbol, set this advanced option to a different symbol number.

## 9.5 XS\_GA\_NORTH\_MARK\_SCALE

**Category in [Advanced options dialog \(page 29\)](#): Marking - parts**

By default, Tekla Structures draws North marks in general arrangement drawings using a scale of 1:1. Use this advanced option to specify a different scale. You can also create a larger symbol for North marks in the Symbol Editor.

This advanced option is model specific and the setting is saved in the options database.

## 9.6 XS\_GA\_NORTH\_MARK\_SYMBOL

**Category in [Advanced options dialog \(page 29\)](#): Marking - parts**

By default, the symbol for North marks in general arrangement drawings is number 32 in the `xsteel.sym` symbol file. To change the symbol, set this advanced option to a different symbol number.

This advanced option is model specific and the setting is saved in the options database.

## 9.7 XS\_GA\_OMITTED\_DIAMETER\_TYPE

**Category in [Advanced options dialog \(page 29\)](#): Marking - parts**

Use this advanced option to omit marks for specific diameter types in general arrangement drawings. The options are `HOLE` or `BOLT`.

This advanced option is model specific and the setting is saved in the options database.

**See also**

[XS\\_OMITTED\\_BOLT\\_TYPE \(page 351\)](#)

## 9.8 XS\_GET\_ASSEMBLY\_LEVELS\_FROM\_ASSEMBLY\_MAIN\_PART

Category in [Advanced options dialog \(page 29\)](#): Marking - parts

Set this advanced option to `TRUE` to get assembly levels from the assembly main part. Set it to `FALSE` to get the levels from the whole assembly. The default value is `FALSE`.

This advanced option is model specific and the setting is saved in the options database.

## 9.9 XS\_GET\_CAST\_UNIT\_LEVELS\_FROM\_CAST\_UNIT\_MAIN\_PART

Category in [Advanced options dialog \(page 29\)](#): Marking - parts

Set this advanced option to `TRUE` to get cast unit levels from the cast unit main part. Set it to `FALSE` to get the levels from the whole cast unit. The default value is `FALSE`.

This advanced option is model specific and the setting is saved in the options database.

## 9.10 XS\_GOL\_SYMMETRY\_DISTANCE

Category in [Advanced options dialog \(page 29\)](#): Marking - bolts

The gauge of outstanding leg (GOL) is the center-to-center distance of the holes between two angles usually connected on the web of the beam/column. It is equal to the gauge of leg angles plus the web thickness. Outstanding leg is the leg of the angle perpendicular to the paper viewing from the web. Use this advanced option to set the tolerance in part symmetry checking when calculating the gauge of outstanding leg. The default value is 0.01.

This advanced option is model specific and the setting is saved in the options database.

## 9.11 XS\_GRID\_DIMENSION\_OVERALL\_LENGTH

**Category in [Advanced options dialog \(page 29\)](#): Dimensioning - general**

Set this advanced option to a length to add a dimension line spanning the entire grid next to existing grid dimensions. The default value is 1.

This advanced option is user specific and the setting is saved in `options.bin` under the user folder, for example, in `C:\Users\\AppData\Local\Trimble\Tekla Structures\\UserSettings`. Restart Tekla Structures to activate the new value.

## 9.12 XS\_GRID\_COLOR\_FOR\_WORK\_PLANE

**Category in [Advanced options dialog \(page 29\)](#): Model views**

Use this advanced option to change the color of the work plane grid in the model.

Define the color by specifying RGB values in the following way: :

`<value for red> <value for green> <value for blue>`.

Separate the values with spaces. Define the values on a scale from 0.0 to 1.0. The default value is `0.7 0.0 0.3`.

Reopen the model view to activate the new value.

This advanced option is user specific and the setting is saved in `options.bin` under the user folder, for example, in `C:\Users\\AppData\Local\Trimble\Tekla Structures\\UserSettings`.

### See also

[Color picker for Tekla Structures](#)

## 9.13 XS\_GRID\_PLANES\_VISIBLE\_WITH\_USERPLANES

**Category in [Advanced options dialog \(page 29\)](#): Model views**

Use this advanced option to show or hide the grid planes.

Set to `TRUE` to show the grid planes. Set to `FALSE` (default) to hide the grid planes.

Reopen the view for the change to take effect.

---

**NOTE** The grid planes can be shown only if the construction planes are visible. To display the construction planes, select the **Construction planes** checkbox in the **Display** dialog.

---

## 9.14 XS\_GRID\_TEXT\_FONT

Category in [Advanced options dialog \(page 29\)](#): **Drawing properties**

This advanced option affects only old drawings created when Tekla Structures did not have font settings available in the object properties. This advanced option is used only for converting fonts when opening old drawings.

Use this advanced option to set the font for grid text. The default value is Arial. If you do not specify a font, Tekla Structures uses the default font defined for [XS\\_DEFAULT\\_FONT \(page 116\)](#).

This advanced option is model specific and the setting is saved in the options database.

# 10 Advanced options - H

## 10.1 XS\_HANDLE\_SCALE

**Category in [Advanced options dialog \(page 29\)](#): Model views**

Use this advanced option to modify the handle size in model views. Enter a decimal value.

- The default value is 1.3.
- A value larger than 1.3 makes the handles larger and easier to see.
- A value smaller than 1.3 decreases the handles.

Close the model view and open it again to implement the change.

This advanced option is user specific, and the setting is saved in `options.bin` under the user folder.

## 10.2 XS\_HATCH\_PATTERN\_LINE\_LIMIT

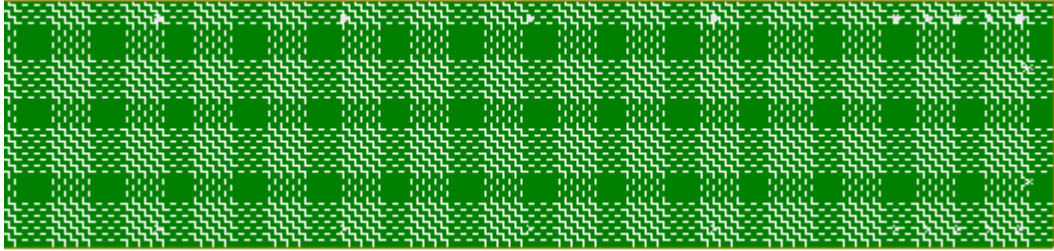
**Category in [Advanced options dialog \(page 29\)](#): Hatching**

Set this advanced option to a numerical value to control the maximum number of line segments created by a hatch pattern. The default value is 0, which means that there is no limit in the number of line segments.

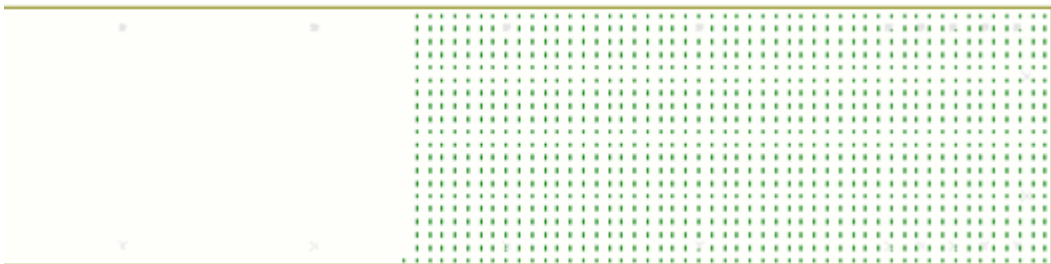
This advanced option is intended to be used as a safety workaround when opening drawings, because sometimes hatch pattern definitions contain very complex geometry, and creating such a complex geometry might take a very long time, making the drawing opening very slow. Use this advanced option to open the drawing more quickly. Also adjust the hatch properties (scale, type, etc) so that not too many details are created.

The following examples show hatches in a part with different values. The fill type used is HCHEQ5BS, and the fill scale is 0.2 in both X and Y directions:

Value 0 is used:



Value 1000 is used:



---

**NOTE** This advanced option has no effect on hardware hatches, and it does not affect printing.

---

This advanced option is model specific and the setting is saved in the options database.

### 10.3 XS\_HATCH\_SCALE\_LIMIT

**Category in [Advanced options dialog \(page 29\)](#): Hatching**

This advanced option defines the smallest possible size of the drawn hatch pattern. If the scale of a single hatch pattern is smaller than the defined value, the pattern is changed to a solid face. The default value is 0.001.

This advanced option is model specific and the setting is saved in the options database.

## 10.4 XS\_HATCH\_SEGMENT\_BUFFER\_SIZE

Category in [Advanced options dialog \(page 29\)](#): Hatching

Tekla Structures includes a hatch buffer to speed up opening drawings containing hatch. This advanced option defines the size of the buffer.

The default value is 1000000. If you use extremely complicated hatches, you may get better performance with a larger value. For small hatches, use a smaller value.

This advanced option is role specific. When the type **SYSTEM(ROLE)** is in use, the default value is used. When the type **MODEL(ROLE)** or **DRAWING(ROLE)** is in use, you can change the value, which is then the same for all users in the current model.

## 10.5 XS\_HIGH\_ACCURACY\_TRIMBIM\_EXPORT

Category in [Advanced options dialog \(page 29\)](#): Export

Use this advanced option to enable high solid accuracy in `.tekla` and `.trb` file exports, and thus make the rounding on profiles visible in Trimble Connect when a Tekla Structures model is uploaded to Trimble Connect.

Note that the higher solid accuracy affects Tekla Structures performance.

The default value is `TRUE`. When set to `TRUE`, the high solid accuracy is used.

This advanced option is user-specific.

## 10.6 XS\_HIDDEN\_LINES\_CHECK\_TOLERANCE

Category in [Advanced options dialog \(page 29\)](#): Drawing properties

This advanced option defines the distance within which Tekla Structures treats part lines inside cast units as overlapping lines. The default value is `0.01`.

This advanced option is model specific and the setting is saved in the options database.

## 10.7 XS\_HIDDEN\_LINES\_UNHIDE\_EMBEDDED

Category in [Advanced options dialog \(page 29\)](#): Drawing properties

Set this advanced option to `TRUE` to draw the edge lines of embedded parts as visible lines even when they are hidden inside concrete. `FALSE` is the default value.

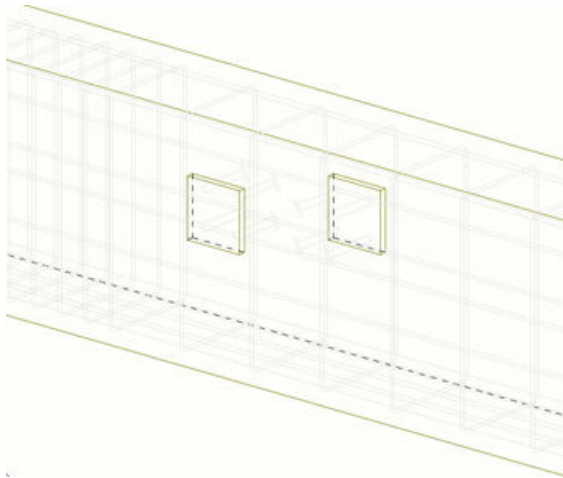
Embed is a non-concrete (steel or miscellaneous) object in a cast unit or pour. It can be a sub-assembly, like steel objects always are in cast units, or a part in a pour.

Note that this advanced option does not affect reinforcement.

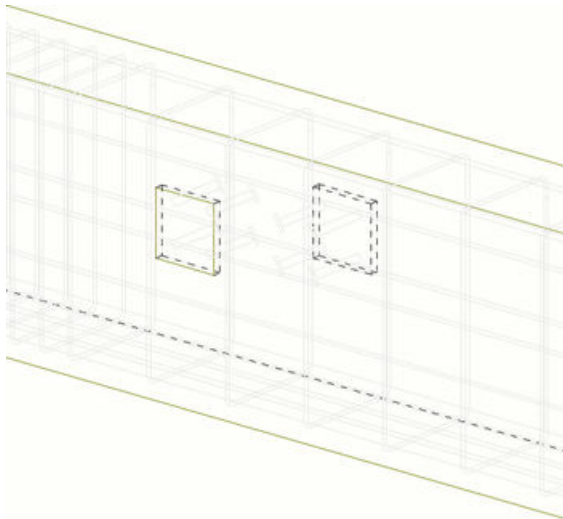
In the following two examples, one of the embeds is in the front/near face and the other is in the back/far face of the beam.

In the first example:

- `XS_HIDDEN_LINES_UNHIDE_EMBEDDED` is set to `TRUE`, so embed part lines are visible also when they are inside concrete.
- Cast unit lines are shown as outlines.
- Embed anchor studs have been created as rebars, and they are hidden, because **Hide lines behind parts** has been selected in reinforcement properties.



In the second example, `XS_HIDDEN_LINES_UNHIDE_EMBEDDED` is set to `FALSE`, so embed part lines that are inside concrete are hidden.



This advanced option is model specific and the setting is saved in the options database.

## 10.8 XS\_HIDDEN\_NORTH\_MARK\_SYMBOL

**Category in [Advanced options dialog \(page 29\)](#): Marking - parts**

By default hidden North mark symbol is number 32 in the `xsteel.sym` symbol file. To change the symbol, set this advanced option to a different symbol number.

For more information about symbols in Tekla Structures, and checking the symbol files, see [Add symbols in drawings](#).

This advanced option is model specific and the setting is saved in the options database.

### **See also**

Show orientation marks (north marks)

## 10.9 XS\_HIDDEN\_REMOVE\_DOUBLE\_LINES

Category in [Advanced options dialog \(page 29\)](#): Drawing properties

To have Tekla Structures draw double lines when displaying models with **Exact** representation and creating drawings and 2D DWG/DXF files, set this advanced option to `FALSE`.

Note that on the screen, it is very difficult to notice the difference, but if you open the exported DWG file in a DWG editor, such as AutoCAD, you will more easily notice the difference, because you can select one or two lines in the file.

The default value is `TRUE`, which means that Tekla Structures does not draw double lines, to minimize file size.

This advanced option is model specific and the setting is saved in the options database.

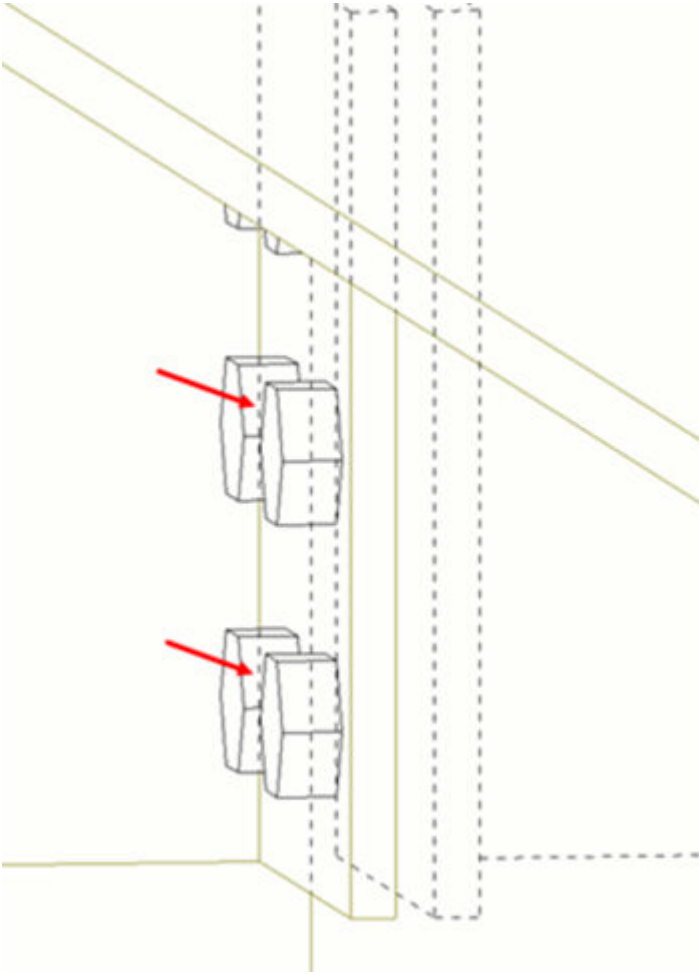
## 10.10 XS\_HIDDEN\_USE\_BOLT\_PLANES

Category in [Advanced options dialog \(page 29\)](#): Drawing properties

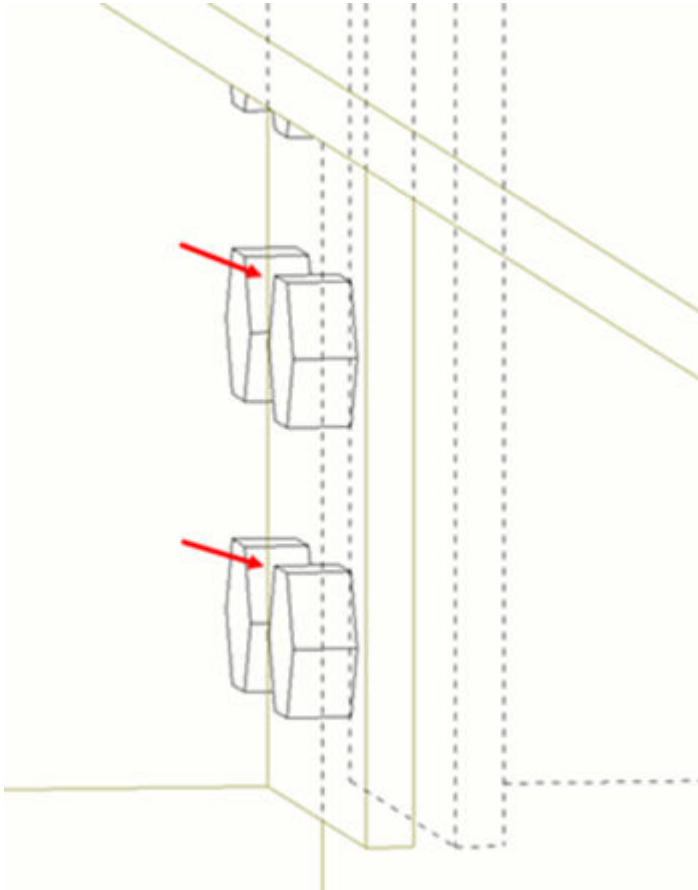
Set this advanced option to `TRUE` to hide lines behind a bolt nut (with **Exact** part representation). To show the lines, set it to `FALSE` (default).

This advanced option is user specific and the setting is saved in `options.bin` under the user folder, for example, in `C:\Users\\AppData\Local\Trimble\Tekla Structures\\UserSettings`. Restart Tekla Structures to activate the new value.

`TRUE:`



FALSE:



## 10.11 XS\_HIDE\_OTHER\_PARTS\_IN\_ASSEMBLY\_AND\_CAST\_UNIT\_VIEWS

Category in [Advanced options dialog \(page 29\)](#): **Model views**

This advanced option defines whether parts that do not belong to assemblies or cast units are shown or hidden in assembly and cast unit views. The default value `TRUE` hides the parts that do not belong to the selected assembly or cast unit. If you set this advanced option to `FALSE`, the parts are not hidden.

This advanced option is user specific and the setting is saved in `options.bin` under the user folder, for example, in `C:\Users\\AppData\Local\Trimble\Tekla Structures\\UserSettings`. Restart Tekla Structures to activate the new value.

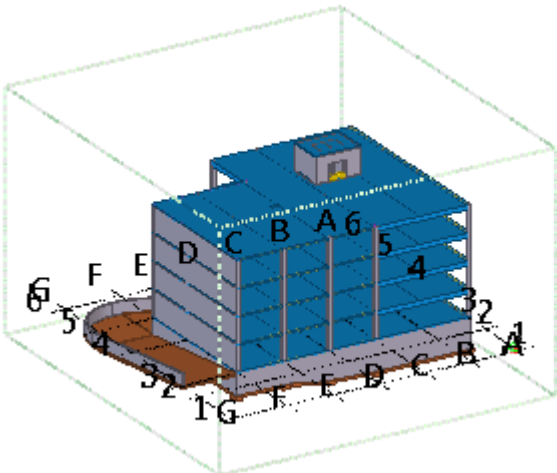
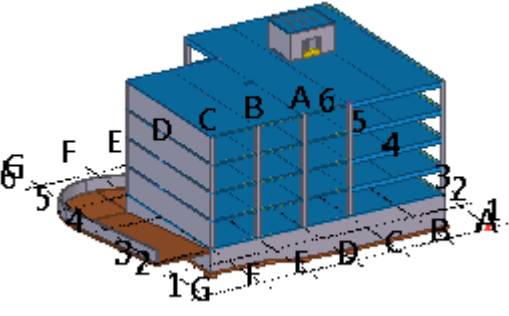
## 10.12 XS\_HIDE\_WORKAREA

Category in [Advanced options dialog \(page 29\)](#): **Model views**

Set this advanced option to `TRUE` to hide the work area or to `FALSE` to display the work area in model views. The default is `FALSE`. Redraw the views for the change to take effect.

This advanced option is user specific and the setting is saved in `options.bin` under the user folder, for example, in `C:\Users\\AppData\Local\Trimble\Tekla Structures\\UserSettings`.

### Example

| Setting | Appearance in model  |
|---------|--|
| FALSE   |   |
| TRUE    |  |

To temporarily hide the green work area box, hold down the **Ctrl** and **Shift** keys simultaneously, right-click and select **Redraw view**. To make the box visible again, right-click and select **Redraw view** again.

## 10.13 XS\_HIGHLIGHT\_ASSOCIATIVE\_DIMENSION\_CHANGES

**Category in [Advanced options dialog \(page 29\)](#): Dimensioning - general**

Use this advanced option to define whether changed dimension text and moved dimension points are highlighted in associative drawings.

When set to `TRUE` (default), Tekla Structures highlights the changed dimension text and the moved dimension points in updated associative drawings.

Tekla Structures highlights the changes in the following ways:

- A change symbol (by default a cloud) is drawn around the old point, the new point and the dimension values. It is displayed only when you select the dimension.
- An arrow is drawn from the old point to the new point.

This advanced option is user specific and the setting is saved in `options.bin` under the user folder, for example, in `C:\Users\\AppData\Local\Trimble\Tekla Structures\\UserSettings`. Restart Tekla Structures to activate the new value.

### See also

[XS\\_HIGHLIGHT\\_MARK\\_CONTENT\\_CHANGES \(page 286\)](#)

[XS\\_ASSOCIATIVE\\_CHANGE\\_HIGHLIGHT\\_SYMBOL \(page 61\)](#)

[XS\\_ASSOCIATIVE\\_CHANGE\\_HIGHLIGHT\\_SIZE \(page 61\)](#)

## 10.14 XS\_HIGHLIGHT\_MARK\_CONTENT\_CHANGES

**Category in [Advanced options dialog \(page 29\)](#): Marking - general**

Use this advanced option to define whether changed mark contents are highlighted in associative drawings.

When set to `TRUE` (default), Tekla Structures highlights the mark contents that have been changed in updated associative drawings by drawing a change symbol (by default a cloud) around the changed mark content.

This advanced option is user specific and the setting is saved in `options.bin` under the user folder, for example, in `C:\Users\\AppData\Local\Trimble\Tekla Structures\\UserSettings`. Restart Tekla Structures to activate the new value.

### See also

[XS\\_HIGHLIGHT\\_ASSOCIATIVE\\_DIMENSION\\_CHANGES \(page 285\)](#)

[XS\\_ASSOCIATIVE\\_CHANGE\\_HIGHLIGHT\\_SYMBOL \(page 61\)](#)

[XS\\_ASSOCIATIVE\\_CHANGE\\_HIGHLIGHT\\_SIZE \(page 61\)](#)

## 10.15 XS\_HOLE\_MARK\_STRING\_FOR\_SIZE

Category in [Advanced options dialog \(page 29\)](#): **Marking - bolts**

Use this advanced option to define the contents of the **Size** element in hole marks. The default value is `%BOLT_NUMBER%*D%HOLE.DIAMETER%`.

This advanced option is only used when there is a hole, no bolt (and the hole is a normal one).

The advanced options `XS_SHOP_HOLE_MARK_STRING_FOR_SIZE` and `XS_SITE_HOLE_MARK_STRING_FOR_SIZE` **override this setting**.

You can use any combination of text and the following options as the value for this advanced option. You can use the options in any order, and make calculations.

- BOLT\_NUMBER
- DIAMETER
- LENGTH
- HOLE.DIAMETER
- LONG\_HOLE\_X
- LONG\_HOLE\_Y
- LONGHOLE\_MIN (the shorter of the slotted hole dimensions)
- LONGHOLE\_MAX (the longer of the slotted hole dimensions)
- BOLT\_STANDARD
- BOLT\_MATERIAL
- BOLT\_ASSEMBLY\_TYPE
- BOLT\_COUNTERSUNK
- BOLT\_SHORT\_NAME
- BOLT\_FULL\_NAME

Enclose each option in % characters.

---

**NOTE** If you define this advanced option in an `.ini` file, use double percent signs `%%` around the options. For example, `%%BOLT_NUMBER%%*D%HOLE.DIAMETER%%`.

---

To use special characters, enter a backslash (\) followed by an ASCII number.

With length-type options, but not in calculations, you can specify the number of decimals. For example, `HOLE.DIAMETER.2` shows (tapped) hole diameters with two decimals.

This advanced option is model specific and the setting is saved in the options database.

**See also**

[XS\\_SITE\\_HOLE\\_MARK\\_STRING\\_FOR\\_SIZE \(page 472\)](#)

[XS\\_SHOP\\_HOLE\\_MARK\\_STRING\\_FOR\\_SIZE \(page 442\)](#)

## 10.16 XS\_HOLE\_MARK\_STRING\_FOR\_SIZE\_IN\_GA

**Category in [Advanced options dialog \(page 29\)](#): Marking - bolts**

Use this advanced option to define the contents of the **Size** element in bolt marks in general arrangement drawings. If you have not set the advanced options `XS_SHOP_HOLE_MARK_STRING_FOR_SIZE_IN_GA` or `XS_SITE_HOLE_MARK_STRING_FOR_SIZE_IN_GA`, then this advanced option is used.

This advanced option is only used when there is a hole, no bolt (and the hole is a normal one).

You can use any combination of text and the following options as the value for this advanced option. You can use the options in any order, and make calculations.

- BOLT\_NUMBER
- DIAMETER
- LENGTH
- HOLE.DIAMETER
- LONG\_HOLE\_X
- LONG\_HOLE\_Y
- LONGHOLE\_MIN (the shorter of the slotted hole dimensions)
- LONGHOLE\_MAX (the longer of the slotted hole dimensions)
- BOLT\_STANDARD
- BOLT\_MATERIAL
- BOLT\_ASSEMBLY\_TYPE
- BOLT\_COUNTERSUNK

- BOLT\_SHORT\_NAME
- BOLT\_FULL\_NAME

Enclose each option in % characters.

---

**NOTE** If you define this advanced option in an `.ini` file, use double percent signs `%%` around the options. For example, `%%BOLT_NUMBER%%*D%  
%HOLE.DIAMETER%%`.

---

To use special characters, enter a backslash (`\`) followed by an ASCII number. With length-type options, but not in calculations, you can specify the number of decimals. For example, `HOLE.DIAMETER.2` shows (tapped) hole diameters with two decimals.

This advanced option is model specific and the setting is saved in the options database.

**See also**

[XS\\_SHOP\\_HOLE\\_MARK\\_STRING\\_FOR\\_SIZE\\_IN\\_GA \(page 443\)](#)

[XS\\_SITE\\_HOLE\\_MARK\\_STRING\\_FOR\\_SIZE\\_IN\\_GA \(page 473\)](#)

# 11 Advanced options - I

## 11.1 XS\_IGNORE\_CUT\_VALUE\_IN\_TEMPLATE

**This advanced option must be set in an initialization (.ini) file.**

By default, when a Template Editor template output value field does not fit into a cell, three asterisks (\*\*\*) will indicate that the value is cut. For example, when a template has a value field length limited to 10 characters and the output value is 11 characters or more, \*\*\* will be displayed at the end of the value.

If you do not want to display the asterisks, set `XS_IGNORE_CUT_VALUE_IN_TEMPLATE` to `TRUE`.

## 11.2 XS\_IGNORE\_CROSSBAR\_LOCATION\_IN\_REBAR\_MESH\_NUMBERING

**Category in [Advanced options dialog \(page 29\)](#): Numbering**

Use this advanced option to define whether the location of the crossing bars (e.g. above or below the main bars) is ignored in the numbering of reinforcement meshes.

The default value is `FALSE`.

If `XS_IGNORE_CROSSBAR_LOCATION_IN_REBAR_MESH_NUMBERING` is set to `FALSE`, the location of the crossing bars affects numbering, and the otherwise identical meshes receive different numbers if the crossing bars are on the different sides of the main bars.

If `XS_IGNORE_CROSSBAR_LOCATION_IN_REBAR_MESH_NUMBERING` is set to `TRUE`, crossing bars can be on either side of the main bars, and the otherwise identical meshes still receive the same number.

This advanced option is model specific and the setting is saved in the options database.

---

**NOTE** We do not recommend that you change this setting during a project. If you do so, you must carry out full numbering (**File --> Diagnose & repair --> Diagnose and repair numbering: all**).

---

### 11.3 XS\_IGNORE\_SUBASSEMBLY\_HIERARCHY\_IN\_DIMENSIONING

Category in [Advanced options dialog \(page 29\)](#): **Dimensioning - parts**

Use this advanced option to define whether sub-assembly parts are dimensioned as secondary parts of the main assembly.

When set to `TRUE`, Tekla Structures ignores sub-assemblies and dimensions parts inside the sub-assemblies as if they were parts in the main assembly. The default value is `FALSE`.

This advanced option is model specific and the setting is saved in the options database.

### 11.4 XS\_IFC\_EXPORT\_OBJECT\_LAYER\_FROM\_UDA

**This advanced option must be set in an initialization (.ini) file.**

Use this advanced option to define for the IFC2x3 export the layer name of an object in an IFC file using a predefined UDA. Using this advanced option requires that you have selected the **Layer names as part names** option in the IFC2x3 export settings. By default, the value is empty, and the part name is used as the layer name.

If you have not selected **Layer names as part names**, the [phase number and name combination is written](#) to the Layer attribute.

The UDA name is case sensitive, so you need to check how the UDA name is written in the `objects.inp` file. By default, the `objects.inp` file is located in `...\Tekla Structures\<version>\Environments\common\inp`.

Enter the following in an `.ini` file:

```
set XS_IFC_EXPORT_OBJECT_LAYER_FROM_UDA=<UDA>
```

Replace the `<UDA>` with the UDA of your choice.

Example: The UDA input field “Fabricator name” is defined as “fabricator” in `objects.inp`, so enter the UDA as follows:

```
set XS_IFC_EXPORT_OBJECT_LAYER_FROM_UDA=fabricator
```

## 11.5 XS\_IFC2X3\_EXPORT\_SECONDARY\_AS\_DISCRETEACCESSORY

**This advanced option must be set in an initialization (.ini) file.**

The IFC2x3 export does not export steel secondary objects as `IfcDiscreteAccessory`. You can force steel secondary objects to the `IfcDiscreteAccessory` category by setting this advanced option to `TRUE` in an `.ini` file, for example, in `teklastructures.ini`.

## 11.6 XS\_IMMEDIATE\_PROPERTY\_PANE\_UPDATE

**Category in [Advanced options dialog \(page 29\)](#): Modeling properties**

Use this advanced option to define whether property pane updates immediately after an object is selected.

When set to `TRUE`, the property pane is updated whether it is open or not. The default value is `TRUE`.

When set to `FALSE`, the property pane is updated only when it is open.

If you record macros that use the property pane, set this advanced option to `TRUE`. If the advanced option is set to `FALSE`, macros may work unreliably.

This advanced option is user specific and the setting is saved in `options.bin` under the user folder, for example, in `C:\Users\\AppData\Local\Trimble\Tekla Structures\\UserSettings`.

## 11.7 XS\_IMPERIAL

**Category in [Advanced options dialog \(page 29\)](#): Imperial units**

Set this advanced option to `TRUE` to have output in imperial units only. If you do not want to do this, set it to `FALSE` (default).

This affects only the following elements of bolt marks:

- **Gage of outstanding leg (GOL)**
- **Center-to-center distance**

This advanced option is model specific and the setting is saved in the options database.

## 11.8 XS\_IMPERIAL\_DATE

**Category in [Advanced options dialog \(page 29\)](#): Imperial units**

Set this advanced option to `TRUE` to use the date format `mm/dd/yyyy`. Set it to `FALSE` (default) to use the date format `dd.mm.yyyy`.

When this advanced option is set to `TRUE`, the date format must also be `mm/dd/yyyy` in the Windows region settings for dates to work correctly in Tekla Structures.

This advanced option is user specific and the setting is saved in `options.bin` under the user folder, for example, in `C:\Users\\AppData\Local\Trimble\Tekla Structures\\UserSettings`. Restart Tekla Structures to activate the new value.

## 11.9 XS\_IMPERIAL\_INPUT

**Category in [Advanced options dialog \(page 29\)](#): Imperial units**

Set this advanced option to `TRUE` to allow input in imperial units only. To disable the advanced option, set it to `FALSE` (default).

This advanced option is model specific and the setting is saved in the options database.

## 11.10 XS\_IMPERIAL\_PLATE\_PRECISION

**Category in [Advanced options dialog \(page 29\)](#): Imperial units**

This advanced option specifies the accuracy used for the profile width of contour plates. The default value is 16. Accepted values are 16, 32, 64, and 128. If you enter a value other than the accepted values, the default value is used.

This advanced option is model specific and the setting is saved in the options database.

## 11.11 XS\_IMPERIAL\_TIME

**Category in [Advanced options dialog \(page 29\)](#): Imperial units**

Set this advanced option to `TRUE` to use the time format `hh:mm:ss am/pm`.

Set to `FALSE` to use the time format `hh:mm:ss`.

This advanced option is user specific and the setting is saved in `options.bin` under the user folder, for example, in `C:\Users\\AppData\Local\Trimble\Tekla Structures\\UserSettings`. Restart Tekla Structures to activate the new value.

## 11.12 XS\_IMPERIAL\_TRIANGLES

**Category in [Advanced options dialog \(page 29\)](#): Imperial units**

Set this advanced option to `TRUE` to also show triangle ratios in inches.

The default value is `FALSE`.

This advanced option is model specific and the setting is saved in the options database.

## 11.13 XS\_IMPORT\_DWG\_TEXT\_AS\_POLYGON

**Category in [Advanced options dialog \(page 29\)](#): Drawing properties**

This advanced option can be used when adding DWG files to drawings. If you have problems with fonts in the DWG files, set this advanced option to `TRUE`, and Tekla Structures will import fonts as polygons, instead of fonts. By default, the option is set to `FALSE`.

This advanced option is user specific, and the setting is saved in `options.bin` under the user folder.

## 11.14 XS\_IMPORT\_MODEL\_LOG

**Category in [Advanced options dialog \(page 29\)](#): Import**

Set this advanced option to `TRUE` (default) to create a new log every time you import a model.

To append a log entry to the previous log, set it to `APPEND`.

This advanced option is user specific and the setting is saved in `options.bin` under the user folder, for example, in `C:\Users\\AppData\Local\Trimble\Tekla Structures\\UserSettings`. Restart Tekla Structures to activate the new value.

## 11.15 XS\_INCH\_SIGN\_ALWAYS

**Category in [Advanced options dialog \(page 29\)](#): Imperial units**

By default, Tekla Structures does not add an inch symbol (") in dimensions that contain only inches. Set this advanced option to `TRUE` to show inch symbols in all dimensions. The default value is `FALSE`.

This advanced option is model specific and the setting is saved in the options database.

**See also**

[XSR\\_USE\\_NO\\_INCH\\_SYMBOL \(page 424\)](#)

## 11.16 XS\_INCLUDE\_DWG\_ATTRIBUTES\_IN\_REPORTS\_AND\_INQUIRE

**Category in [Advanced options dialog \(page 29\)](#): Speed and accuracy**

DWG-specific attributes are available in reports and inquiries only if this advanced option is set to `TRUE`. This advanced option is by default set to `FALSE`.

This advanced option is role specific. When the type **SYSTEM(ROLE)** is in use, the default value is used. When the type **MODEL(ROLE)** or **DRAWING(ROLE)** is in use, you can change the value, which is then the same for all users in the current model.

## 11.17 XS\_INHERIT\_CONCRETE\_PART\_NUMBERING\_SETTINGS\_FROM\_CAST\_UNIT

Category in [Advanced options dialog \(page 29\)](#): **Numbering**

Use this advanced option to define whether to set concrete part numbering according to cast unit numbering settings. If you set this advanced option to `TRUE` (default), the part number prefix for concrete parts includes the cast unit prefix and the start number. If you set the advanced option to `FALSE`, the cast unit prefix and the start number are not included.

For example, the cast unit prefix is `C` and the start number is `100`. When the advanced option is `TRUE`, the concrete part prefix is `Concrete_C-100`. When the advanced option is `FALSE`, the prefix is only `Concrete`.

This setting affects concrete parts: Strip and pad footings, concrete beams and columns, concrete walls and slabs, and concrete polybeams.

This advanced option is model specific and the setting is saved in the options database.

### See also

[XS\\_CONCRETE\\_PART\\_NUMBERING\\_PREFIX \(page 101\)](#)

[XS\\_CONCRETE\\_PART\\_NUMBERING\\_START\\_NUMBER \(page 102\)](#)

## 11.18 XS\_INP

This advanced option is system specific and is read from `teklastructures.ini`. It can also be set locally, see your environment `.ini` file (`env_<environment_name>.ini`). Generally, there is no need to modify system-specific settings. Do not modify them if you are not an administrator.

Several system files are read from this folder definition, such as definitions for parametric profiles (`.clb`), IFC property set configurations (`.xml`), line type mappings (`.lin`), global UDA definitions (`objects.inp`), and access rights (`privileges.inp`).

You can use semicolon-separated lists of folder paths. The default value is:

```
%XSDATADIR%\environments\common\inp;%XSDATADIR%\environments\common\profil;%XSDATADIR%\environments\common\collaboration\ifc
```

For IFC property sets, you can also use ready-made IFC property sets from the common environment without taking other settings from `\common\inp` so that you define `\common\collaboration\ifc` folder for the `XS_INP` advanced option in your own `.ini` file.

## 11.19 XS\_INTELLIGENCE\_DO\_NOT\_REMOVE\_OBSOLETE\_VIEWS

**Category in [Advanced options dialog \(page 29\)](#): Drawing properties**

Set this advanced option to `TRUE` to prevent drawing views from being deleted when associated objects are removed from the model. `FALSE` is the default.

This advanced option is role specific. When the type **SYSTEM(ROLE)** is in use, the default value is used. When the type **MODEL(ROLE)** or **DRAWING(ROLE)** is in use, you can change the value, which is then the same for all users in the current model.

For general arrangement drawings use the advanced option `XS_INTELLIGENCE_DO_NOT_REMOVE_OBSOLETE_VIEWS_IN_GA`.

**See also**

[XS\\_INTELLIGENCE\\_DO\\_NOT\\_REMOVE\\_OBSOLETE\\_VIEWS\\_IN\\_GA \(page 297\)](#)

## 11.20 XS\_INTELLIGENCE\_DO\_NOT\_REMOVE\_OBSOLETE\_VIEWS\_IN\_GA

**Category in [Advanced options dialog \(page 29\)](#): Drawing properties**

Set this advanced option to `TRUE` (default) to prevent drawing views from being deleted when associated objects are removed from the model.

This advanced option is role specific. When the type **SYSTEM(ROLE)** is in use, the default value is used. When the type **MODEL(ROLE)** or **DRAWING(ROLE)** is in use, you can change the value, which is then the same for all users in the current model.

**See also**

[XS\\_INTELLIGENCE\\_DO\\_NOT\\_REMOVE\\_OBSOLETE\\_VIEWS \(page 297\)](#)

## 11.21 XS\_INTELLIGENCE\_MAX\_PART\_COUNT

**Category in [Advanced options dialog \(page 29\)](#): Drawing properties**

Use this advanced option to define how many parts are taken into account when searching for associated objects. Enter an integer as the value. This advanced option is set to 20 by default.

This advanced option is model specific and the setting is saved in the options database.

## 11.22 XS\_INTELLIGENCE\_MAX\_PLANE\_COUNT

Category in [Advanced options dialog \(page 29\)](#): Drawing properties

Use this advanced option to define how many planes are taken into account when searching for associated objects. Enter an integer. This advanced option is set to 1000 by default.

This advanced option is model specific and the setting is saved in the options database.

## 11.23 XS\_INTELLIGENCE\_MAX\_RULE\_COUNT

Category in [Advanced options dialog \(page 29\)](#): Drawing properties

---

**WARNING** Use this advanced option only when there are performance issues with associative drawings. Using this advanced option may cause losing of associativity in some cases when objects have been deleted from the model.

---

Use this advanced option to decrease the number of associative rules that are used for one measurement point. A smaller value, for example 10 (default), is usually enough. A smaller value may also increase performance and decrease the database size.

This advanced option also controls the maximum number of shown rules in the dimension associativity rule list.

This advanced option is role specific. When the type **SYSTEM(ROLE)** is in use, the default value is used. When the type **MODEL(ROLE)** or **DRAWING(ROLE)** is in use, you can change the value, which is then the same for all users in the current model.

## 11.24 XS\_INTELLIGENT\_CLONING\_ADD\_DIMENSIONS

Category in [Advanced options dialog \(page 29\)](#): Drawing properties

Set this advanced option to `TRUE` to create dimensions for additional parts using automatic dimensioning during cloning, and to `FALSE` to prevent this. The default is `TRUE`.

This advanced option is model specific and the setting is saved in the options database.

## 11.25 XS\_INTELLIGENT\_DRAWING\_ALLOWED

Category in [Advanced options dialog \(page 29\)](#): Drawing properties

Set this advanced option to `FALSE` to prevent Tekla Structures from automatically moving dimensions, marks, etc. according to model changes. `TRUE` is the default value.

This advanced option is model specific and the setting is saved in the options database.

To control how the drawing view placing works when the model changes, set this advanced option to `TRUE` and use it together with the advanced option `XS_DRAWING_UPDATE_VIEW_PLACING`.

---

**NOTE** This setting affects all drawings. To prevent Tekla Structures from automatically updating general arrangement drawings, use the advanced option `XS_INTELLIGENT_DRAWING_ALLOWED_IN_GA`.

---

### See also

[XS\\_INTELLIGENT\\_DRAWING\\_ALLOWED\\_IN\\_GA \(page 299\)](#)

[XS\\_DRAWING\\_UPDATE\\_VIEW\\_PLACING \(page 223\)](#)

## 11.26 XS\_INTELLIGENT\_DRAWING\_ALLOWED\_IN\_GA

Category in [Advanced options dialog \(page 29\)](#): Drawing properties

Set this advanced option to `FALSE` to prevent Tekla Structures from automatically moving dimensions, marks, etc. according to model changes in general arrangement drawings.

This advanced option is model specific and the setting is saved in the options database.

To control how the drawing view placing works when the model changes, set this advanced option to `TRUE` and use it together with the advanced option `XS_DRAWING_UPDATE_VIEW_PLACING`.

---

**NOTE** This setting affects only general arrangement drawings. To prevent Tekla Structures from automatically updating all types of drawings, use the advanced option `XS_INTELLIGENT_DRAWING_ALLOWED`.

---

### See also

[XS\\_INTELLIGENT\\_DRAWING\\_ALLOWED \(page 299\)](#)

[XS\\_DRAWING\\_UPDATE\\_VIEW\\_PLACING \(page 223\)](#)

## 11.27 XS\_INTELLIGENT\_MESSAGES\_ALLOWED

**Category in [Advanced options dialog \(page 29\)](#): Drawing properties**

Set this advanced option to `TRUE` to display a message when a drawing is opened if a model object to which one or more drawing objects are linked is deleted from the model.

If you do not want to display the message, set this advanced option to `FALSE` (default).

This advanced option is user specific and the setting is saved in `options.bin` under the user folder, for example, in `C:\Users\\AppData\Local\Trimble\Tekla Structures\\UserSettings`. Restart Tekla Structures to activate the new value.

## 11.28 XS\_INTELLIGENT\_UPDATE\_ADD\_DIMENSIONS

**Category in [Advanced options dialog \(page 29\)](#): Drawing properties**

Set this advanced option to `TRUE` to add dimensions for new parts, bolts, and reinforcing bars when updating drawings and to `FALSE` to prevent this. The default is `TRUE`.

This advanced option is model specific and the setting is saved in the options database.

## 11.29 XS\_INVALID\_POUR\_BREAK\_COLOR

**This advanced option must be set in an initialization (.ini) file.**

Use this advanced option to change the color of invalid pour breaks in model views. Enter number as the value using the class numbers in the part properties in the property pane to indicate the color. For example, if you set this advanced option to 6, Tekla Structures will color all invalid pour breaks yellow. The default value is 58 (red).

## 11.30 XS\_I\_PROFILE\_CENTER

Category in [Advanced options dialog \(page 29\)](#): **Dimensioning - parts**

Set this advanced option to `NONE` to prevent Tekla Structures from using the center line of I profiles to dimension front views. By default, no value is set.

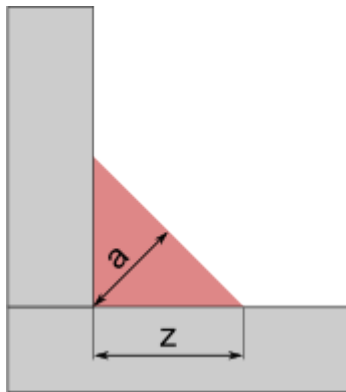
This advanced option is model specific and the setting is saved in the options database.

## 11.31 XS\_ISO\_LEG\_LENGTH\_AS\_WELDSIZE

Category in [Advanced options dialog \(page 29\)](#): **Welds**

When [XS\\_AISC\\_WELD\\_MARK \(page 44\)](#) is set to `FALSE`, set `XS_ISO_LEG_LENGTH_AS_WELDSIZE` to:

- `TRUE` to use the weld size as the leg length ( $z$ ) of the fillet welds.
- `FALSE` to use the weld size as the throat thickness ( $a$ ) of the fillet welds.



---

**NOTE** The weld prefix overrides the setting of the advanced option `XS_ISO_LEG_LENGTH_AS_WELDSIZE`. If you have set the prefix of a weld to  $a$ , the weld size determines the design throat thickness. When the weld prefix is  $z$ , the weld size determines the leg length.

If the last character of the weld prefix is  $s$ , Tekla Structures creates the solid weld object so that  $a$  equals weld size.

---

This advanced option is model specific and the setting is saved in the options database.

After changing this setting, modify existing welds or their properties to activate the new setting and to update the weld solids.

# 12 Advanced options - J

## 12.1 XS\_JOINT\_NUMBER\_FORMAT

Category in [Advanced options dialog \(page 29\)](#): **Marking - general**

You can show the connection numbers in a drawing by adding the **Connection number** element in the connection mark content in the connection mark properties and adding connection marks in the drawing. Use this advanced option to define the connection number format. For example, you can define a prefix.

This advanced option is model specific and the setting is saved in the options database.

### Example

In `J%3.3d`:

- `J` is the prefix.  
The rest of the string defines the number format.
- The first number defines the minimum field width.
- The second number defines the minimum quantity of numbers to display.
- `%` and `d` (integer value) indicate the format.

## 12.2 XS\_JOINTS\_USE\_NOTCH1

Category in [Advanced options dialog \(page 29\)](#): **Components**

Set this advanced option to 1 to use standard notch routines in connections. This is the default value.

Set this advanced option to 0 to use simple notch routines in connections.  
This advanced option is model specific and the setting is saved in the options database.

# 13 Advanced options - K

## 13.1 XS\_KEEP\_AUTOSAVE\_FILES\_ON\_EXIT\_WHEN\_NOT\_SAVING

Category in [Advanced options dialog \(page 29\)](#): **Modeling properties**

When you close a model, Tekla Structures deletes autosave files to save disk space. If this advanced option is set to `TRUE`, Tekla Structures does not delete these files, even if you exit Tekla Structures without saving the model. To delete the autosave files when you close a model, set this advanced option to `FALSE`. The default value is `TRUE`.

This advanced option is user specific and the setting is saved in `options.bin` under the user folder, for example, in `C:\Users\\AppData\Local\Trimble\Tekla Structures\\UserSettings`. Restart Tekla Structures to activate the new value.

## 13.2 XS\_KEYIN\_ABSOLUTE\_PREFIX

Category in [Advanced options dialog \(page 29\)](#): **Modeling properties**

This advanced option defines the character used in absolute snapping. Enter any allowed ASCII character. The default value is `$`.

If you have set Tekla Structures to use absolute snapping by default using the advanced option `XS_KEYIN_DEFAULT_MODE`, you do not need to use a snap character for absolute snapping.

This advanced option is user specific and the setting is saved in `options.bin` under the user folder, for example, in `C:\Users\\AppData\Local\Trimble\Tekla`

Structures\<>version>\UserSettings. Restart Tekla Structures to activate the new value.

**See also**

[XS\\_KEYIN\\_DEFAULT\\_MODE \(page 305\)](#)

[XS\\_KEYIN\\_RELATIVE\\_PREFIX \(page 306\)](#)

[XS\\_KEYIN\\_GLOBAL\\_PREFIX \(page 305\)](#)

## 13.3 XS\_KEYIN\_DEFAULT\_MODE

**Category in [Advanced options dialog \(page 29\)](#): Modeling properties**

This advanced option defines the snapping mode Tekla Structures uses by default. Set to `RELATIVE` (default), `ABSOLUTE`, or `GLOBAL`.

In relative snapping mode, the coordinates you enter in the **Enter a Numeric Location** dialog as such without any prefix are relative to the last position picked.

In absolute snapping mode, the coordinates are based on the origin of the work plane.

In global snapping mode, the coordinates are based on the global origin and the global x and y directions.

This advanced option is user specific and the setting is saved in `options.bin` under the user folder, for example, in `C:\Users\<>user>\AppData\Local\Trimble\Tekla Structures\<>version>\UserSettings`. Restart Tekla Structures to activate the new value.

**See also**

[XS\\_KEYIN\\_RELATIVE\\_PREFIX \(page 306\)](#)

[XS\\_KEYIN\\_ABSOLUTE\\_PREFIX \(page 304\)](#)

[XS\\_KEYIN\\_GLOBAL\\_PREFIX \(page 305\)](#)

## 13.4 XS\_KEYIN\_GLOBAL\_PREFIX

**Category in [Advanced options dialog \(page 29\)](#): Modeling properties**

This advanced option defines the character used in global snapping. The default value is `!`.

If you have set Tekla Structures to use global snapping by default using the advanced option `XS_KEYIN_DEFAULT_MODE`, you do not need to use a snap character for global snapping.

This advanced option is user specific and the setting is saved in `options.bin` under the user folder, for example, in `C:\Users\\AppData\Local\Trimble\Tekla Structures\\UserSettings`. Restart Tekla Structures to activate the new value.

#### See also

[XS\\_KEYIN\\_DEFAULT\\_MODE \(page 305\)](#)

[XS\\_KEYIN\\_RELATIVE\\_PREFIX \(page 306\)](#)

[XS\\_KEYIN\\_ABSOLUTE\\_PREFIX \(page 304\)](#)

## 13.5 XS\_KEYIN\_RELATIVE\_PREFIX

**Category in [Advanced options dialog \(page 29\)](#): Modeling properties**

This advanced option defines the character used in relative snapping. Enter any allowed ASCII character. The default value is @.

If you have set Tekla Structures to use relative snapping by default using the advanced option `XS_KEYIN_DEFAULT_MODE`, you do not need to use a snap character for relative snapping.

This advanced option is user specific and the setting is saved in `options.bin` under the user folder, for example, in `C:\Users\\AppData\Local\Trimble\Tekla Structures\\UserSettings`. Restart Tekla Structures to activate the new value.

#### See also

[XS\\_KEYIN\\_DEFAULT\\_MODE \(page 305\)](#)

[XS\\_KEYIN\\_ABSOLUTE\\_PREFIX \(page 304\)](#)

[XS\\_KEYIN\\_GLOBAL\\_PREFIX \(page 305\)](#)

## 13.6 XS\_KNOCK\_OFF\_DIMENSION\_PRECISION

**Category in [Advanced options dialog \(page 29\)](#): Dimensioning - general**

Set this advanced option to 16 or 32 to set the precision of the knock-off dimensions to 1/16 or 1/32. Otherwise the precision is the one that is

set in the dimensioning dialog. The default value is zero. Other values are ignored, and the knock-off dimension precision is the same as that for other dimensions.

Knock-off dimensions are used in integrated dimensioning.

# 14 Advanced options - L

## 14.1 XS\_LANGUAGE

**This advanced option must be set in an initialization (.ini) file.**

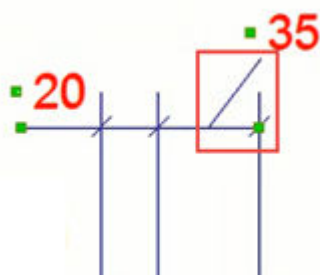
This advanced option is system specific and is read from environment files. Generally, there is no need to modify system-specific settings. Do not modify them if you are not an administrator.

This advanced option sets the Tekla Structures default language. The default language is displayed first when you go to the **File** menu and click **Settings** --> **Change language** .

## 14.2 XS\_LEADER\_LINE\_TO\_DRAGGED\_DIMENSION\_TEXT

**Category in [Advanced options dialog \(page 29\)](#): Dimensioning - general**

When you set this advanced option to `TRUE`, a leader line is drawn when a dimension text is dragged away from the dimension line. When you set it to `FALSE`, the leader line is not drawn. The default value is `TRUE`.



This advanced option is model specific and the setting is saved in the options database.

## 14.3 XS\_LICENSE\_SERVER\_HOST

**This advanced option must be set in an initialization (.ini) file.**

Use this advanced option to control which license Tekla Structures uses, online subscription or on-premises server, and predefine the address of the license server.

As an administrator, you can predefine the address so that the user does not need to enter the server details in the **Tekla Structures - License** dialog when starting Tekla Structures for the first time.

You can use this advanced option in startup shortcuts to start `teklastructures.exe` with your defined initialization settings.

- For Tekla Structures online subscriptions: set the value to `https`. This directs Tekla Structures to use the online license server.

For example, set `XS_LICENSE_SERVER_HOST=https`

Add this advanced option in a customized .ini file.

- For Tekla Structures on-premises licensing, set the advanced option to point to the location of the license server. Use one of the following formats:  
`port@host` or `port@ip-address`

For example, set

```
XS_LICENSE_SERVER_HOST=27007@MY_LICENSE_SERVER_NAME
```

- If you are using the classic startup: add this advanced option in the `teklastructures.ini` file to enable the on-premises license server.
- If you are using Tekla Launcher: add this advanced option in the `user.ini` file to enable the on-premises license server.

## 14.4 XS\_LOAD\_MODELING\_CODE

**This advanced option must be set in an initialization (.ini) file.** For more information about initialization files, see .

Use this advanced option for defining the set of load group types. Load combinations are generated according to rules that are specific to the load modeling code. The default value is `EuroCode`.

Possible values are: `EuroCode`, `AISC`, `UBC`, `IBC`, `ACI`, `BS`, `CM66 (F)`, and `BAEL91 (F)`.

## Example

```
set XS_LOAD_MODELING_CODE=EuroCode
```

## 14.5 XS\_LOG\_FILE\_NAME

**This advanced option must be set in an initialization (.ini) file.**

This advanced option defines the names of the Tekla Structures log file and the Tekla Structures error log file. The default values are `TeklaStructures-<process ID>.log` and `TeklaStructures-<process ID>.err`.

This advanced option is system specific and is read from environment files. Generally, there is no need to modify system-specific settings. Do not modify them if you are not an administrator.

## 14.6 XS\_LOG\_LEVEL

**Category in [Advanced options dialog \(page 29\)](#): Speed and accuracy**

Use this advanced option to define which messages Tekla Structures writes to the session history log file, `TeklaStructures-<process ID>.log`. Set the level of the log output to one of the following options:

- `DEBUG`: all log messages are written
- `INFO`: all log messages except debug messages are written
- `WARNING`: all log messages except debug and info messages are written
- `ERROR`: only error and assert messages are written

The default value is `INFO`. Providing any value other than one of the above results in log level `INFO`.

This advanced option is system specific and is read from `teklastructures.ini`. Generally, there is no need to modify system-specific settings. Do not modify them if you are not an administrator.

## 14.7 XS\_LOG\_TIMER

**Category in [Advanced options dialog \(page 29\)](#): Speed and accuracy**

Set this advanced option to `TRUE` to save loading and opening times in the session history log. The default value is `FALSE`. Using this advanced option you can get a quick performance overview directly from the log.

Examples of log entries:

Plug-ins loaded in 1233ms.

Plug-in dialogs loaded in 1235ms.

Opening model...

.Inp files loaded in 355ms.

Model db read in 3467ms.

Searchtree intialized in 10400ms.

Model opened in 354258743ms.

This advanced option is system specific and is read from environment files. Generally, there is no need to modify system-specific settings. Do not modify them if you are not an administrator.

## 14.8 XS\_LOGPATH

**This advanced option must be set in an initialization (.ini) file.**

This advanced option points to the folder that contains the Tekla Structures log file.

By default, the file is stored in %LocalAppdata%\Trimble\Tekla Structures\%Version%\Logs. The log entries for the last five Tekla Structures sessions are stored in the folder.

This advanced option is system specific and is read from environment files. Generally, there is no need to modify system-specific settings. Do not modify them if you are not an administrator.

## 14.9 XS\_LONGHOLE\_MARK\_STRING\_FOR\_SIZE

**Category in [Advanced options dialog \(page 29\)](#): Marking - bolts**

Use this advanced option to define the contents of the **Size** element in slotted hole marks. For example, enter %BOLT\_NUMBER%\*D%HOLE.DIAMETER% (%HOLE.DIAMETER+LONGHOLE\_MIN%x%HOLE.DIAMETER+LONGHOLE\_MAX%).

This advanced option is only used when there is a slotted hole.

The advanced options XS\_SHOP\_LONGHOLE\_MARK\_STRING\_FOR\_SIZE and XS\_SITE\_LONGHOLE\_MARK\_STRING\_FOR\_SIZE override this setting.

You can use any combination of text and the following options as the value for this advanced option. You can use the options in any order, and make calculations.

- BOLT\_NUMBER
- DIAMETER
- LENGTH
- HOLE.DIAMETER
- LONG\_HOLE\_X
- LONG\_HOLE\_Y
- LONGHOLE\_MIN (the shorter of the slotted hole dimensions)
- LONGHOLE\_MAX (the longer of the slotted hole dimensions)
- BOLT\_STANDARD
- BOLT\_MATERIAL
- BOLT\_ASSEMBLY\_TYPE
- BOLT\_COUNTERSUNK
- BOLT\_SHORT\_NAME
- BOLT\_FULL\_NAME

Enclose each option in % characters.

---

**NOTE** If you define this advanced option in an `.ini` file, use double percent signs `%%` around the options. For example, `%%BOLT_NUMBER%%*D%  
%HOLE.DIAMETER%%`.

---

To use special characters, enter a backslash (\) followed by an ASCII number.

With length-type options, but not in calculations, you can specify the number of decimals. For example, `HOLE.DIAMETER.2` shows (tapped) hole diameters with two decimals.

This advanced option is model specific and the setting is saved in the options database.

**See also**

[XS\\_SITE\\_LONGHOLE\\_MARK\\_STRING\\_FOR\\_SIZE \(page 474\)](#)

[XS\\_SHOP\\_LONGHOLE\\_MARK\\_STRING\\_FOR\\_SIZE \(page 444\)](#)

## 14.10 XS\_LONGHOLE\_MARK\_STRING\_FOR\_SIZE\_IN\_GA

Category in [Advanced options dialog \(page 29\)](#): Marking - bolts

Use this advanced option to define the contents of the size element in slotted hole marks in general arrangement drawings. If you have not set the advanced option `XS_SHOP_LONGHOLE_MARK_STRING_FOR_SIZE_IN_GA` or `XS_SITE_LONGHOLE_MARK_STRING_FOR_SIZE_IN_GA`, then this advanced option is used.

This advanced option is only used when there is a slotted hole.

You can use any combination of text and the following options as the value for this advanced option. You can use the options in any order, and make calculations.

- BOLT\_NUMBER
- DIAMETER
- LENGTH
- HOLE.DIAMETER
- LONG\_HOLE\_X
- LONG\_HOLE\_Y
- LONGHOLE\_MIN (the shorter of the slotted hole dimensions)
- LONGHOLE\_MAX (the longer of the slotted hole dimensions)
- BOLT\_STANDARD
- BOLT\_MATERIAL
- BOLT\_ASSEMBLY\_TYPE
- BOLT\_COUNTERSUNK
- BOLT\_SHORT\_NAME
- BOLT\_FULL\_NAME

Enclose each option in % characters.

---

**NOTE** If you define this advanced option in an `.ini` file, use double percent signs `%%` around the options. For example, `%%BOLT_NUMBER%%*D%%HOLE.DIAMETER%%`.

---

To use special characters, enter a backslash (\) followed by an ASCII number.  
With length-type options, but not in calculations, you can specify the number of decimals. For example, `HOLE.DIAMETER.2` shows (tapped) hole diameters with two decimals.

This advanced option is model specific and the setting is saved in the options database.

**See also**

[XS\\_SHOP\\_LONGHOLE\\_MARK\\_STRING\\_FOR\\_SIZE\\_IN\\_GA \(page 445\)](#)

[XS\\_SITE\\_LONGHOLE\\_MARK\\_STRING\\_FOR\\_SIZE\\_IN\\_GA \(page 475\)](#)

# 15 Advanced options - M

## 15.1 XS\_MACRO\_DIRECTORY

Category in [Advanced options dialog \(page 29\)](#): **File locations**

This advanced option specifies the folder locations for macro files. Macro files are usually specific to the language and environment, and do not run in any other environment or language. This advanced option is system-specific.

By default, this advanced option is set to `..\ProgramData\Trimble\Tekla Structures\<version>\environments\common\macros`. You can also specify another location, for example, when a company or project-specific folder is needed for storing macros. Note that this advanced option accepts a maximum of 2 folders.

In the advanced option, the `\common\macros` folder should be the first folder. Use a semicolon (;) as the separator between the folder paths.

For example:

```
set
XS_MACRO_DIRECTORY=%XSDATADIR%environments\common\macros;%XSDATADIR%environments\uk\General\user-macros
```

We recommend that you do not change the `\common\macros` folder.

If you want to create your own macros, go to the **Applications & components** catalog, click **Access advanced features**, and select **Record macro** or **New macro**. The recorded macros and macro files are saved under the model folder, in the `\macros\drawings` or `\macros\modeling` folder depending on the mode (drawing or modeling) you are using while creating the macros. Tekla Structures creates the `\macros\drawings` and `\macros\modeling` folders automatically.

## 15.2 XS\_MACRO\_ENABLE\_TIMESTAMP

Category in [Advanced options dialog \(page 29\)](#): **Modeling properties**

Set this advanced option to `TRUE` to examine the time spent on different tasks while recording macros. This advanced option is system-specific.

The default value is `FALSE`. If you change the value, you need to reopen the model to activate the new setting.

The timestamps are in the `.cs` file of the macro in question, which is located in the `../environments/common/macros` folder. The macro is saved in the `drawings` or `modeling` folders, depending on in which mode the macro was recorded.

```
// Generated by Tekla.Technology.Akit.ScriptBuilder

namespace Tekla.Technology.Akit.Userscript
{
    public class script
    {
        public static void Run(Tekla.Technology.Akit.IScript akit)
        {
            akit.PushButton("RecordPB", "MacroSelector"); // 2012-12-05T09:15:14
            akit.ValueChange("ElementCatalogDialog", "txtFldSearch", "144"); // 2012-12-05T09:15:19
            akit.PushButton("butSearchButton", "ElementCatalogDialog"); // 2012-12-05T09:15:19
        }
    }
}
```

## 15.3 XS\_MACRO\_LOG

This advanced option must be set in an initialization `(.ini)` file.

By default Tekla Structures macro output is displayed in the terminal window. Set this advanced option to a file name to save this output to a file.

This advanced option is user specific and the setting is saved in `options.bin` under the user folder, for example, in `C:\Users\<user>\AppData\Local\Trimble\Tekla Structures\<version>\UserSettings`. Restart Tekla Structures to activate the new value.

## 15.4 XS\_MAGNETIC\_PLANE\_OFFSET

Category in [Advanced options dialog \(page 29\)](#): **Components**

Use this advanced option to adjust the magnetic distance of magnetic planes. By default the distance is 0.2 mm.

Setting this advanced option does not affect magnetic construction lines.

This advanced option is model specific and the setting is saved in the options database.

## 15.5 XS\_MARK\_ALL\_BOLT\_GROUPS\_SEPARATELY

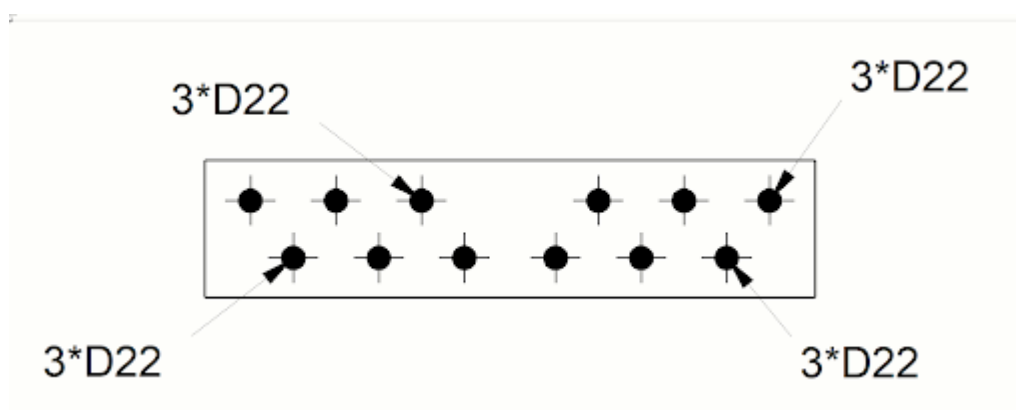
Category in [Advanced options dialog \(page 29\)](#): Marking - bolts

Set this advanced option to `TRUE` to prevent Tekla Structures from combining bolt group marks. By default Tekla Structures combines bolt group marks (`FALSE`).

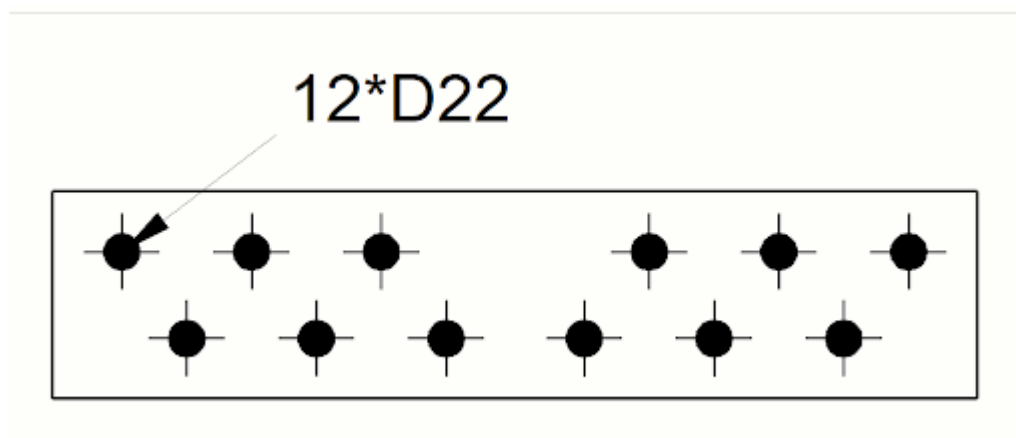
This advanced option is model specific and the setting is saved in the options database.

### Example

In the image below, this advanced option is set to `TRUE`.



In the image below, `FALSE` is used.



## 15.6 XS\_MARK\_ELEMENT\_SPACE\_FACTOR

Category in [Advanced options dialog \(page 29\)](#): **Marking - general**

By default, Tekla Structures leaves a space of  $0.3 \times \text{text height}$  between mark elements. Use this advanced option to change the default value.

This advanced option is model specific and the setting is saved in the options database.

### Example

In the example below, the default value 0.3 was changed to 1.



## 15.7 XS\_MARK\_FONT

Category in [Advanced options dialog \(page 29\)](#): **Drawing properties**

This advanced option affects only old drawings created when Tekla Structures did not have font settings available in the object properties. This advanced option is used only for converting fonts when opening old drawings.

Use this advanced option to define the mark text font (for part marks etc.). Enter the name of the font. The default value is Arial. If no font is given, Tekla Structures uses the default font defined for `XS_DEFAULT_FONT`.

This advanced option is model specific and the setting is saved in the options database.

### See also

[XS\\_DEFAULT\\_FONT \(page 116\)](#)

## 15.8 XS\_MARK\_INTELLIGENT\_PLACING

Category in [Advanced options dialog \(page 29\)](#): **Marking - general**

Marks are automatically placed according to the mark placing algorithm if the advanced option `XS_MARK_INTELLIGENT_PLACING` is set to `TRUE` (default). The mark placement algorithm tries to avoid crossing leader lines, and also places marks otherwise more clearly.

If you select all four corners in the mark placing settings in the mark properties, the automatic mark placement will be used, and Tekla Structures attempts to find the closest quarter with empty space.

The algorithm applies to all marks and associative notes, except weld marks.

If `XS_MARK_INTELLIGENT_PLACING` is set to `FALSE`, you can still arrange marks and notes using the following commands:

- You can arrange the selected marks and notes so that you avoid crossing leader lines by using the **Arrange marks** command on the ribbon. The result also depends on the defined protection settings and search margins.
- With another ribbon command, **Align marks** --> **Auto-align marks**, you can align the selected marks and associative notes that are close to each other by stacking the marks and placing them evenly.
- You can also align selected marks around a point using the command **Align marks** --> **Align to a point**. This command tries to avoid crossing leader lines.
- These commands can also be started from **Quick Launch**.

This advanced option is model specific and the setting is saved in the options database.

## 15.9 XS\_MARK\_INTELLIGENT\_POST\_FREEPLACE\_NEARBY

Category in [Advanced options dialog \(page 29\)](#): Marking - general

If you set the advanced option `XS_MARK_INTELLIGENT_POST_FREEPLACE_NEARBY` to `TRUE` (default), Tekla Structures first places the marks in drawings avoiding crossing leader lines, and after that runs the place nearby command, which ensures that the mark locations follow the protection settings. If you set this advanced option to `FALSE`, the crossing mark check is performed, but the place nearby command is not run, so some of the protection settings may not be followed.

Note that you need to set the advanced option `XS_TRY_TO_KEEP_LOCATION_IN_FREEPLACING` to `TRUE` (Default) for the advanced option `XS_MARK_INTELLIGENT_POST_FREEPLACE_NEARBY` to work.

This advanced option is model specific and the setting is saved in the options database.

### See also

[XS\\_MARK\\_INTELLIGENT\\_PLACING \(page 318\)](#)

[XS\\_TRY\\_TO\\_KEEP\\_LOCATION\\_IN\\_FREEPLACING \(page 495\)](#)

## 15.10 XS\_MARK\_LEADER\_LINE\_ARROW\_HEIGHT

Category in [Advanced options dialog \(page 29\)](#): Marking - general

Use this advanced option to define the height of the arrow head in the mark leader line. 1 is the default value. For example, the standard AutoCAD leader arrow height is 0.67.

This advanced option is role specific. When the type **SYSTEM(ROLE)** is in use, the default value is used. When the type **MODEL(ROLE)** or **DRAWING(ROLE)** is in use, you can change the value, which is then the same for all users in the current model.

## 15.11 XS\_MARK\_LEADER\_LINE\_ARROW\_LENGTH

Category in [Advanced options dialog \(page 29\)](#): Marking - general

Use this advanced option to define the length of arrow head in mark leader line. The default is 2.5.

This advanced option is role specific. When the type **SYSTEM(ROLE)** is in use, the default value is used. When the type **MODEL(ROLE)** or **DRAWING(ROLE)** is in use, you can change the value, which is then the same for all users in the current model.

## 15.12 XS\_MARK\_LEADER\_LINE\_EXTENSION\_LENGTH

Category in [Advanced options dialog \(page 29\)](#): Marking - general

Use this advanced option to define the length of the leader line extension. The extension is placed before the start of a text string. Give the length in millimeters. The default value is 0.



This advanced option is role specific. When the type **SYSTEM(ROLE)** is in use, the default value is used. When the type **MODEL(ROLE)** or **DRAWING(ROLE)** is

in use, you can change the value, which is then the same for all users in the current model.

## 15.13 XS\_MARK\_LEADER\_LINE\_LENGTH\_FOR\_PERPENDICULAR

Category in [Advanced options dialog \(page 29\)](#): Marking - general

Use this advanced option to control the length of the perpendicular leader lines of rebar group marks. The default value is 0.

When the value is 0 (or a negative value), the leader line length is **dynamic**, and the leader line stays connected to the rebar also when the mark is dragged further away from the rebar. If you use a positive value, the leader line length becomes **static**, and it is always the given value even when you drag the mark away from the rebar.

This advanced option is role specific. When the type **SYSTEM(ROLE)** is in use, the default value is used. When the type **MODEL(ROLE)** or **DRAWING(ROLE)** is in use, you can change the value, which is then the same for all users in the current model.

## 15.14 XS\_MARK\_LEADER\_LINE\_POSITION\_TYPE\_FOR\_NO\_FRAME

Category in [Advanced options dialog \(page 29\)](#): Marking - general

Use this advanced option to define the position of the start point of the mark leader line for a mark:

- without a mark frame (mark frame deleted in the mark properties)
- without a mark frame but with a mark element frame (mark frame deleted and mark element frame added in the mark properties).

The default value is 0, which means that the leader line starts from the nearest corner of the text area.

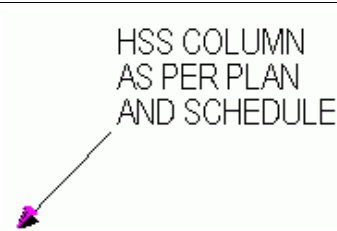
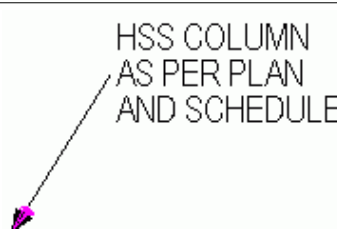
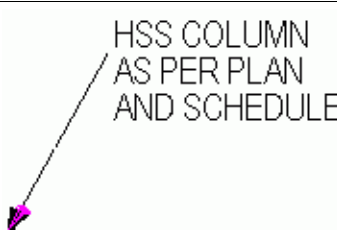
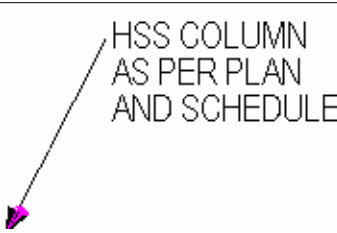
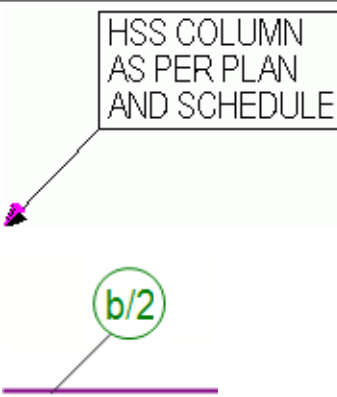
---

**TIP** You may want to keep the default value 0 for the advanced option `XS_MARK_LEADER_LINE_EXTENSION_LENGTH`, when using `XS_MARK_LEADER_LINE_POSITION_TYPE_FOR_NO_FRAME`.

---

This advanced option is role specific. When the type **SYSTEM(ROLE)** is in use, the default value is used. When the type **MODEL(ROLE)** or **DRAWING(ROLE)** is in use, you can change the value, which is then the same for all users in the current model.

## Example

| Position  | Appearance   | Set the advanced option to |
|---|--|----------------------------|
| Nearest corner.   |    | 0                          |
| In the middle of the text area.   |    | 1                          |
| 1/3 from the top of the text area.  |   | 2                          |
| In the middle of the first row of text.   |  | 3                          |
| <p>The leader line connects to the inner frame around the mark element (not to the frame around the whole mark).</p> <p>The mark frame has been deleted in the mark properties.</p> |  | 4                          |

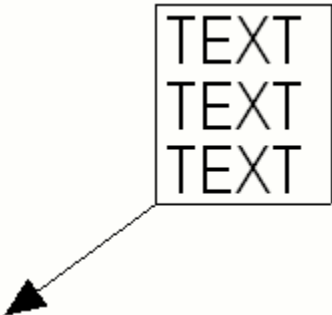
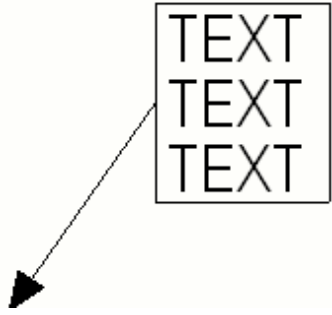
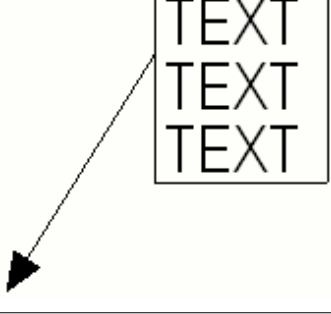
## 15.15 XS\_MARK\_LEADER\_LINE\_POSITION\_TYPE\_FOR\_RECTANGULAR\_FRAME

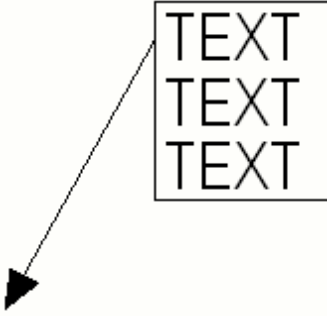
Category in [Advanced options dialog \(page 29\)](#): Marking - general

Use this advanced option to define the position of the start point of the mark leader line for a mark with a rectangular frame. The default value is 0, which means that the leader line starts from the nearest corner of the text area.

This advanced option is model specific and the setting is saved in the options database.

### Example

| Position                           | Appearance   | Set the advanced option to |
|------------------------------------|--|----------------------------|
| Nearest corner.                    |   | 0                          |
| In the middle of the text area.    |  | 1                          |
| 1/3 from the top of the text area. |  | 2                          |

| Position                                | Appearance   | Set the advanced option to |
|---|--|----------------------------|
| In the middle of the first row of text. |  | 3                          |

**See also**

[XS\\_MARK\\_LEADER\\_LINE\\_POSITION\\_TYPE\\_FOR\\_NO\\_FRAME](#) (page 321)

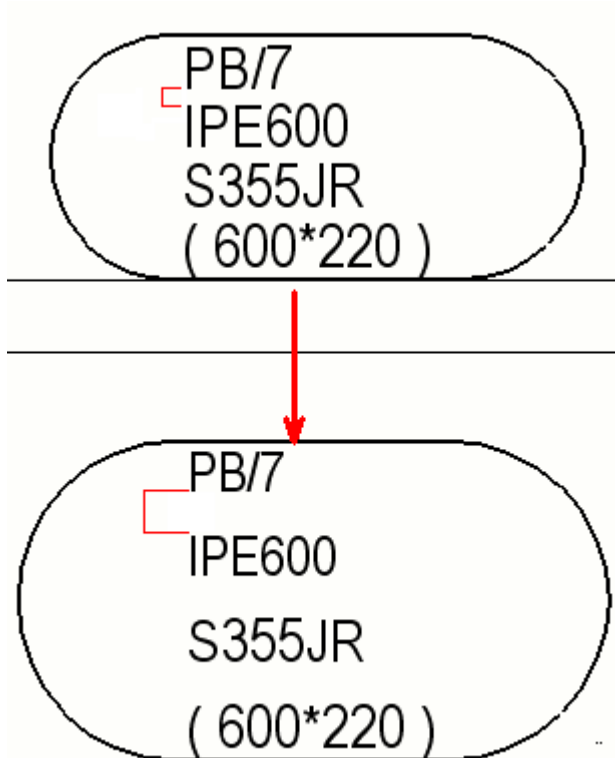
## 15.16 XS\_MARK\_LINE\_SPACE\_FACTOR

**Category in [Advanced options dialog \(page 29\)](#): Marking - general**

By default, Tekla Structures leaves a space of  $0.3 \times \text{text height}$  between the lines in multi-line marks, for example, part, bolt, and connection marks. Use this advanced option to change the default value. This advanced option also affects the space between the lines in multi-line text objects.

This advanced option is model specific and the setting is saved in the options database.

In the example below, the value was changed from 0.3 to 1.



## 15.17 XS\_MARK\_PLACING\_ANGLE\_CLOSE\_TO\_45\_DEGREES

Category in [Advanced options dialog \(page 29\)](#): Marking - general

To place marks with leader lines in a 45-degree angle if allowed by the protection settings, ensure that the advanced option `XS_MARK_PLACING_ANGLE_CLOSE_TO_45_DEGREES` is set to `TRUE`. `TRUE` is the default value.

This advanced option is model specific and the setting is saved in the options database.

### See also

[XS\\_MARK\\_INTELLIGENT\\_PLACING \(page 318\)](#)

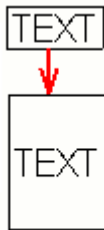
## 15.18 XS\_MARK\_TEXT\_FRAME\_BOX\_HEIGHT\_FACTOR

Category in [Advanced options dialog \(page 29\)](#): **Marking - general**

By default Tekla Structures leaves a space of  $0.5 \times \text{text height}$  between the text and the frame around the text. Use this advanced option to change the default value.

This advanced option is model specific and the setting is saved in the options database.

In the example below, the value was changed from 0.5 to 2.



## 15.19 XS\_MATERIAL\_SYMBOL\_REPRESENTATION\_FILE

Category in [Advanced options dialog \(page 29\)](#): **Drawing properties**

Use this advanced option to define the folder path and filename of the file containing the user-defined material symbols, for example `material_symbol_table.txt`.

This advanced option is model specific and the setting is saved in the options database.

## 15.20 XS\_MAX\_ANGLE\_BETWEEN\_SKEWED\_END\_PLATE\_AND\_BEAM\_END

Category in [Advanced options dialog \(page 29\)](#): **Drawing properties**

Use this advanced option to produce section views and dimensions of slightly skewed end plates. An end plate can be sloping or skewed to such a small degree that it is unnecessary to bevel cut the end of the main part. If the end plate is not dimensioned in the section view, you need to set a limit for the end plate angle.

Tekla Structures dimensions any end plate that is skewed less than this value in section views. Larger angle dimensions do not appear in the section view.

Set the angle between the skewed end plate and beam in degrees. The default angle is 0.

This advanced option is role specific. When the type **SYSTEM(ROLE)** is in use, the default value is used. When the type **MODEL(ROLE)** or **DRAWING(ROLE)** is in use, you can change the value, which is then the same for all users in the current model.

## 15.21 XS\_MAX\_ANGLE\_TOLERANCE\_BETWEEN\_COMPLEX\_MAIN\_PARTS

Category in [Advanced options dialog \(page 29\)](#): Dimensioning - parts

Use this advanced option to define the maximum angle range (0...1) within which Tekla Structures dimensions non-parallel parts as one. The default value is 0.01.

This advanced option is role specific. When the type **SYSTEM(ROLE)** is in use, the default value is used. When the type **MODEL(ROLE)** or **DRAWING(ROLE)** is in use, you can change the value, which is then the same for all users in the current model.

## 15.22 XS\_MAX\_AUTOMATIC\_RADIUS\_DIMENSION

Category in [Advanced options dialog \(page 29\)](#): Dimensioning - parts

Use this advanced option to define the maximum radius for adding automatic radius dimensions in single part drawings. The default value is 5000, which means that only dimensions less than 5000 mm will be created automatically. Tekla Structures will display radii smaller than the value you enter in drawings.

This advanced option is model specific and the setting is saved in the options database.

## 15.23 XS\_MAX\_DECIMALS\_IN\_PROFILE\_NAME

Category in [Advanced options dialog \(page 29\)](#): Profiles

Use this advanced option to control the number of decimals in profile names, for example, in NC file headers. The default value is 1.

- 
- NOTE** • This advanced option only affect plates created directly in the model. The advanced option [XS\\_PLATE\\_ROUNDING\\_DECIMALS \(page 362\)](#) affects plates created by components.
- This advanced option works on plates only if you set the advanced option [XS\\_USE\\_NEW\\_PLATE\\_DESIGNATION \(page 519\)](#) to `TRUE` in the **Plate work** category of the **Advanced options** dialog.
- 

This advanced option is model specific and the setting is saved in the options database. If you change the value, you need to save the model and restart Tekla Structures.

## 15.24 XS\_MAX\_DEVIATION\_FOR\_CURVED\_PART\_EDGES

Category in [Advanced options dialog \(page 29\)](#): **Concrete detailing**

When you camber a part, Tekla Structures calculates all the part vertices to be on a circle arc, but all span edges between two vertices are approximations of the arc. Use this advanced option to limit the maximum distance by which the edge can deviate from the arc.

Define the value in millimeters. The default is 2.0. The minimum value is 0.1.

This advanced option is model specific and the setting is saved in the options database.

### See also

[XS\\_WARP\\_MAX\\_ANGLE\\_BETWEEN\\_CS \(page 548\)](#)

## 15.25 XS\_MAX\_FRACTIONS\_IN\_MODEL\_DIMENSION

Category in [Advanced options dialog \(page 29\)](#): **Imperial units**

Use this advanced option to define the measuring accuracy in models in the US environment Imperial role. For example, this accuracy affects the imperial measurements shown with the **Measure** tool. You can enter any number, but you should use numbers such as 8, 16, 32, 64, 128 and 256. The default value is 16.

This advanced option is role specific. When the type **SYSTEM(ROLE)** is in use, the default value is used. When the type **MODEL(ROLE)** or **DRAWING(ROLE)** is in use, you can change the value, which is then the same for all users in the current model.

## Example

To use the accuracy of 1/32, set this advanced option to 32.

## 15.26 XS\_MAXIMUM\_NUMBER\_OF\_PLANES\_TO\_NAME

Category in [Advanced options dialog \(page 29\)](#): **Modeling properties**

Use this advanced option to define how many planes Tekla Structures names when the planes are used, for example, in defining distance variables. The default value is 400.

When the maximum number of planes is reached, Tekla Structures stops naming the planes and uses the name **Undefined plane** for the rest of the planes.

This advanced option is model specific and the setting is saved in the options database.

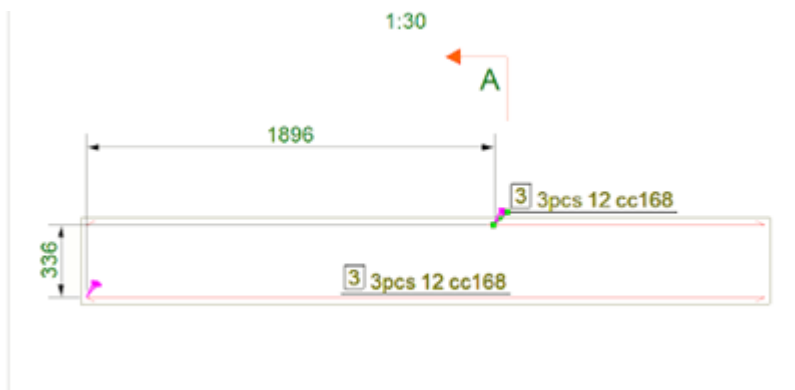
## 15.27 XS\_MAX\_MERGE\_DISTANCE\_IN\_HORIZONTAL

Category in [Advanced options dialog \(page 29\)](#): **Marking - parts**

Use this advanced option to define the maximum horizontal distance between the associativity points of the reinforcement marks within which identical reinforcement gets merged reinforcement marks. This advanced option only affects merging of reinforcing bar marks pointing to individual reinforcing bars, not marks pointing to a group of reinforcing bars, or marks within a group of reinforcing bars. The default value is 600 mm.

This advanced option is model specific and the setting is saved in the options database.

In the example below, the associativity points of the reinforcement marks are not within the defined distance (600 mm), so the marks will not be merged.



**See also**

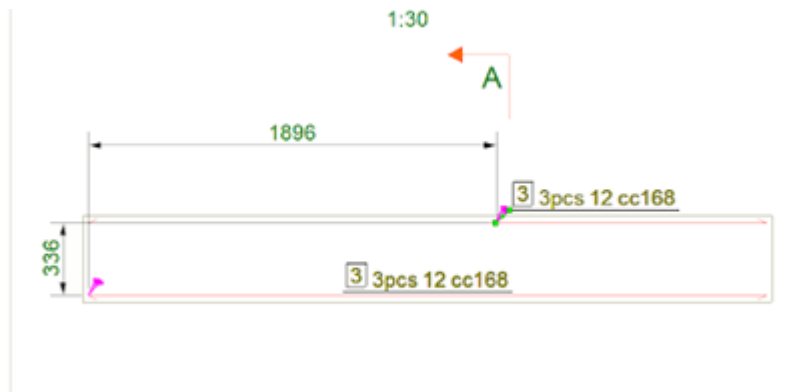
[XS\\_MAX\\_MERGE\\_DISTANCE\\_IN\\_VERTICAL \(page 330\)](#)

## 15.28 XS\_MAX\_MERGE\_DISTANCE\_IN\_VERTICAL

Category in [Advanced options dialog \(page 29\)](#): **Marking - parts**

Use this advanced option to define the maximum vertical distance between the associativity points of the reinforcement marks within which identical reinforcement gets merged reinforcement marks. This advanced option only affects merging of reinforcing bar marks pointing to individual reinforcing bars, not marks pointing to a group of reinforcing bars, or marks within a group of reinforcing bars. The default value is 600 mm.

In the example below, the associativity points of the reinforcement marks are not within the defined distance (600 mm), so the marks will not be merged.



This advanced option is model specific and the setting is saved in the options database.

**See also**

[XS\\_MAX\\_MERGE\\_DISTANCE\\_IN\\_HORIZONTAL \(page 329\)](#)

## 15.29 XS\_MAX\_SPACE\_BETWEEN\_COMPLEX\_ASSEMBLY\_PARALLEL\_PARTS

Category in [Advanced options dialog \(page 29\)](#): **Dimensioning - parts**

Use this advanced option to define the maximum distance allowed between parallel parts for Tekla Structures to dimension them as one. The default value is 1000.

This advanced option is role specific. When the type **SYSTEM(ROLE)** is in use, the default value is used. When the type **MODEL(ROLE)** or **DRAWING(ROLE)** is in use, you can change the value, which is then the same for all users in the current model.

## 15.30 XS\_MDIBASICVIEWPARENT

Category in [Advanced options dialog \(page 29\)](#): **Model views**

Set this advanced option to `TRUE` (default) to allow connection or default view windows to be moved within the Tekla Structures window.

Set this advanced option to `FALSE` to allow connection or default view windows to be moved anywhere on the Windows desktop.

This advanced option is user specific and the setting is saved in `options.bin` under the user folder, for example, in `C:\Users\\AppData\Local\Trimble\Tekla Structures\\UserSettings`. Restart Tekla Structures to activate the new value.

**See also**

[XS\\_MDIVIEWPARENT \(page 331\)](#)

## 15.31 XS\_MDIVIEWPARENT

Category in [Advanced options dialog \(page 29\)](#): **Model views**

Set this advanced option to `TRUE` to allow view windows to be moved only within the Tekla Structures window.

Set this advanced option to `FALSE` to allow view windows to be moved anywhere on the Windows desktop. This gives you more workspace on the screen, because view windows move to the front when you click on them and open dialogs remain behind the views. It also allows you to enlarge Tekla Structures windows to fill the entire desktop.

The default value is `TRUE`.

This advanced option is user specific and the setting is saved in `options.bin` under the user folder, for example, in `C:\Users\\AppData\Local\Trimble\Tekla Structures\\UserSettings`. Restart Tekla Structures to activate the new value.

---

**NOTE** This advanced option also affects drawing windows. Use the advanced options `XS_MDIZOOMPARENT` and `XS_MDIBASICVIEWPARENT` to control connection and default views and zoom views .

---

#### See also

[XS\\_MDIZOOMPARENT \(page 332\)](#)

[XS\\_MDIBASICVIEWPARENT \(page 331\)](#)

## 15.32 XS\_MDIZOOMPARENT

Category in [Advanced options dialog \(page 29\)](#): **Model views**

This option affects zoom windows, which can be created when editing drawings by using the **Create zoom window** command in the context menu or **Quick Launch**.

Set this advanced option to `TRUE` to allow zoom windows to be moved only within the Tekla Structures window.

Set this advanced option to `FALSE` (default) to allow zoom windows of views to be moved anywhere on the Windows desktop.

This advanced option is user specific and the setting is saved in `options.bin` under the user folder, for example, in `C:\Users\\AppData\Local\Trimble\Tekla Structures\\UserSettings`. Restart Tekla Structures to activate the new value.

## 15.33 XS\_MESSAGES\_PATH

**This advanced option must be set in an initialization (.ini) file.**

Use this advanced option to define the locations of message files for user interface text. Message files include translated texts in the languages in which the Tekla Structures user interface is available.

This advanced option is system specific and is read from `teklastructures.ini`. It can also be set locally, see your environment `.ini`

file (`env_<environment_name>.ini`). Generally, there is no need to modify system-specific settings. Do not modify them if you are not an administrator.

If you are an administrator, we recommend that you use the environment file for your `.ail` files.

## 15.34 XS\_MESSAGES\_PATH\_INTERNAL

**This advanced option must be set in an initialization (.ini) file.**

---

**WARNING** Do not change the value of this advanced option.

---

This advanced option is only meant for administrators.

This advanced option defines the location of `.ail` files that are used internally by Tekla Structures. This folder is always read by default.

If you have previously defined the locations of folders for customized user interface text using the `XS_MESSAGES_PATH` advanced option and want to continue using your customizations, you can optionally disable the use of the internal messages folder. Add `XS_DISABLE_MESSAGES_PATH_INTERNAL=true` to your environment `.ini` file (`env_<environment_name>.ini`).

---

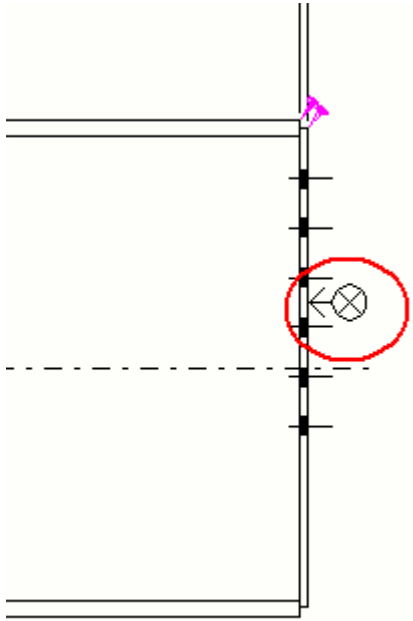
**NOTE** Disabling the use of the internal messages folder might cause some translations for components to be missing or incorrect.

---

## 15.35 XS\_MIN\_DISTANCE\_FOR\_CONNECTING\_SIDE\_MARK

Category in [Advanced options dialog \(page 29\)](#) **Marking - general**

Use this advanced option to set the minimum distance of the connecting part from the main part so that when the distance is larger than the value you enter, Tekla Structures draws a connecting side mark to show that there is a part farther away from the main part that is connected to the part. When the distance is smaller than the value you enter, no mark is drawn. The default value is 300 mm.



You can change the connecting side mark symbol with the advanced option [XS\\_CONNECTING\\_SIDE\\_MARK\\_SYMBOL](#) (page 102).

This advanced option is model specific and the setting is saved in the options database.

## 15.36 XS\_MIN\_MERGE\_PART\_COUNT

**Category in [Advanced options dialog \(page 29\)](#): Marking - parts**

Use this advanced option to define the minimum number of identical parts whose marks to merge. The default value is 2.

This advanced option is model specific and the setting is saved in the options database.

## 15.37 XS\_MIN\_NUMBER\_OF\_ASSEMBLY\_MULTI\_CHARACTERS

**Category in [Advanced options dialog \(page 29\)](#): Numbering**

Use this advanced option to set the minimum number of characters in assembly multinumbers.

This advanced option is model specific and the setting is saved in the options database.

### Example

If you set this advanced option to 3, the multinumber format is 101AAA.

### See also

[XS\\_USE\\_MULTI\\_NUMBERING\\_FOR](#) (page 517)

[XS\\_VALID\\_CHARS\\_FOR\\_ASSEMBLY\\_MULTI\\_NUMBERS](#) (page 539)

[XS\\_ASSEMBLY\\_MULTI\\_NUMBER\\_FORMAT\\_STRING](#) (page 57)

[XS\\_MIN\\_NUMBER\\_OF\\_PART\\_MULTI\\_CHARACTERS](#) (page 335)

## 15.38 XS\_MIN\_NUMBER\_OF\_PART\_MULTI\_CHARACTERS

**Category in [Advanced options dialog \(page 29\)](#): Numbering**

Use this advanced option to define the minimum number of characters in part multinumbers.

This advanced option is model specific and the setting is saved in the options database.

### Example

If you set this advanced option to 3, the multinumber format is 101aaa.

### See also

[XS\\_USE\\_MULTI\\_NUMBERING\\_FOR](#) (page 517)

[XS\\_VALID\\_CHARS\\_FOR\\_PART\\_MULTI\\_NUMBERS](#) (page 539)

[XS\\_PART\\_MULTI\\_NUMBER\\_FORMAT\\_STRING](#) (page 358)

[XS\\_MIN\\_NUMBER\\_OF\\_ASSEMBLY\\_MULTI\\_CHARACTERS](#) (page 334)

## 15.39 XS\_MIN\_WELD\_LINE\_LENGTH

**Category in [Advanced options dialog \(page 29\)](#): Welds**

Use this advanced option to define the minimum length of the weld mark reference line. If symbols and other data exceed the minimum length of weld mark reference line, weld mark reference line extends to contain all symbols and data. Enter the value in millimeters.

This advanced option is model specific and the setting is saved in the options database.

## 15.40 XS\_MIS\_FILE\_DIRECTORY

Category in [Advanced options dialog \(page 29\)](#): **CNC**

This advanced option points to the folder of the NC files created through the NC export. The default is the current model folder.

Note that this advanced option does not support template attributes or UDAs. For example, if you want to have the project number in the folder name, you need to write it in the folder name manually.

This advanced option is model specific and the setting is saved in the options database.

The following table shows where the NC files are created with different values entered in the **File location** box in the **NC File Settings** dialog when XS\_MIS\_FILE\_DIRECTORY is set to C:\NC:

| Path in File location | NC files are created in |
|-----------------------|-------------------------|
| empty                 | C:\NC\ModelName         |
| .\                    | C:\NC\ModelName         |
| .\MyFiles             | C:\NC\ModelName\MyFiles |

## 15.41 XS\_MIS\_SEQUENCE

Category in [Advanced options dialog \(page 29\)](#): **Export**

Use this advanced option to enable sequences in the EJE and KISS file type MIS exports.

Define which part property is used as the sequence information. The options are:

- CLASS
- PHASE\_NUMBER (default)
- PHASE\_NAME: In the phase name, add required phase number and sequence number, for example 32S,12 where 32S is the sequence number and 12 is the phase number.
- UDA:USER\_PHASE

---

**NOTE** The maximum lengths of the sequence information fields are 10 and 4 characters in KISS and EJE file types, respectively. Do not use

long names for phase names or user phases, if you are using this information as MIS Sequence.

This advanced option is user specific and the setting is saved in `options.bin` under the user folder, for example, in `C:\Users\\AppData\Local\Trimble\Tekla Structures\\UserSettings`. Restart Tekla Structures to activate the new value.

## 15.42 XS\_MODEL\_BACKUP\_DIRECTORY




Category in [Advanced options dialog \(page 29\)](#): File locations

Use this advanced option to define the path to the folder where you want to store the backup copies of Tekla Structures model files. You can enter either an absolute path or a relative path. For example, you can enter a path to a mapped network drive. Model files are often large, so you should ensure that you enter a path to a location that has enough disk space.

Tekla Structures will create sub-folders for each Tekla Structures model under the folder path that you enter. Each one of these model folders will contain sub-folders for each time a backup copy of the model has been saved. These sub-folders are named by the times when backup copies have been created in the `YYYYMMDD-HHMMSS` format.

System (C:) > TeklaStructuresModels > backup > New model

Name

 20200915-171500  
 20201007-152003  
 20201015-160015

The default folder for backup copies is `..\TeklaStructuresModels\backup\`. If you do not enter another path, the default folder is used.

Note that the backup folder cannot be located directly under the actual model folder, because it would cause an infinite loop. If you define the backup folder to be in the model folder, Tekla Structures will ignore the path and use the default folder instead.

If Tekla Structures cannot find the folder path you entered, the status bar will tell you that creating a backup file has failed.

This advanced option is user specific and the setting is saved in `options.bin` under the user folder, for example, in `C:\Users\\AppData\Local\Trimble\Tekla Structures\\UserSettings`. Restart Tekla Structures to activate the new value.

## 15.43 XS\_MODEL\_IMPORT\_LOCK\_OBJECTS

Category in [Advanced options dialog \(page 29\)](#): **Import**

Set this advanced option to `TRUE` to lock all the imported objects. When you do this, the user-defined attribute **Locked** is automatically set to **Yes** in the user-defined attributes dialog of the imported objects. `TRUE` is the default value.

This advanced option is model specific and the setting is saved in the options database.

## 15.44 XS\_MODEL\_PREFIX\_INFLUENCES\_MULTI\_NUMBERING\_FOR

Category in [Advanced options dialog \(page 29\)](#): **Numbering**

Use this advanced option to define whether part and assembly number prefixes affect the numbering of parts and assemblies in multidrawings. The options are `NONE`, `ASSEMBLIES`, `PARTS` and `ASSEMBLIES_AND_PARTS`. The value field is empty by default.

This advanced option is model specific and the setting is saved in the options database.

### See also

[XS\\_USE\\_MULTI\\_NUMBERING\\_FOR \(page 517\)](#)

[XS\\_USE\\_MODEL\\_PREFIX\\_IN\\_MULTI\\_NUMBERS\\_FOR \(page 517\)](#)

## 15.45 XS\_MODEL\_TEMPLATE\_DIRECTORY

Category in [Advanced options dialog \(page 29\)](#): **File locations**

Use this advanced option to define the path to the folder where Tekla Structures saves model templates. You can enter multiple folder paths. Only the templates saved in these folders are listed as model templates when you are creating a new model.

For example, you can set this advanced option to point to the same location as [XS\\_FIRM \(page 267\)](#).

By default, the model template folder is saved in your environment folder, under `..ProgramData\Trimble\Tekla Structures\<version>\environments\<your environment>\`. The exact folder location may vary depending on your environment and role.

This advanced option is user specific and the setting is saved in `options.bin` under the user folder, for example, in `C:\Users\<user>\AppData\Local\Trimble\Tekla Structures\<version>\UserSettings`. Restart Tekla Structures to activate the new value.

## 15.46 XS\_MULTIDRAWING\_KEEP\_OBSOLETE\_DRAWINGS

**Category in [Advanced options dialog \(page 29\)](#): Drawing properties**

Use this advanced option for controlling the views and multinumbers of deleted assemblies in multidrawings. Set this advanced option to `TRUE` to preserve the views of deleted parts and assemblies and to reserve the multinumbers of the deleted parts and assemblies. Set it to `FALSE` to reuse the multinumbers of the deleted assemblies and to delete the views. The default value is `FALSE`.

This advanced option is model specific and the setting is saved in the options database.

## 15.47 XS\_MULTIDRAWING\_REMOVE\_VIEW\_LABEL\_GAP

**Category in [Advanced options dialog \(page 29\)](#): Drawing properties**

Set this advanced option to `TRUE` to remove unnecessary space between the drawing view label and the drawing view in multidrawings. If you do not want to do this, use `FALSE` (default).

This advanced option is model specific and the setting is saved in the options database.

## 15.48 XS\_MULTI\_DRAWING\_VIEW\_PLACING\_TRIAL\_NUMBER

**This advanced option must be set in an initialization (.ini) file.**

Use this advanced option to define the number of attempts to place the drawing views into a multidrawing. Enter an integer between 1 and 500. The advanced option is set to 500 by default.

## 15.49 XS\_MULTI\_DRAWING\_VIEW\_TITLE

**Category in [Advanced options dialog \(page 29\)](#): Drawing properties**

Use this advanced option to define a title for a multidrawing view in a multidrawing. You can define plain text or use some switches (`BASE_NAME` and `NAME`) as the value.

By default the title is defined as follows:

```
Drawing %DRAWING_BASE_NAME%
```

For details about creating multidrawings, see [Create multidrawings](#).

This advanced option is model specific and the setting is saved in the options database.

## 15.50 XS\_MULTI\_NUMBERING\_INCLUDE\_ASSEMBLY\_PARTS

**Category in [Advanced options dialog \(page 29\)](#): Numbering**

Set this advanced option to `TRUE` to include single parts in multinumbering. If this advanced option is set to `FALSE`, single parts get multinumbers only if they are included in an assembly drawing.

The default value is `FALSE`.

This advanced option is model specific and the setting is saved in the options database.

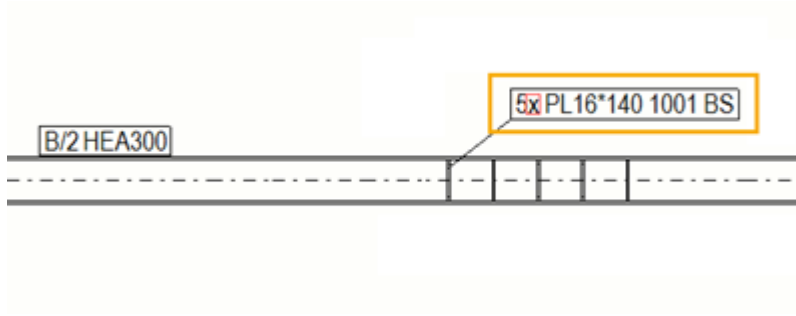
**See also**

[XS\\_USE\\_MULTI\\_NUMBERING\\_FOR \(page 517\)](#)

## 15.51 XS\_MULTIPLIER\_SEPARATOR\_FOR\_MERGED\_PART\_MARK

**Category in [Advanced options dialog \(page 29\)](#): Marking - parts**

Use this advanced option to define the separator in merged part marks. The default value is `x`.



This advanced option is model specific and the setting is saved in the options database.

## 15.52 XS\_MULTUSER\_SAVE\_REOPEN\_DISABLE\_COMPACTION

**This advanced option must be set in an initialization (.ini) file.** We recommend that you use the `options.ini` file in the model folder.

Use this advanced option only if you frequently get the error `The command could not be completed, restart Tekla Structures and try again.` during saving a multi-user model. Set the value to `TRUE` to prevent the error, and reopen the model. The default value is `FALSE`.

# 16 Advanced options - N

## 16.1 XS\_NEIGHBOUR\_PART\_SKEW\_LIMIT

Category in [Advanced options dialog \(page 29\)](#): **Drawing properties**

Tekla Structures considers neighbor parts as skewed if the dot product between the part axis vector and one of the coordinate axis vectors is less than  $1 - \text{XS\_NEIGHBOUR\_PART\_SKEW\_LIMIT}$ . Use this advanced option to define the limit. Enter the limit as a floating value, for example, 0.1 (default).

The dot product measures the cosine of the angle between two vectors, which can be used to determine how aligned they are. When the cosine of the angle between the parts is 0, the parts are perpendicular to each other, and when the cosine is 1, they are parallel.

This advanced option is model specific and the setting is saved in the options database.

## 16.2 XS\_NO\_AUTO\_DISPLAY\_VIEWS

Category in [Advanced options dialog \(page 29\)](#): **Model views**

Set this advance option to `TRUE` to prevent Tekla Structures from displaying views automatically when you start the program. Set it to `FALSE` (default) to display the views automatically. Views that are not visible remain not visible. Only visible views are shown.

This advanced option is user specific and the setting is saved in `options.bin` under the user folder, for example, in `C:\Users\<user>\AppData\Local\Trimble\Tekla Structures\<version>\UserSettings`. Restart Tekla Structures to activate the new value.

## 16.3 XS\_NO\_BOLT\_ANGLE\_DIMENSIONS

Category in [Advanced options dialog \(page 29\)](#): **Dimensioning - bolts**

To create angle dimensions for bolts, set this advanced option to `FALSE`. To not create angle dimensions for bolts, select `TRUE` (default).

This advanced option is model specific and the setting is saved in the options database.

## 16.4 XS\_NO\_CHAMFERS\_IN\_EXACT\_MODE

Category in [Advanced options dialog \(page 29\)](#): **Model views**

Set this advanced option to `TRUE` to prevent Tekla Structures from creating chamfers in exact mode. To create the chamfers in exact mode, set it to `FALSE`.

By default chamfers are created. This advanced option only affects wire frame views.

This advanced option is user specific and the setting is saved in `options.bin` under the user folder, for example, in `C:\Users\\AppData\Local\Trimble\Tekla Structures\\UserSettings`. Restart Tekla Structures to activate the new value.

## 16.5 XS\_NO\_END\_VIEWS\_TO\_INCLUDED\_SINGLE\_DRAWINGS

Category in [Advanced options dialog \(page 29\)](#): **Single-part views in assembly drawings**

Set this advanced option to `TRUE` (default) to prevent Tekla Structures from creating end views when you create an assembly drawing and choose to include single-part drawings. If you do not want to do this, set it to `FALSE`.

If you do not enter a value, Tekla Structures creates end views based on the properties of the single-part drawings.

This advanced option is model specific and the setting is saved in the options database.

## 16.6 XS\_NO\_RELATIVE\_SHAPE\_DIMENSIONS

**Category in [Advanced options dialog \(page 29\)](#): Dimensioning - parts**

Set this advanced option to `TRUE` to force shape dimensions to be the same as the dimension type you select.

By default, automatic shape dimensions are always relative regardless of the selected dimension type.

This advanced option does not affect single-part drawings.

To affect single part drawings, use the advanced option

`XS_SINGLE_NO_RELATIVE_SHAPE_DIMENSIONS`.

This advanced option is model specific and the setting is saved in the options database.

**See also**

[XS\\_SINGLE\\_NO\\_RELATIVE\\_SHAPE\\_DIMENSIONS \(page 465\)](#)

## 16.7 XS\_NO\_UNFOLDING\_LINES\_TO\_DRAWINGS

**Category in [Advanced options dialog \(page 29\)](#): Dimensioning - unfolding**

Use this advanced option to define whether unfolding lines are shown in drawings. When you set the advanced option to `TRUE`, the unfolding lines are not shown. The default is `FALSE`.

This advanced option is model specific and the setting is saved in the options database.

## 16.8 XS\_NO\_SINGLE\_PART\_DRAWINGS\_FOR

**Category in [Advanced options dialog \(page 29\)](#): Single-part views in assembly drawings**

Set this advanced option as follows to prevent Tekla Structures producing single-part drawings for assemblies containing one part:

`XS_NO_SINGLE_PART_DRAWINGS_FOR=LOOSE_PARTS`

By default, no value is defined.

This advanced option is model specific and the setting is saved in the options database.

## 16.9 XS\_NORTH\_MARK\_SCALE

Category in [Advanced options dialog \(page 29\)](#): **Marking - parts**

Use this advanced option to define the scale of the north mark symbol. By default, north marks have a scale of 1:1. You can also create a larger symbol for north marks in the Symbol editor. By default, the north mark symbol is number 32 in the symbol file `xsteel.sym`.

This advanced option is model specific and the setting is saved in the options database.

## 16.10 XS\_NORTH\_MARK\_SYMBOL

Category in [Advanced options dialog \(page 29\)](#): **Marking - parts**

By default, the north mark symbol is number 32 in the symbol file `xsteel.sym`. Use this advanced option to change the symbol.



This advanced option is model specific and the setting is saved in the options database.

## 16.11 XS\_NSFS\_POSTFIX\_FOR\_MERGED\_PART\_MARK

Category in [Advanced options dialog \(page 29\)](#): **Marking - parts**

Use this advanced option to define the postfix in merged part marks. The postfix is visible for identical parts on both side of a main part. The default value is BS (both sides). Other possible values are NS (near side) and FS (far side).

This advanced option is model specific and the setting is saved in the options database.

In merging part marks, you may also find the following advanced options useful:

[XS\\_MULTIPLIER\\_SEPARATOR\\_FOR\\_MERGED\\_PART\\_MARK \(page 340\)](#)

[XS\\_NS\\_POSTFIX\\_FOR\\_MERGED\\_PART\\_MARK \(page 347\)](#)

[XS\\_FS\\_POSTFIX\\_FOR\\_MERGED\\_PART\\_MARK \(page 270\)](#)

[XS\\_PART\\_MERGE\\_MAX\\_DISTANCE \(page 357\)](#)

[XS\\_MIN\\_MERGE\\_PART\\_COUNT \(page 334\)](#)

## 16.12 XS\_NSFS\_TEXT\_POSITION\_IN\_PART\_MARK

**Category in [Advanced options dialog \(page 29\)](#): Marking - parts**

Use this advanced option to define which element the NS (near side), FS (far side), and BS (both sides) text follows in merged part marks.

The default is 23, which means that the text is located after the part position. If the element type that is defined by the advanced option cannot be found in the mark at all, the text will be located at end of the mark. To force the text to always appear at the end of the mark, use -1.

This advanced option is model specific and the setting is saved in the options database.

The following list contains the mark element types and the corresponding integer values:

TEXT = 1

LINE FEED = 2

SYMBOL = 3

FRAME START = 4

FRAME END = 5

MATERIAL = 10

USER DEFINED ATTRIBUTE = 16

ASSEMBLY\_POSITION = 22

PART\_POSITION = 23

PROFILE = 24

NAME = 25

LENGTH = 26

CAMBER = 27

SIZE = 28

FITTINGS (NS/FS) = 29

CLASS = 38

BACK\_SPACE = 46

GAGE OF OUTSTANDING LEG = 48

CENTER TO CENTER DISTANCE = 49

FACE\_DIRECTION = 57

END OF Mark = -1

### Example

XS\_NSFS\_TEXT\_POSITION\_IN\_PART\_MARK=22

The value 22 means after assembly position.

---

**NOTE** The NS, FS, or BS text itself comes from two separate places depending on if the marks are merged or not. For ordinary marks, the text comes from a file called `by_number.ail` (NS: `by_number_msg_no_675`, FS: `by_number_msg_no_676`). For merged marks, the text comes from the following advanced options:

- BS: `XS_GET_NSFS_POSTFIX_FOR_MERGED_PART_MARK`
  - NS: `XS_GET_NS_POSTFIX_FOR_MERGED_PART_MARK`
  - FS: `XS_GET_FS_POSTFIX_FOR_MERGED_PART_MARK`
- 

## 16.13 XS\_NS\_POSTFIX\_FOR\_MERGED\_PART\_MARK

Category in [Advanced options dialog \(page 29\)](#): **Marking - parts**

Use this advanced option to define the near side (NS) postfix in merged part marks. This postfix is visible for identical parts on near side. The default value is NS.

This advanced option is model specific and the setting is saved in the options database.

In merging part marks, you may also find the following advanced options useful:

[XS\\_MULTIPLIER\\_SEPARATOR\\_FOR\\_MERGED\\_PART\\_MARK \(page 340\)](#)

[XS\\_NSFS\\_POSTFIX\\_FOR\\_MERGED\\_PART\\_MARK \(page 345\)](#)

[XS\\_FS\\_POSTFIX\\_FOR\\_MERGED\\_PART\\_MARK \(page 270\)](#)

[XS\\_PART\\_MERGE\\_MAX\\_DISTANCE \(page 357\)](#)

[XS\\_MIN\\_MERGE\\_PART\\_COUNT \(page 334\)](#)

## 16.14 XS\_NUMBERING\_RESULTS\_DIALOG\_DISPLAY\_TIME

Category in [Advanced options dialog \(page 29\)](#): **Numbering**

Use this advanced option to set the time frame within which Tekla Structures makes the second save when numbering when you have selected the **Synchronize with master model (save-numbering-save)** option in the **Numbering Setup** dialog.

Enter the desired time in seconds. The advanced option is set to 1500 by default.

This advanced option is model specific and the setting is saved in the options database.

# 17 Advanced options - O

## 17.1 XS\_OBJECT\_SELECTION\_CONFIRMATION

Category in [Advanced options dialog \(page 29\)](#): **Modeling properties**

Use this advanced option to define the time in milliseconds after which Tekla Structures prompts you to cancel the object selection. You can cancel the object selection process if the selection takes longer than the defined time.

The default value is 5000.

This advanced option is user specific and the setting is saved in `options.bin` under the user folder, for example, in `C:\Users\\AppData\Local\Trimble\Tekla Structures\\UserSettings`. Restart Tekla Structures to activate the new value.

## 17.2 XS\_OBJECTLOCK\_DEFAULT

Category in [Advanced options dialog \(page 29\)](#): **Modeling properties**

Use this advanced option to set the default lock status for new assemblies or cast units when they are created. Additionally, when you start to share the model in Tekla Model Sharing, the default lock status is set for all assemblies and cast units that do not yet have any lock status. The locked status is shown in the **Locked** value in the **Object locks** dialog. The value options are ORGANIZATION or NO.

This advanced option is system specific.

## 17.3 XS\_OMIT\_MARKS\_OF\_HIDDEN\_PARTS\_IN\_GA\_DRAWINGS

Category in [Advanced options dialog \(page 29\)](#): **Marking - parts**

Set this advanced option to `TRUE` to hide part marks of parts hidden by other parts from views in general arrangement drawings. The default value is `FALSE`.

If you have stiffeners on either side of a beam, one will be hidden by the beam in front of it. Set this advanced option to `TRUE` to prevent Tekla Structures from displaying the part mark of the hidden part.

This advanced option is model specific and the setting is saved in the options database.

## 17.4 XS\_OMIT\_MARKS\_OF\_PARTS\_OUT\_OF\_VIEW\_PLANE\_LIMIT\_ANGLE

Category in [Advanced options dialog \(page 29\)](#): **Marking - general**

Use this advanced option to hide the part marks for parts outside the current view plane by defining the limit for inclusion as an angle. The default value is `20.0`.

You also need to set the **Parts out of view plane** option in the view level part mark properties to **Not visible** to hide parts from the views that are outside the angle you specify here.

This advanced option is model specific and the setting is saved in the options database.

## 17.5 XS\_OMITTED\_BOLT\_ASSEMBLY\_TYPE

Category in [Advanced options dialog \(page 29\)](#): **Marking - bolts**

Use this advanced option to filter out the given type of bolt marks when the **Ignore size** setting is set to a value in drawing bolt mark properties. The options are:

- `SITE` (default)
- `SHOP`
- `SITE_AND_SHOP`.

The default value `SITE` filters out only site bolt marks for bolts that meet the **Ignore size** value, whereas workshop bolt marks of all sizes are shown in drawings.

This advanced option is model specific and the setting is saved in the options database.

**See also**

[XS\\_OMITTED\\_BOLT\\_TYPE \(page 351\)](#)

## 17.6 XS\_OMITTED\_BOLT\_TYPE

**Category in [Advanced options dialog \(page 29\)](#): Marking - bolts**

Use this advanced option to define which bolt standards to omit from drawings. Enter the name of the bolt standard, for example, 7990. You can also use wildcards, such as \* or ?. By default, no value is given, which means that no bolt standards are omitted. This advanced option only accepts one value, and no spaces are allowed.

Example: To filter away all the bolt marks of bolts of the bolt standards A325N, A325X and A325SC, set this advanced option to `A325*`.

**IMPORTANT:** For this advanced option to work, you also need to define the following:

- A size for the **Ignore bolt size** bolt mark setting on the drawing level
- A value for the advanced option `XS_OMITTED_DIAMETER_TYPE`, which defines the bolt diameter type of the marks to omit
- A value for the advanced option `XS_OMITTED_BOLT_ASSEMBLY_TYPE`, which filters out the given type of bolt marks (SITE, SHOP, SITE AND SHOP)

This advanced option is model specific and the setting is saved in the options database.

**See also**

[XS\\_OMITTED\\_BOLT\\_ASSEMBLY\\_TYPE \(page 350\)](#)

[XS\\_OMITTED\\_DIAMETER\\_TYPE \(page 351\)](#)

[XS\\_GA\\_OMITTED\\_DIAMETER\\_TYPE \(page 273\)](#)

## 17.7 XS\_OMITTED\_DIAMETER\_TYPE

Category in [Advanced options dialog \(page 29\)](#): **Marking - bolts**

Use this advanced option to define the bolt diameter type of the marks to omit in drawings. The options are `HOLE` or `BOLT`.

This advanced option is used together with the drawing bolt mark property setting **Ignore size**. For example, to filter out all bolt marks of bolts that have a hole diameter 22, enter 22 as the value for **Ignore size**, and set this advanced option to `HOLE`.

This advanced option is model specific and the setting is saved in the options database.

**See also**

[XS\\_OMITTED\\_BOLT\\_TYPE \(page 351\)](#)

## 17.8 XS\_OMITTED\_PART\_NAME\_IN\_AUTOCONNECTION

Category in [Advanced options dialog \(page 29\)](#): **Components**

Use this advanced option to filter out specific part types when you use AutoConnection. AutoConnection cannot handle brace connections when large quantities of parts are selected.

This advanced option is model specific and the setting is saved in the options database.

**Example**

If you want to use this advanced option to filter out brace parts, set it to `brace`. Tekla Structures does not select any parts with names containing the string "brace".

---

**TIP** You can also do this by setting the **Selection Filter** to select all parts except for those named "brace\*".

---

## 17.9 XS\_OMITTED\_WELD\_TYPE

Category in [Advanced options dialog \(page 29\)](#): **Welds**

Use this advanced option to define which weld type to omit in drawings. Enter the number of the weld type you want to omit. The default value is 10 (fillet weld).

In addition to this advanced option, there are two other settings that Tekla Structures uses to determine the welds that are shown in the drawing: `XS_WELD_FILTER_TYPE` tells if Tekla Structures should filter welds that are exactly the size (`EXACT`) or of the same size or smaller (`MIN`) than the value given in the **Weld size limit** box in the object or mark properties on the drawing view level. Tekla Structures always shows welds that have reference text.

This advanced option is model specific and the setting is saved in the options database.

### Example

If you set `XS_OMITTED_WELD_TYPE` to 10, `XS_WELD_FILTER_TYPE` to `EXACT`, and **Weld size limit** to 5, Tekla Structures shows all other welds except those that are 5 mm, and those of type fillet weld (10). In this case, if you do not set `XS_WELD_FILTER_TYPE`, Tekla Structures shows all welds that are bigger than 5 mm except fillet welds.

### See also

[XS\\_WELD\\_FILTER\\_TYPE \(page 548\)](#)

## 17.10 XS\_OPEN\_DRAWINGS\_MAXIMIZED

Category in [Advanced options dialog \(page 29\)](#): **Drawing views**

Set this advanced option to `TRUE` to maximize drawings when you open them. The default is `FALSE`.

This advanced option is user specific and the setting is saved in `options.bin` under the user folder, for example, in `C:\Users\\AppData\Local\Trimble\Tekla Structures\\UserSettings`. Restart Tekla Structures to activate the new value.

## 17.11 XS\_ORIENTATION\_MARK\_DIRECTION

Category in [Advanced options dialog \(page 29\)](#): **Marking - parts**

Use this advanced option to define the direction of the orientation marks. The options are `NORTH-EAST`, `NORTH-WEST`, `SOUTH-EAST` and `SOUTH-WEST`. `NORTH-EAST` is the default value.

This advanced option is model specific and the setting is saved in the options database.

**See also**

[XS\\_NORTH\\_MARK\\_SYMBOL \(page 345\)](#)

## 17.12 XS\_ORIENTATION\_MARK\_MOVE\_DIST\_FOR\_BEAMS

**Category in [Advanced options dialog \(page 29\)](#): Marking - parts**

Use this advanced option to indicate the position of orientation marks for beams. Enter a value indicating the distance from the end of the part to the orientation mark. The default value is 300.0 mm. You can enter any value in the range 1.0 to 3000.0.

This advanced option is model specific and the setting is saved in the options database.

## 17.13 XS\_ORIENTATION\_MARK\_MOVE\_DIST\_FOR\_BEAMS\_IN\_GA

**Category in [Advanced options dialog \(page 29\)](#): Marking - parts**

Use this advanced option to indicate the position of beam orientation marks in GA drawings. Enter a value indicating the distance from the end of the part to the orientation mark. The default value is 300.0 mm.

This advanced option is model specific and the setting is saved in the options database.

**See also**

[XS\\_ORIENTATION\\_MARK\\_MOVE\\_DIST\\_FOR\\_BEAMS \(page 354\)](#)

## 17.14 XS\_ORIENTATION\_MARK\_MOVE\_DIST\_FOR\_COLUMNS

**Category in [Advanced options dialog \(page 29\)](#): Marking - parts**

Use this advanced option to define the placing of orientation marks for columns. The value assigned to this advanced option is the distance from the end of the part to the orientation mark. The default value for columns is 300.0 mm. Possible values range from 1.0 to 3000.0.

This advanced option is role specific. When the type **SYSTEM(ROLE)** is in use, the default value is used. When the type **MODEL(ROLE)** or **DRAWING(ROLE)** is in use, you can change the value, which is then the same for all users in the current model.

## 17.15 XS\_ORIENTATION\_MARK\_MOVE\_DIST\_FOR\_COLUMNS\_IN\_GA

Category in [Advanced options dialog \(page 29\)](#): **Marking - parts**

Use this advanced option to define the position of the column orientation marks in GA drawings. The value assigned to this advanced option is the distance from the end of the part to the orientation mark. The default value is 300.0 mm.

This advanced option is role specific. When the type **SYSTEM(ROLE)** is in use, the default value is used. When the type **MODEL(ROLE)** or **DRAWING(ROLE)** is in use, you can change the value, which is then the same for all users in the current model.

### See also

[XS\\_ORIENTATION\\_MARK\\_MOVE\\_DIST\\_FOR\\_COLUMNS \(page 354\)](#)

# 18 Advanced options - P

## 18.1 XS\_PARAMETRIC\_PROFILE\_SEPARATOR

Category in [Advanced options dialog \(page 29\)](#): Profiles

Use this advanced option to define an additional character to separate dimensions in the names of parametric profiles. Tekla Structures always recognizes the standard separator characters X, \*, -, and /. The default value is an asterisk (\*).

For example, when you inquire a part with a sketched profile, the character specified by this advanced option is used as the separator.

### Example

```
XS_PARAMETRIC_PROFILE_SEPARATOR=E
```

Acceptable profile names with this setting are:

1. PL500\*800
2. PL500X800
3. PL500E800

Any combination of these is also accepted:

ProfileName500\*500-500\*500E500 (the profile ProfileName should be defined).

### Limitations

- Only one character is accepted as a value for this advanced option.
- You cannot use slash (/) in the US imperial environment.

### See also

[XS\\_USER\\_DEFINED\\_PARAMETRIC\\_PROFILE\\_SEPARATORS \(page 537\)](#)

## 18.2 XS\_PART\_CUT\_INHERIT\_UDAS\_FROM\_CUTTING\_PART

Category in [Advanced options dialog \(page 29\)](#): **Modeling properties**

Use this advanced option to prevent the copying of user-defined attributes (UDAs) from the original cutting part to the anti-material cutting part when you use the **Part cut** command.

The default value is `FALSE`. When set to `FALSE`, the UDAs are not copied to the anti-material part.

This advanced option is model specific and the setting is saved in the options database.

## 18.3 XS\_PART\_DIMENSION\_PLANES\_TABLE

Category in [Advanced options dialog \(page 29\)](#): **Dimensioning - parts**

Use this advanced option to point to the path to the user-defined part dimension planes table. This table defines the planes in which dimensions are created. For example, you might want Tekla Structures to dimension round bars to the middle of the profile rather than the reference line.

You can also use a file name as a value. If the value is a file name, Tekla Structures searches for the file in the model, project, firm, and profile folders (in this order).

This is a system-specific advanced option.

### Example

```
XS_PART_DIMENSION_PLANES_TABLE=%XS_PROFDB%  
\dim_planes_table.txt
```

## 18.4 XS\_PART\_MERGE\_MAX\_DISTANCE

Category in [Advanced options dialog \(page 29\)](#): **Marking - parts**

Use this advanced option to define the maximum distance within which identical parts get merged marks. Units are in millimeters. The default value is 1200.

This advanced option is role specific. When the type **SYSTEM(ROLE)** is in use, the default value is used. When the type **MODEL(ROLE)** or **DRAWING(ROLE)** is in use, you can change the value, which is then the same for all users in the current model.

## 18.5 XS\_PART\_MULTI\_NUMBER\_FORMAT\_STRING

Category in [Advanced options dialog \(page 29\)](#): Numbering

Use this advanced option to define multinumbers for single parts. Use the following options to define the contents of part marks. Use as many switches as you need, and enclose each one in percent symbols (%).

The available options are:

| Option  | Description  |
|---|--|
| <code>%PART_MULTI_DRAWING_NUMBER%</code>                                      | Multidrawing name.   |
| <code>%PART_MULTI_DRAWING_POS%</code>   | Position of the single-part drawing inside the multidrawing.   |
| <code>%PART_PREFIX%</code>  | Part prefix in the model.  |
| <code>%PART_POS%</code>   | Part position number in the model.   |
| Template fields   | Enter <code>TPL:</code> followed by the name of any relevant template field. Enclose each name in percent symbols (%). For example, <code>%TPL:PROJECT.NUMBER%</code>                      |
| User-defined attributes that are defined in the <code>objects.inp</code> file | Enter <code>UDA:</code> followed by the name of any relevant user-defined attribute, exactly as it appears in the <code>objects.inp</code> file. For example, <code>%UDA:MY_INFO_1%</code> |

This advanced option is model specific and the setting is saved in the options database.

### Example

To put the part multinumbers in the format part prefix + position on multidrawing + multidrawing name, set the advanced option as follows:

```
%PART_PREFIX%%PART_MULTI_DRAWING_POS%
%PART_MULTI_DRAWING_NUMBER%
```

### See also

[XS\\_USE\\_MULTI\\_NUMBERING\\_FOR \(page 517\)](#)

[XS\\_ASSEMBLY\\_MULTI\\_NUMBER\\_FORMAT\\_STRING \(page 57\)](#)

[XS\\_CAST\\_UNIT\\_MULTI\\_NUMBER\\_FORMAT\\_STRING \(page 83\)](#)

## 18.6 XS\_PART\_POSITION\_NUMBER\_FORMAT\_STRING

Category in [Advanced options dialog \(page 29\)](#): **Numbering**

Use this advanced option to define the contents of the part position number.

If this advanced option is set, it overrides the **Position number separator** setting in **File menu --> Settings --> Options --> Numbering**.

---

**NOTE** The advanced options [XS\\_ASSEMBLY\\_POSITION\\_NUMBER\\_FORMAT\\_STRING \(page 59\)](#) and [XS\\_PART\\_POSITION\\_NUMBER\\_FORMAT\\_STRING](#) override the advanced option [XS\\_SWITCH\\_POS\\_NUMBERS\\_FOR \(page 489\)](#). [XS\\_SWITCH\\_POS\\_NUMBERS\\_FOR](#) has no impact on assembly and/or part position numbers if you use [XS\\_ASSEMBLY\\_POSITION\\_NUMBER\\_FORMAT\\_STRING](#) and/or [XS\\_PART\\_POSITION\\_NUMBER\\_FORMAT\\_STRING](#).

---

Enter any combination of the following options:

| Option                  | Description  |
|-------------------------|--|
| %PART_PREFIX%           | Part prefix, defined in the part properties in the property pane.  |
| %PART_POS%              | Part position number, defined by the start number (from part properties in the property pane) and the final position in that numbering series.   |
| %PART_POS_WITH_LETTERS% | Same as above, but with letters.<br>Uses letters A – Z by default, but you can also define valid letters with the advanced option <a href="#">XS_VALID_CHARS_FOR_PART_POSITION_NUMBERS</a> . |

The position number/ letter switch can also include a suffix defining the minimum number of digits (or letters), for example: %PART\_POS.3%. This example results in a first part number of 001, second 002 etc.

This advanced option is model specific and the setting is saved in the options database.

### See also

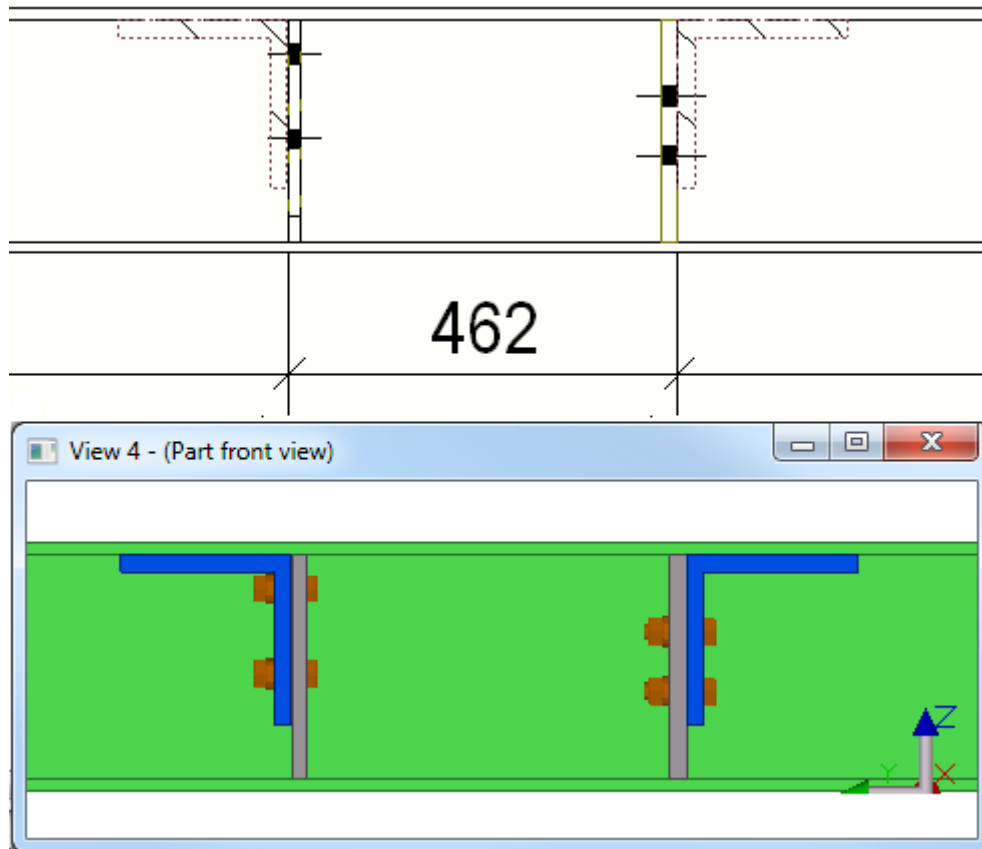
[XS\\_VALID\\_CHARS\\_FOR\\_PART\\_POSITION\\_NUMBERS \(page 540\)](#)

## 18.7 XS\_PART\_POSITION\_TO\_EDGE\_NEAREST\_TO\_NEIGHBOUR

Category in [Advanced options dialog \(page 29\)](#): Dimensioning - parts

Set this advanced option to `TRUE` to dimension the position of parts to the edge that is nearest to the neighbor part. The default is `FALSE`.

In the image below, the neighbor parts in the model are blue, and the plate creation points are shown.



This advanced option is role specific. When the type **SYSTEM(ROLE)** is in use, the default value is used. When the type **MODEL(ROLE)** or **DRAWING(ROLE)** is in use, you can change the value, which is then the same for all users in the current model.

## 18.8 XS\_PART\_POSITION\_TO\_LEADING\_EDGE

Category in [Advanced options dialog \(page 29\)](#): Dimensioning - parts

Set this advanced option to `TRUE` (default) to dimension the position of beams to the leading edge. If you do not want to do this, set it to

FALSE. For this advanced option to take effect, disable the advanced option `XS_USE_PLATE_SIDE_POSITIONING`.

For column assemblies, you must also set the advanced option `XS_PART_POSITION_TO_LEADING_EDGE_IN_COLUMNS_ALSO` to TRUE.

This advanced option is model specific and the setting is saved in the options database.

**See also**

[XS\\_PART\\_POSITION\\_TO\\_LEADING\\_EDGE\\_IN\\_COLUMNS\\_ALSO \(page 361\)](#)

[XS\\_USE\\_PLATE\\_SIDE\\_POSITIONING \(page 527\)](#)

## 18.9 XS\_PART\_POSITION\_TO\_LEADING\_EDGE\_IN\_COLUMNS\_ALSO

**Category in [Advanced options dialog \(page 29\)](#): Dimensioning - parts**

To dimension part position to the leading edge for column assemblies, set this advanced option to TRUE. If you do not want to do this, set it to FALSE. The default value is TRUE.

You must also set the advanced option [XS\\_PART\\_POSITION\\_TO\\_LEADING\\_EDGE \(page 360\)](#) to TRUE.

This advanced option is model specific and the setting is saved in the options database.

## 18.10 XS\_PIXEL\_TOLERANCE

**Category in [Advanced options dialog \(page 29\)](#): Model views**

Use this advanced option to define the snap zone of objects. Each object has a snap zone, which defines how close you need to pick to hit a position. When you pick within the snap zone of an object, Tekla Structures automatically snaps to the closest pickable point on that object. Enter the value in pixels. The default value is 10.

This advanced option is user specific and the setting is saved in `options.bin` under the user folder, for example, in `C:\Users\\AppData\Local\Trimble\Tekla Structures\\UserSettings`. Restart Tekla Structures to activate the new value.

## 18.11 XS\_PLATE\_ROUNDING\_DECIMALS

Category in [Advanced options dialog \(page 29\)](#): **Plate work**

Use this advanced option to define the maximum number of decimals in a plate profile name created by **components**. The default is 1.

Note that unnecessary zeroes are always left off, for example 10.501:

- with 2 decimals is 10.5
- with 3 decimals is 10.501

This advanced option is model specific and the setting is saved in the options database.

The advanced option `XS_MAX_DECIMALS_IN_PROFILE_NAME` controls the decimals of plates that are modeled directly in the model.

**See also**

[XS\\_MAX\\_DECIMALS\\_IN\\_PROFILE\\_NAME \(page 327\)](#)

## 18.12 XS\_PLOT\_ORIGIN\_MOVE\_X

**This advanced option must be set in an initialization (.ini) file.**

Use this advanced option to offset the print origin in the X direction. Use if a drawing does not fit on the paper or is printed to a wrong location. Enter the value in millimeters as an integer. This advanced option affects all printers. By default, this advanced option is not set to any value.

---

**NOTE** If you set these advanced options in your initialization files, you will override the **Printer Catalog** dialog.

---

**See also**

[XS\\_PLOT\\_ORIGIN\\_MOVE\\_Y \(page 362\)](#)

## 18.13 XS\_PLOT\_ORIGIN\_MOVE\_Y

**This advanced option must be set in an initialization (.ini) file.**

Use this advanced option to offset the print origin in the Y direction. Use if a drawing does not fit on the paper or is printed to a wrong location. Enter the value in millimeters as an integer. This advanced option affects all printers. By default, this advanced option is not set to any value.

---

**NOTE** If you set these advanced options in your initialization files, you will override the **Printer Catalog** dialog.

---

**See also**

[XS\\_PLOT\\_ORIGIN\\_MOVE\\_X](#) (page 362)

## 18.14 XS\_PLOT\_VIEW\_FRAMES

**Category in [Advanced options dialog \(page 29\)](#): Printing**

To show drawing view frames in printed and exported drawings, set `XS_PLOT_VIEW_FRAMES` to `TRUE`. `FALSE` is the default value.

This advanced option is model specific and the setting is saved in the options database.

## 18.15 PML\_ASSEMBLY\_MARKS\_IN\_USE

**Category in [Advanced options dialog \(page 29\)](#): Export**

---

**NOTE** This advanced option is only related to the PML export, which is no longer supported.

---

Set this advanced option to `TRUE` to have Tekla Structures use assembly marks in PML exports. By default this advanced option is set to `FALSE`, which means that Tekla Structures uses part marks.

This advanced option is model specific and the setting is saved in the options database.

## 18.16 PML\_CARDINAL\_POINT\_NOT\_IN\_USE

**Category in [Advanced options dialog \(page 29\)](#): Export**

---

**NOTE** This advanced option is only related to the PML export, which is no longer supported.

---

Set this advanced option to `TRUE` to prevent Tekla Structures from using cardinal points in PML exports. This means that all parts will be defined by their center lines, and their position may differ from that in the Tekla

Structures model. By default this advanced option is set to `FALSE`, which means that cardinal points are used in PML export. The default value is `FALSE`.

## 18.17 XS\_PML\_EXPORT\_INCLUDE\_GLOBAL\_ID

Category in [Advanced options dialog \(page 29\)](#): **Export**

---

**NOTE** This advanced option is only related to the PML export, which is no longer supported.

---

Set this advanced option to `TRUE` to revert to the FrameWorksPlus ID number in PML exports. If you do not want to export the ID number, set it to `FALSE`. The default value is `FALSE`.

This advanced option is model specific and the setting is saved in the options database.

### See also

[XS\\_SDNF\\_IMPORT\\_STORE\\_MEMBER\\_NUMBER \(page 428\)](#)

## 18.18 XS\_PML\_EXPORT\_USE\_ADDITIONAL\_CUT\_DIST

Category in [Advanced options dialog \(page 29\)](#): **Export**

---

**NOTE** This advanced option is only related to the PML export, which is no longer supported.

---

Some earlier versions of Tekla Structures added 1 mm in length to fitted part ends in PML exports. Set this advanced option to `TRUE` to force recent versions to add the length. The default value is `FALSE`.

This advanced option is model specific and the setting is saved in the options database.

## 18.19 XS\_POINT\_CLOUD\_CACHE\_FOLDER

Category in [Advanced options dialog \(page 29\)](#): **File locations**

Use this advanced option to define the folder where point cloud data is stored. By default, the folder is `%LocalAppData%\Trimble\Tekla Structures\PointClouds,`

for example, `C:\Users\\AppData\Local\Trimble\Tekla Structures\PointClouds`.

This advanced option is user specific and the setting is saved in `options.bin` under the user folder, for example, in `C:\Users\\AppData\Local\Trimble\Tekla Structures\\UserSettings`. Restart Tekla Structures to activate the new value.

## 18.20 XS\_POINT\_CLOUDS\_WEB\_CACHE

Category in [Advanced options dialog \(page 29\)](#): File locations

Use this advanced option to define the point cloud web streaming cache. By default, the folder is `%LocalAppData%\Trimble\Trimble Connect\Import`, for example, `C:\Users\\AppData\Local\Trimble\Trimble Connect\Import`.

## 18.21 XS\_POLYBEAM\_CHORD\_TOLERANCE

Category in [Advanced options dialog \(page 29\)](#): Speed and accuracy

Use this advanced option to define the chord tolerance for curved polybeam segments. This advanced option affects all polybeams, bent plates, spiral beams, and lofted plates in the model. Enter the value in millimeters. The default is 1.0.

Re-open the model to activate the new value.

---

**NOTE** Do not change the chord tolerance settings during a project. Changing them automatically recreates the curved polybeams when you re-open the model, resulting in slightly different solid objects, which may affect numbering, or the concrete covers of rebar sets, for example.

---

The advanced option `XS_POLYBEAM_MAX_ANGLE_BETWEEN_CS` works as limiting factor to `XS_POLYBEAM_CHORD_TOLERANCE`.

This advanced option is model specific and the setting is saved in the options database.

### See also

[XS\\_POLYBEAM\\_MAX\\_ANGLE\\_BETWEEN\\_CS \(page 366\)](#)

[XS\\_CHORD\\_TOLERANCE\\_FOR\\_TUBE\\_SEGMENTS \(page 94\)](#)

## 18.22 XS\_POLYBEAM\_MAX\_ANGLE\_BETWEEN\_CS

Category in [Advanced options dialog \(page 29\)](#): **Speed and accuracy**

Use this advanced option to define the maximum angle between adjacent cross sections in curved polybeam segments. Enter the value in degrees. The default value is 30.0.

This advanced option works as a limiting factor to XS\_POLYBEAM\_CHORD\_TOLERANCE.

This advanced option is model specific and the setting is saved in the options database.

**See also**

[XS\\_POLYBEAM\\_CHORD\\_TOLERANCE \(page 365\)](#)

## 18.23 XS\_POLYBEAM\_CURVATURE\_TOLERANCE

Category in [Advanced options dialog \(page 29\)](#): **Modeling properties**

Use this advanced option to define the tolerance used in detecting the curvature between three points in a polybeam. The default is  $2.0 \times 10^{-6}$ .

This advanced option defines the difference in dot products between two unit vectors formed by two consecutive polybeam arc chamfer handles. If the dot product differs less than this value, the curve is considered to be a straight line, and the arc chamfer is omitted.

Generally, you need to change the default value only if you are working with long, thin or very complex polybeams. Change the default value in the following situations:

- If the polybeam is only very slightly curved and it looks like a straight polybeam in the model, you need to give a smaller value, such as  $2.0 \times 10^{-10}$ . A larger value makes polybeams with only a slight curvature straight.
- If the value is unnecessarily small (smaller than default value for simple polybeams), there might be performance issues.
- If the tolerance is set to a value that is too small ( $< 10^{-11}$ ), the polybeam may break.

## 18.24 XS\_POLYGON\_CUT\_EXTRA\_THICKNESS

Category in [Advanced options dialog \(page 29\)](#): **Modeling properties**

Use this advanced option to define the cut depth of a polygon cut, for example, to cut thick surface treatment. The default value for the cut thickness is 5.0 mm.

## 18.25 XS\_POLYGON\_PERPENDICULAR\_EDGE\_PREFERENCE\_FACTOR

Category in [Advanced options dialog \(page 29\)](#): **Plate work**

---

**NOTE** If you change the value for this advanced option, run repair numbering to see the effect on drawings and **Document manager** list. The existing drawings might change.

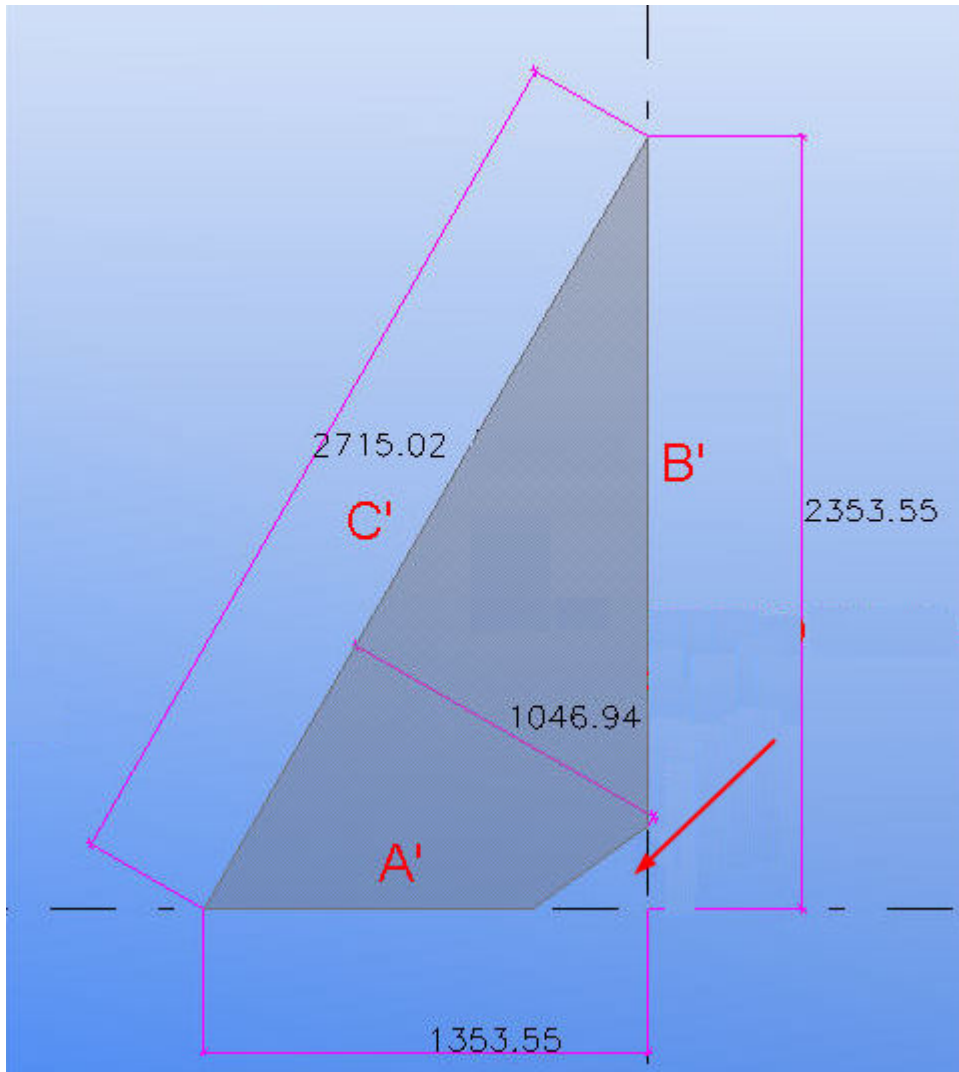
---

This advanced option is used to artificially manipulate which side of a plate is considered as the 'longest'.

The longest side of polygon plates usually runs from left to right in drawings, which can affect plates with perpendicular edges.

This information can then be used, for example, in changing the rotation of a plate in drawings, or when choosing which side of a plate is to be considered the 'Length' and 'Width'.

This advanced option is used for plates with perpendicular sides in drawings. This advanced option rotates plates if there is some edge which is perpendicular to the current one and it is not adjacent edge.



The default value is 1.5.

In the example above, when you set

`XS_POLYGON_PERPENDICULAR_EDGE_PREFERENCE_FACTOR` to 1, all sides are multiplied by 1, and view restriction box is drawn according to the longest side. The result is that the Length = 2715.02, and Width = 1046.94.

If you set this advanced option to 10, perpendicular corner edges A' and B' are multiplied by 10. If the result is larger than the longest side C', the view restriction box is drawn using the sides A' and B'. The result would be Length = 2353.55, and Width = 1353.55.

This advanced option is model specific and the setting is saved in the options database.

### See also

[XS\\_POLYGON\\_SQUARE\\_CORNER\\_PREFERENCE\\_FACTOR](#) (page 369)

## 18.26 XS\_POLYGON\_SQUARE\_CORNER\_PREFERENCE\_FACTOR

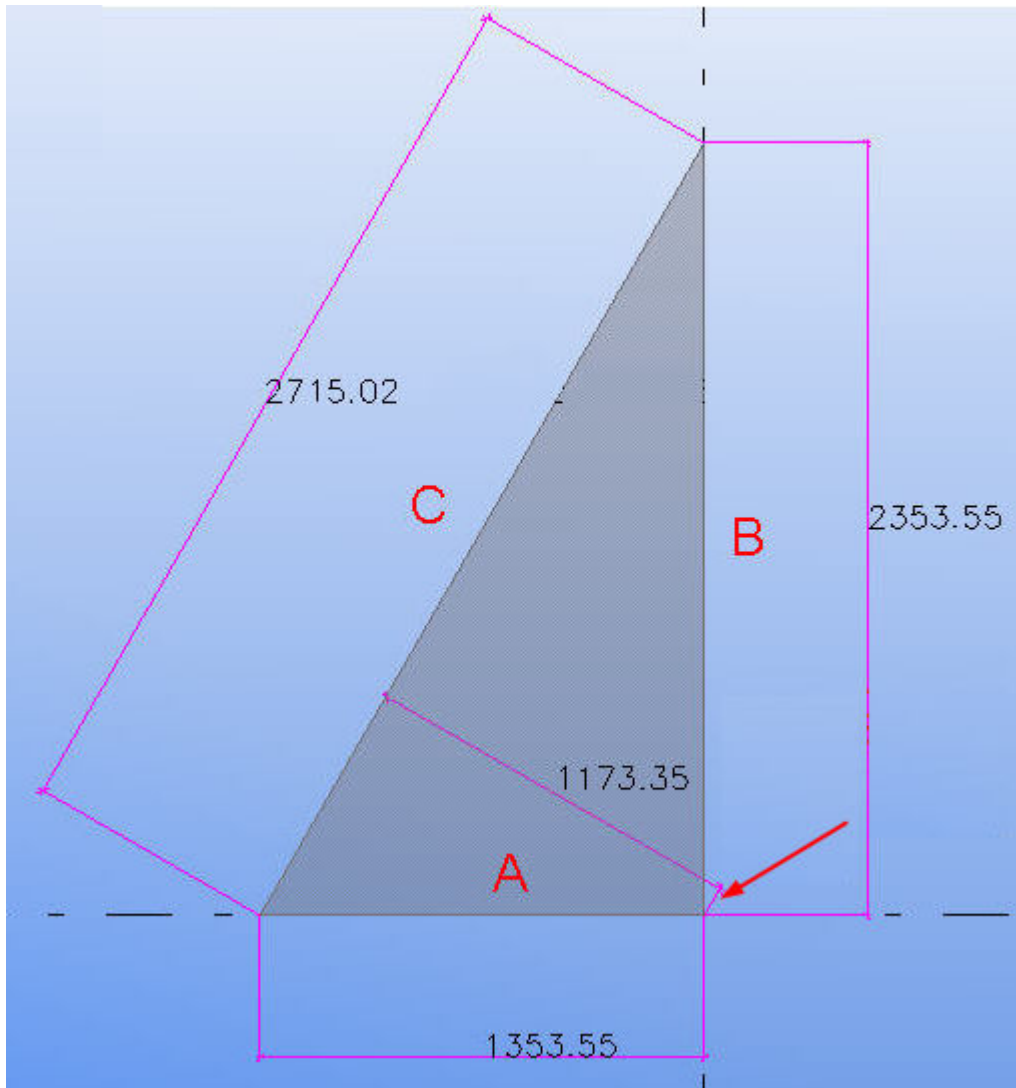
Category in [Advanced options dialog \(page 29\)](#): Plate work

This advanced option is used to artificially manipulate which side of a plate is considered as the 'longest'.

In drawings, this advanced option is also used to control the rotation of right-angled plates. The longest side of polygon plates always usually runs from left to right in drawings, which can affect right-angled plates.

This information can then be used, for example, in changing the rotation of a plate in drawings, or when choosing which side of a plate is to be considered the 'Length' and 'Width'.

This advanced option is used for plates that have two consecutive edges perpendicular to each other. When this advanced option is set to a factor, Tekla Structures multiplies the length of the side next to the right angle by that factor, making it the longest side. In reports, this side will be then considered the 'Length', and the corresponding perpendicular distance the 'Width'.



Tekla Structures still uses and displays the real dimensions of the plate.

In the example above, when you set `XS_POLYGON_SQUARE_CORNER_PREFERENCE_FACTOR` to 1, all sides are multiplied by 1, and the view restriction box is drawn according to the longest side. The result is Length = 2715.02, and Width = 1173.35.

If you set this advanced option to 10, only square corner edges A and B are multiplied by 10. If the result is larger than the largest side C, the view restriction box is drawn using the sides A and B. The result would be Length = 2353.55, and Width = 1353.55.

The default value for this advanced option is 2.0.

This advanced option is model specific and the setting is saved in the options database.

### See also

[XS\\_POLYGON\\_PERPENDICULAR\\_EDGE\\_PREFERENCE\\_FACTOR](#) (page 367)

## 18.27 XS\_POP\_MARK\_COLOR\_RGB

Category in [Advanced options dialog \(page 29\)](#): Drawing properties















Use this advanced option to define the color of a customized pop-mark symbol that is displayed in a drawing. The default value is 1 (white).





You can enter a single color index value (such as 160 for the standard Tekla Structures red color) or a specific custom RGB color. For an RGB color, enter three numeric values separated by spaces (each value in the range 0 to 255). For example, for a specific shade of green, enter 0 220 50.

Legacy Tekla Structures index values and the corresponding colors:

|   |   |
|---|---|
| 0 |  Black     |
| 1 |  White     |
| 2 |  Red       |
| 3 |  Green     |
| 4 |  Blue      |
| 5 |  Cyan     |
| 6 |  Yellow  |
| 7 |  Magenta |

Standard Tekla Structures index values and the corresponding colors:

|     |  |
|-----|--|
| 152 |  Invisible  |
| 153 |  Black      |
| 160 |  Red        |
| 161 |  Green      |
| 162 |  Blue       |
| 163 |  Cyan       |
| 164 |  Yellow     |
| 165 |  Magenta    |
| 154 |  Brown      |
| 155 |  Dark green |
| 156 |  Dark blue  |
| 157 |  Blue-green |
| 158 |  Orange     |
| 159 |  Gray       |

|     |   |
|-----|---|
| 130 |  Gray 30 |
| 131 |  Gray 50 |
| 132 |  Gray 70 |
| 133 |  Gray 90 |

This advanced option is model specific and the setting is saved in the options database.

## 18.28 XS\_POP\_MARK\_HEIGHT

**Category in [Advanced options dialog \(page 29\)](#): Drawing properties**

Use this advanced option to define the height of a customized pop-mark symbol that is displayed in a drawing. Enter a decimal value in millimeters. The default is 2.0.

This advanced option is model specific and the setting is saved in the options database.

### See also

[XS\\_POP\\_MARK\\_SYMBOL \(page 372\)](#)

[XS\\_POP\\_MARK\\_COLOR\\_RGB \(page 371\)](#)

## 18.29 XS\_POP\_MARK\_SYMBOL

**Category in [Advanced options dialog \(page 29\)](#): Drawing properties**

Use this advanced option to define the customized pop-mark symbol to be used for pop-marks in drawings. The default is `xsteel@0`, which means that you are using symbol number 0 in the symbol file `xsteel`.



This advanced option is model specific and the setting is saved in the options database.

## 18.30 XS\_POSITION\_DIMENSIONS\_FOR\_HOLES\_IN\_SINGLE\_SECONDARY\_PARTS\_IN\_ASSEMBLY\_DRAWING

Category in [Advanced options dialog \(page 29\)](#): **Dimensioning - bolts**

To create position dimensions for holes in single secondary parts in assembly drawing, set this advanced option to `TRUE`. To not create position dimensions for holes, set it to `FALSE`. The default value is `TRUE`.

This advanced option is model specific and the setting is saved in the options database.

## 18.31 XS\_POUR\_BREAK\_COLOR

Category in [Advanced options dialog \(page 29\)](#): **Concrete detailing**

Use this advanced option to change the color of the pour breaks in model views. Enter number as the value using the class numbers in the part property pane to indicate the color. For example, if you set this advanced option to 6, Tekla Structures will color all pour breaks yellow. The default value is 59.

In the exported IFC models, pour breaks are black.

This advanced option is user specific and the setting is saved in `options.bin` under the user folder, for example, in `C:\Users\\AppData\Local\Trimble\Tekla Structures\\UserSettings`. Restart Tekla Structures to activate the new value.

### See also

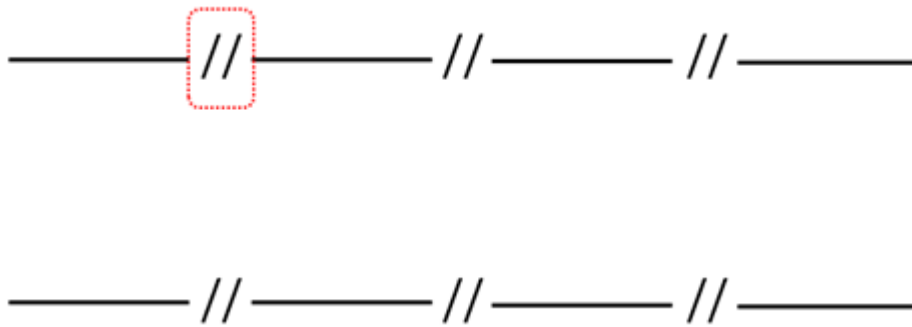
[XS\\_POUR\\_OBJECT\\_COLOR \(page 374\)](#)

[XS\\_INVALID\\_POUR\\_BREAK\\_COLOR \(page 300\)](#)

## 18.32 XS\_POUR\_BREAK\_SYMBOL

Category in [Advanced options dialog \(page 29\)](#): **Drawing properties**

Pour breaks are represented by a symbol in the drawings, see the image below. The symbol scale and the spacing between the symbols follows the drawing view scale automatically.



If you want to change the pour break symbol, enter a new value for this advanced option. The default value is `PourBreaks@0`. The symbol value starts with the symbol library file name and ends with the number of the symbol. The default library may contain many different pour break symbols. If you wish to use a symbol file that is not located under your environment folders, enter the complete path to the symbol file location and the symbol file name.

This advanced option is model specific and the setting is saved in the options database.

## 18.33 XS\_POUR\_OBJECT\_COLOR

**Category in [Advanced options dialog \(page 29\)](#): Concrete detailing**

Use this advanced option to change the default color of pour objects in model views. Enter number as the value using the class numbers in the part property pane to indicate the color. For example, if you set this advanced option to 6, Tekla Structures will color all pour objects yellow.

This advanced option is user specific and the setting is saved in `options.bin` under the user folder, for example, in `C:\Users\\AppData\Local\Trimble\Tekla Structures\\UserSettings`. Restart Tekla Structures to activate the new value.

### See also

[XS\\_POUR\\_BREAK\\_COLOR \(page 373\)](#)

## 18.34 XS\_PREVIEW\_LIMIT

Category in [Advanced options dialog \(page 29\)](#): **Model views**

Use this advanced option to set the limit for number of objects shown in the copy or move preview. The preview is shown in the model when you use the **Copy** or **Move** command to copy or move objects.

The default value is 1000. When the value is 0, the preview is off.

## 18.35 XS\_PRINT\_MULTISHEET\_BORDER

Category in [Advanced options dialog \(page 29\)](#): **Drawing properties**

Use this advanced option to define the borders that are left out from the smaller sheets when printing a drawing on multiple small sheets.

For example, to leave a 3 mm horizontal and a 5 mm vertical border, set the advanced option to 3,5.

## 18.36 XS\_PRINT\_REPORT\_FONT

Category in [Advanced options dialog \(page 29\)](#): **Templates and symbols**

Use this advanced option to define the default font for printed reports. Tekla Structures uses this advanced option if you do not specify another font for the printed reports in the **Print** dialog. The default value is `Arial`. If you do not specify a font, Tekla Structures uses the default font defined for `XS_DEFAULT_FONT`.

This advanced option is user specific and the setting is saved in `options.bin` under the user folder, for example, in `C:\Users\\AppData\Local\Trimble\Tekla Structures\\UserSettings`. Restart Tekla Structures to activate the new value.

### See also

[XS\\_DEFAULT\\_FONT \(page 116\)](#)

## 18.37 XS\_PRINT\_REPORT\_LINE\_WIDTH\_LANDSCAPE

Category in [Advanced options dialog \(page 29\)](#): **Templates and symbols**

Use this advanced option to specify the number of characters per row in reports printed in landscape orientation. The default value is 132.

This advanced option is model specific and the setting is saved in the options database.

### See also

[XS\\_PRINT\\_REPORT\\_LINE\\_WIDTH\\_PORTRAIT \(page 376\)](#)

[XS\\_PRINT\\_REPORT\\_PAGE\\_HEIGHT\\_LANDSCAPE \(page 376\)](#)

[XS\\_PRINT\\_REPORT\\_PAGE\\_HEIGHT\\_PORTRAIT \(page 377\)](#)

## 18.38 XS\_PRINT\_REPORT\_LINE\_WIDTH\_PORTRAIT

Category in [Advanced options dialog \(page 29\)](#): **Templates and symbols**

Use this advanced option to specify the number of characters per row in reports printed in portrait orientation. The default value is 80.

This advanced option is model specific and the setting is saved in the options database.

### See also

[XS\\_PRINT\\_REPORT\\_LINE\\_WIDTH\\_LANDSCAPE \(page 375\)](#)

[XS\\_PRINT\\_REPORT\\_PAGE\\_HEIGHT\\_LANDSCAPE \(page 376\)](#)

[XS\\_PRINT\\_REPORT\\_PAGE\\_HEIGHT\\_PORTRAIT \(page 377\)](#)

## 18.39 XS\_PRINT\_REPORT\_PAGE\_HEIGHT\_LANDSCAPE

Category in [Advanced options dialog \(page 29\)](#): **Templates and symbols**

Use this advanced option to specify the number of rows in printed reports with landscape orientation. The default value is 42.

This advanced option is model specific and the setting is saved in the options database.

### See also

[XS\\_PRINT\\_REPORT\\_LINE\\_WIDTH\\_LANDSCAPE \(page 375\)](#)

[XS\\_PRINT\\_REPORT\\_LINE\\_WIDTH\\_PORTRAIT \(page 376\)](#)

[XS\\_PRINT\\_REPORT\\_PAGE\\_HEIGHT\\_PORTRAIT \(page 377\)](#)

## 18.40 XS\_PRINT\_REPORT\_PAGE\_HEIGHT\_PORTRAIT

Category in [Advanced options dialog \(page 29\)](#): **Templates and symbols**

Use this advanced option to specify the number of rows in printed reports with portrait orientation. The default value is 62.

This advanced option is model specific and the setting is saved in the options database.

### See also

[XS\\_PRINT\\_REPORT\\_LINE\\_WIDTH\\_LANDSCAPE \(page 375\)](#)

[XS\\_PRINT\\_REPORT\\_LINE\\_WIDTH\\_PORTRAIT \(page 376\)](#)

[XS\\_PRINT\\_REPORT\\_PAGE\\_HEIGHT\\_LANDSCAPE \(page 376\)](#)

## 18.41 XS\_PRODUCT\_IDENTIFIER

Category in [Advanced options dialog \(page 29\)](#): **Drawing views**

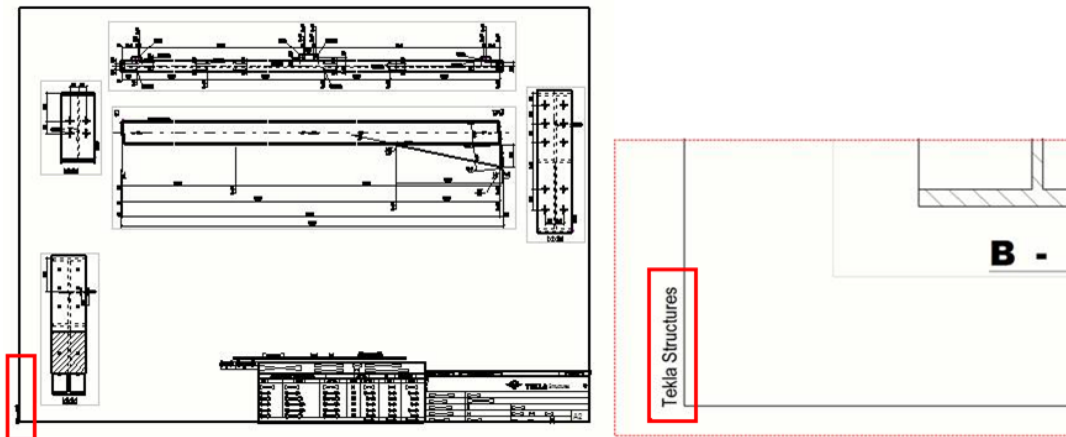
To make it clear with which software a project has been modeled (old XSteel, other detailing systems, or Tekla Structures) and reinforce the Tekla Structures brand, you can add a Tekla Structures product identifier to the side of every drawing. The product identifier will help promote the image of your company as a forward thinking company that uses the latest and most advanced technologies and techniques.

You can use the following values to change the position of the product identifier or turn it off: DX and DY offset, `FALSE`, and `TRUE` (default).

- If you do not want to use the product identifier, set this advanced option to `FALSE`.
- If you want to move the identifier, enter millimeter values separated by a comma (,) for both the X and Y directions.

For example, `-5, 10` will move the text 5 millimeters to the left and 10 millimeters up.

This advanced option is model specific and the setting is saved in the options database.



## 18.42 XS\_PROFDB

### Category in [Advanced options dialog \(page 29\)](#): File locations

Use this advanced option to point to the profile folder which Tekla Structures searches for profile, material, device, and bolt catalogs.

You can store several catalogs in different locations, so it is important to know which catalog you are using.

This is a system-specific advanced option.

## 18.43 XS\_PROFILE\_ANALYSIS\_CHECK\_ALL

### Category in [Advanced options dialog \(page 29\)](#): Analysis and design

In the **Modify Profile Catalog** dialog, you can enter analysis values for each profile. When you run the structural analysis, the analysis applications that use the COM link calculate the analysis values and compare them to the values in the Tekla Structures profile catalog. If the analysis application finds the values in the profile catalog, it uses the catalog values.

To check the profile catalog for analysis values for all profiles, set the following advanced options to `TRUE` before you run the analysis:

- `XS_PROFILE_ANALYSIS_CHECK_ALL`
- `XS_AD_OPTIMISATION_DISABLED`

The default value is `FALSE`.

This advanced option is user specific and the setting is saved in `options.bin` under the user folder,

for example, in C:\Users\\AppData\Local\Trimble\Tekla Structures\\UserSettings. Restart Tekla Structures to activate the new value.

If the profile catalog value differs significantly from the value the analysis application calculates, Tekla Structures writes a warning in the analysis log file. Use the advanced option `XS_PROFILE_ANALYSIS_VALUE_DIFF_LIMIT` to define the warning limit.

#### See also

[XS\\_PROFILE\\_ANALYSIS\\_VALUE\\_DIFF\\_LIMIT \(page 379\)](#)

[XS\\_AD\\_OPTIMISATION\\_DISABLED \(page 40\)](#)

## 18.44 XS\_PROFILE\_ANALYSIS\_VALUE\_DIFF\_LIMIT

Category in [Advanced options dialog \(page 29\)](#): Analysis and design

This advanced option sets the warning limit as a percentage when checking profile catalog analysis values. The default value is 5.5 (%).

This advanced option is user specific and the setting is saved in `options.bin` under the user folder, for example, in C:\Users\\AppData\Local\Trimble\Tekla Structures\\UserSettings. Restart Tekla Structures to activate the new value.

#### See also

[XS\\_PROFILE\\_ANALYSIS\\_CHECK\\_ALL \(page 378\)](#)

## 18.45 XS\_PROFILE\_DISPLAY\_INCH\_MARK\_AFTER\_FRACTIONS\_IN\_REPORTS

Category in [Advanced options dialog \(page 29\)](#): Imperial units

Use this advanced option to define the location of the inch mark in profile lengths in reports.

To display the inch mark after the fractions (for example, PL1"X18 1/2"), enter `TRUE`. To display the inch mark before the fractions (for example, PL1"X18"1/2), enter `FALSE`.

The inch mark is displayed after the fractions by default (`TRUE`).

This advanced option is user specific and the setting is saved in `options.bin` under the user folder,

for example, in C:\Users\\AppData\Local\Trimble\Tekla Structures\\UserSettings. Restart Tekla Structures to activate the new value.

**See also**

[XSR\\_SHOW\\_INCH\\_MARK\\_IN\\_PROFILE\\_NAMES \(page 455\)](#)

## 18.46 XS\_PROJECT

Category in [Advanced options dialog \(page 29\)](#): File locations

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**NOTE** This advanced option is only meant for administrators.

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Set the advanced options XS\_PROJECT and XS\_FIRM, along with XS\_SYSTEM, to point to the folders Tekla Structures searches for properties files. Tekla Structures always saves properties in the current <model>\attributes folder. You can then copy or move them to the XS\_FIRM or the XS\_PROJECT folders if the same settings are needed in other models. You can also create user-defined sub-folders under the XS\_FIRM and the XS\_PROJECT folders, and copy or move property files from the <model>\attributes folder to these sub-folders.

You can also use a Trimble Connect project as the project or the firm folder.

This advanced option is model specific and the setting is saved in the options database.

---

**WARNING** Changing an advanced option value in .ini files located outside the model folder does not affect the existing models. You can only update advanced options in the **Advanced Options** dialog or in the options.ini file located in model folder; not from an options.ini file located in folders defined for the advanced options XS\_FIRM or XS\_PROJECT. The .ini files are read also when you open an existing model, but only new advanced options that do not exist in options\_model.db or options\_drawings.db are inserted, for example, such options that are not yet in the **Advanced Options** dialog but have been added in the software.

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## 18.47 XS\_PROTECT\_SYMBOLS

Category in [Advanced options dialog \(page 29\)](#): **Drawing properties**

Set this advanced option to `TRUE` to prevent Tekla Structures from drawing objects on top of symbols. If you set it to `FALSE`, symbols are not protected. The default value is `FALSE`.

This advanced option is model specific and the setting is saved in the options database.

# 19 Advanced options - R

## 19.1 XS\_RADIUS\_TEXT\_IN\_UNFOLDING\_BENDING\_LINE\_DIMENSIONING

Category in [Advanced options dialog \(page 29\)](#): **Dimensioning - unfolding**

Use this advanced option to set prefix text for radii. Enter any text, for example, R=. By default, there is no prefix for radius in bending line dimensioning.

This advanced option is model specific and the setting is saved in the options database.

## 19.2 XSR\_BOLT\_LENGTH\_USE\_ONLY\_INCHES

Category in [Advanced options dialog \(page 29\)](#): **Templates and symbols**

Set this advanced option to `TRUE` to prevent the advanced option `XSR_USE_ZERO_FEET_VALUE` from affecting bolt length in bolt marks. If you want `XSR_USE_ZERO_FEET_VALUE` to affect bolt length in bolt marks, set it to `FALSE`. The default value is `FALSE`.

This advanced option is model specific and the setting is saved in the options database.

### See also

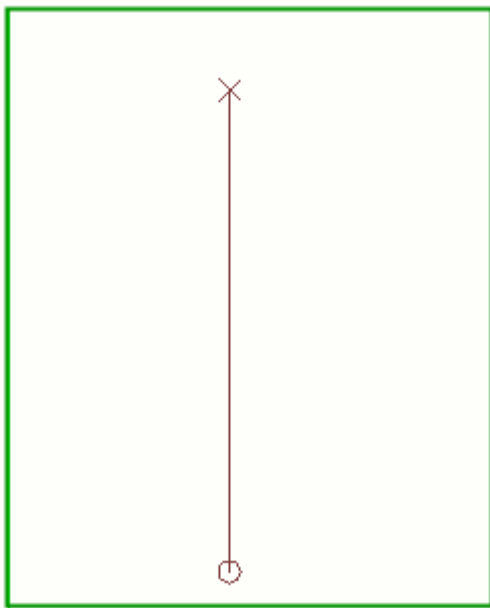
[XSR\\_USE\\_ZERO\\_FEET\\_VALUE \(page 424\)](#)

## 19.3 XS\_REBAR\_BEND\_MARK\_SYMBOL\_MIN\_SIZE

Category in [Advanced options dialog \(page 29\)](#): **Concrete detailing**

Use this advanced option to increase the size of the reinforcing bar bend symbols in drawings (in drawing units) in order to see them more clearly. The default value is 1.

The value set for this advanced option is multiplied by the view scale. If the resulting value is bigger than the default size (diameter of the reinforcing bar), then it will be used as the symbol size. Otherwise the default value is used. This means that to make the symbol as small as possible, leave the value out or use zero (0).



This advanced option can be used together with the advanced option `XS_REBAR_END_SYMBOL_MIN_SIZE`, which is used for increasing the size of the reinforcing bar end symbols.

This advanced option is model specific and the setting is saved in the options database.

### See also

Define automatic reinforcement and mesh properties

[XS\\_REBAR\\_END\\_SYMBOL\\_MIN\\_SIZE \(page 387\)](#)

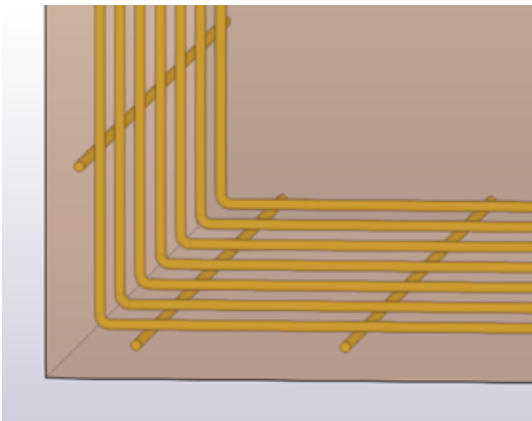
## 19.4 XS\_BEBAR\_BENT\_MESH\_PULLOUT\_DIMENSIONS\_INCLUDE\_LONGITUDINAL\_BARS

Category in [Advanced options dialog \(page 29\)](#) Drawing properties

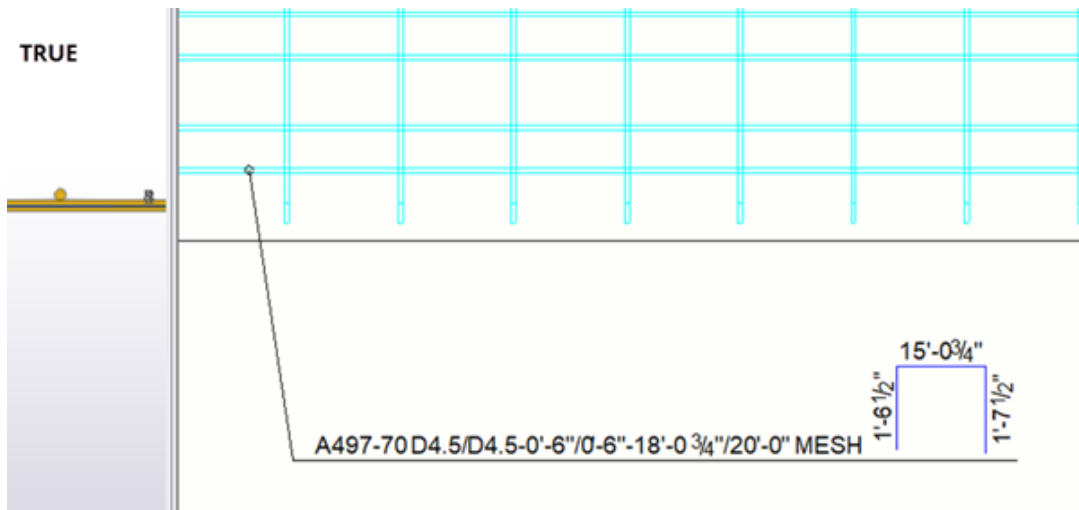
This advanced option controls whether longitudinal bars are taken into account in the dimensions shown in a rebar pull-out picture for a bent mesh. Set this advanced option to `TRUE` to take into account the longitudinal bars, and `FALSE` to ignore them. `TRUE` is the default value. This advanced option affects pull-out pictures in marks and templates.

This advanced option is model specific and the setting is saved in the options database.

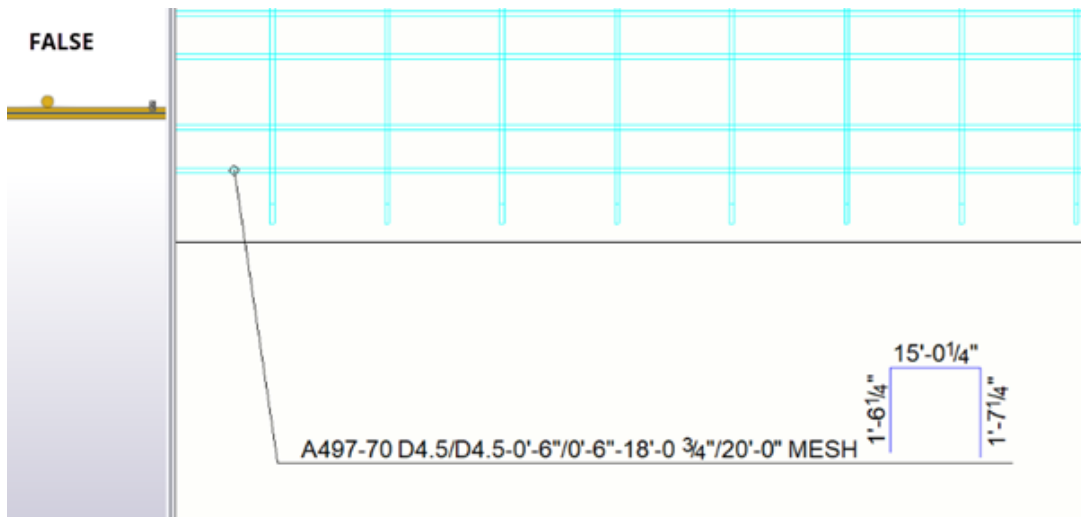
Below is an example of a bent mesh, which has longitudinal bars outside of crossing bars.



In the example below, longitudinal bars are taken into account in dimensions.



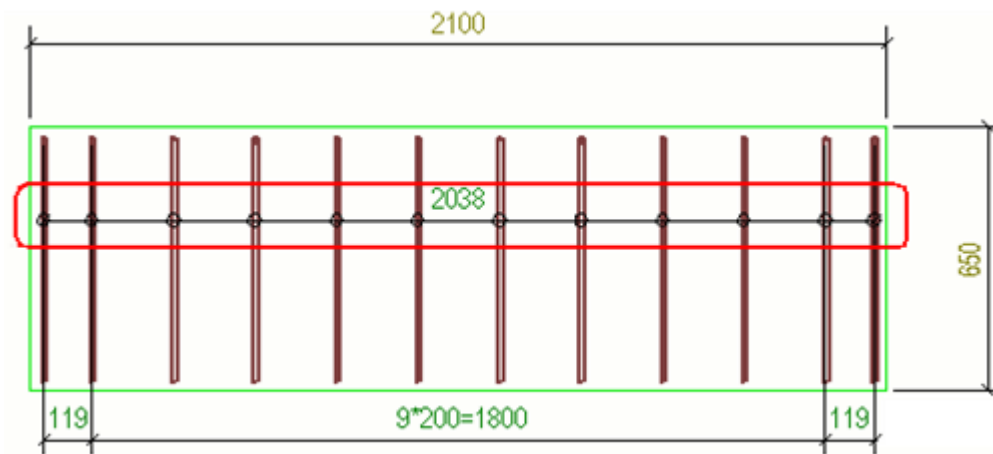
In the example below, longitudinal bars are not taken into account in dimensions.



## 19.5 XS\_REBAR\_DIMENSION\_LINE\_SYMBOL

**This advanced option must be set in an initialization (.ini) file.** Add this advanced option in the `options.ini` file under model folder.

Use this advanced option to change the reinforcing bar group dimension (distribution) line symbol. You can create the dimension line by right-clicking the reinforcing bar group and selecting **Dimension mark**. The default value is `xsteel@16`, where `xsteel` is the name of the symbol file, and 16 is the running number of the symbol.



## 19.6 XS\_REBAR\_END\_SPECIFIC\_UDA\_METHOD

Category in [Advanced options dialog \(page 29\)](#): Concrete detailing

Use this advanced option to control which user-defined attributes (UDAs) rebar set end detail modifiers and **Rebar coupler and anchor tools** add to reinforcing bars for **End preparation** properties. The options are start leg and end leg UDAs, or short leg and long leg UDAs.

If you use the default value `START_AND_END` for this advanced option, Tekla Structures creates start leg and end leg UDAs. These UDAs have a `_START` or `_END` suffix in drawing and report templates.

If you set this advanced option to `SHORT_AND_LONG`, Tekla Structures creates short leg and long leg UDAs. These UDAs have an `_S` or `_L` suffix in drawing and report templates.

When you select a value for this advanced option, consider the following:

- Start leg and end leg UDAs rely on the physical locations in the model. Using them is a good idea if you want to make sure that changes in the bars in the model do not affect UDA information.
- For bars in tapered groups, the short leg and the long leg might change places in the middle of the group.



- The first and last legs might have the same length. With symmetric bending shapes it does not matter, but with unsymmetrical bending shapes it does.

- NOTE**
- When you open a model created with a previous version of Tekla Structures, remember to check and, if needed, change the value of this advanced option.
  - We do not recommend that you change the value of this advanced option during a project. If you do so, you must save and close the model and open it again to activate the new value.
  - This advanced option overrides the suffixes defined in the `RebarCoupler.Udas.dat` file. Regardless of which suffixes are

defined in the file, they will be replaced based on the value of this advanced option.

---

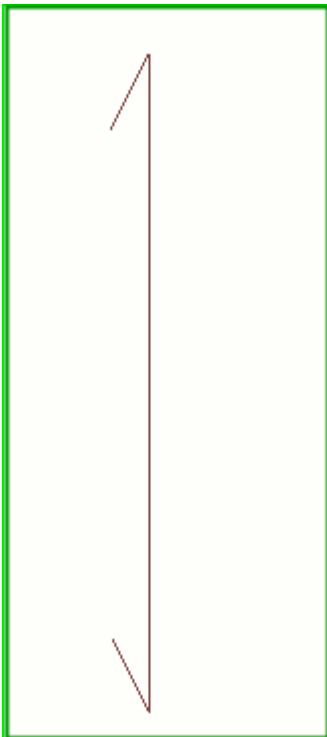
This advanced option is model specific and the setting is saved in the options database.

## 19.7 XS\_REBAR\_END\_SYMBOL\_MIN\_SIZE

**Category in [Advanced options dialog \(page 29\)](#): Concrete detailing**

Use this advanced option to increase the size of the reinforcing bar end symbols in drawings (in drawing units) in order to see them more clearly. Works for 45 or 135 degree symbols. The default value is 2.

The value set for this advanced option is multiplied by the view scale. If the resulting value is bigger than the default size (diameter of the reinforcing bar), then it will be used as the symbol size. Otherwise the default value is used. This means that to make the symbol as small as possible, leave the value out or use zero (0).



This advanced option can be used together with the advanced option `XS_REBAR_BEND_MARK_SYMBOL_MIN_SIZE`, which is used for increasing the size of the reinforcing bar bend symbols.

This advanced option is model specific and the setting is saved in the options database.

## See also

[XS\\_REBAR\\_REVERSE\\_END\\_SYMBOLS \(page 393\)](#)

Define automatic reinforcement and reinforcement mesh properties

[XS\\_REBAR\\_BEND\\_MARK\\_SYMBOL\\_MIN\\_SIZE \(page 382\)](#)

## 19.8 XS\_REBAR\_GEOMETRY\_TYPE\_IN\_NUMBERING

### Category in [Advanced options dialog \(page 29\)](#): Numbering

Use this advanced option to specify how the geometry of reinforcing bars is taken into account in numbering and which type of bar geometry is used when bars are compared with each other.

The options are:

- **POLYLINE**: The modeled, polyline geometry of bars is used in numbering.

With this option, numbering works the same way as prior to Tekla Structures 2023 SP1, and as in the Tekla Structures 2023 service packs where this option was the default value.

- **RATIONALIZED**: With the rationalized geometry, segmented arcs in bars are converted to true arcs in rebar shape recognition, and the true arcs are then used in numbering.

You can control the rationalization accuracy using the [Curve tolerance \(page 391\)](#) and [Extra point shortening \(page 392\)](#) settings.

Note that with the **RATIONALIZED** option the **Max curve radius requiring bending** settings and the **Recognize as straight bar** UDA are not taken into account in numbering. This means that bars with arcs might be treated differently in reporting and in numbering.

- **FABRICATION**: With the fabrication geometry that works on top of the rationalized geometry, arcs in bars might be recognized as straight legs in rebar shape recognition, depending on the [Max curve radius requiring bending \(page 393\)](#) settings. Bars that have the **Recognize as straight bar** UDA set to **Yes** are also recognized as straight.

Starting from Tekla Structures 2024, this option is the default value.

With the **RATIONALIZED** or **FABRICATION** option, the selected bar geometry is also used in cast unit numbering if the **Reinforcing bars** checkbox is selected in the **Numbering Setup** dialog.

This advanced option is model specific and the setting is saved in the options database.

---

**NOTE** We do not recommend that you change this setting during a project. If you do so, you must clear the rebar position numbers and then number the bars again.

---

## 19.9 XS\_REBAR\_MARK\_LEADER\_LINE\_BASE\_POINT\_SEARCH\_STEP\_LENGTH

Category in [Advanced options dialog \(page 29\)](#): **Concrete detailing**

Use this advanced option to define the step length while searching for an optimal place for the rebar mark leader line base point along the reinforcing bar. Enter the value in millimeters using decimals. The default value is 20.0.

This advanced option is model specific and the setting is saved in the options database.

## 19.10 XS\_REBAR\_MARK\_LEADER\_LINE\_BASE\_POINT\_SEARCH\_TOLERANCE

Category in [Advanced options dialog \(page 29\)](#): **Concrete detailing**

Use this advanced option to define how far the other reinforcing bars must be from the base point so that Tekla Structures can place the base point. Enter the value in millimeters using decimals. The default value is 10.0.

This advanced option is model specific and the setting is saved in the options database.

## 19.11 XS\_REBAR\_POSITION\_NUMBER\_FORMAT\_STRING

Category in [Advanced options dialog \(page 29\)](#): **Numbering**

Use this advanced option to define the contents of the reinforcing bar position numbers. You can also change or remove the separator and affect how many numbers are used to represent the reinforcing bar position number. If you change the value, you need to renumber the model.

Use the following options or a combination of them:

| Option                   | Description   |
|--------------------------|---|
| %PART_PREFIX%            | The prefix of the position number of the part that contains the reinforcing bar.  |
| %PART_START_NUMBER%      | The start number of the position number of the part that contains the reinforcing bar.  |
| %REBAR_PREFIX%           | The prefix of the position number of the reinforcing bar.   |
| %REBAR_SERIAL_NUMBER%    | The position number without the prefix of the reinforcing bar.  |
| %REBAR_SEQ_POS%          | The sequence number of the reinforcing bar.   |
| %REBAR_POS%              | This is no longer used. Use %REBAR_SERIAL_NUMBER% instead.  |
| %REBAR_SIZE%             | The size of the reinforcing bar with the possible size prefix.<br><br>For example, in the US environments the size prefix is #. |
| %REBAR_SIZE_NUMBER%      | The size of the reinforcing bar without the size prefix.  |
| %CAST_UNIT_PREFIX%       | The prefix of the position number of the cast unit that contains the reinforcing bar.   |
| %CAST_UNIT_START_NUMBER% | The start number of the position number of the cast unit that contains the reinforcing bar.                                     |

This advanced option is model specific and the setting is saved in the options database.

### Example

In the reinforcing bar properties, the **Prefix** is set to R, the **Start number** is set to 1, and the **Size** is set to #6.

- If you set the advanced option to %REBAR\_SIZE%%REBAR\_PREFIX%  
%REBAR\_SERIAL\_NUMBER.3%, the result for the first reinforcing bar will be #6R001.
- If you set the advanced option to %REBAR\_SIZE\_NUMBER%  
%REBAR\_PREFIX%%REBAR\_SERIAL\_NUMBER.3% and number the model, the result for the first reinforcing bar is 6R001.

## 19.12 XS\_REBAR\_PULLOUT\_ANGLE\_TEXT\_FRAME

**Category in [Advanced options dialog \(page 29\)](#): Concrete detailing**

Use this advanced option to turn off the text frame around the angle text in pull-out pictures. By default, this advanced option is set to `FALSE`, and no frame is drawn. If you set this advanced option to `TRUE`, the frame is drawn.

If you have set `XS_REBAR_PULLOUT_ANGLE_TEXT_UNDERLINE` to `TRUE`, then the advanced option `XS_REBAR_PULLOUT_ANGLE_TEXT_FRAME` is ignored.

This advanced option is model specific and the setting is saved in the options database.

**See also**

[XS\\_REBAR\\_PULLOUT\\_ANGLE\\_TEXT\\_UNDERLINE \(page 391\)](#)

## 19.13 XS\_REBAR\_PULLOUT\_ANGLE\_TEXT\_UNDERLINE

**Category in [Advanced options dialog \(page 29\)](#): Concrete detailing**

Set this advanced option to `TRUE` to draw an line under the angle text in pull-outs. If you set it to `TRUE`, then the advanced option `XS_REBAR_PULLOUT_ANGLE_TEXT_FRAME` is ignored. By default, this advanced option is set to `FALSE`, and no underline is drawn.

This advanced option is model specific and the setting is saved in the options database.

**See also**

[XS\\_REBAR\\_PULLOUT\\_ANGLE\\_TEXT\\_FRAME \(page 390\)](#)

## 19.14 XS\_REBAR\_RECOGNITION\_CURVE\_TOLERANCE

**Category in [Advanced options dialog \(page 29\)](#): Concrete detailing**

Use this advanced option to set the default value for **Curve tolerance** that is used in rebar shape recognition.

You can use **Curve tolerance** to define whether multiple sequential bendings that are forming an arc in a reinforcing bar are combined into one or more bendings (90 degrees or less) with the arc radius as the bending radius.

If the deviation of a bar leg from the arc is less than the tolerance, bendings are combined.

If the deviation is more than the tolerance, or if **Curve tolerance** is set to 0, bendings are not combined.

The default value is 12.7 mm.

This advanced option is model specific and the setting is saved in the options database.

If needed, you can override this setting by modifying rebar definitions in the rebar catalog (`rebar_database.inp`) or by using the **Shape recognition** user-defined attributes of individual reinforcement objects.

### See also

[XS\\_REBAR\\_RECOGNITION\\_EXTRA\\_POINT\\_SHORTENING \(page 392\)](#)

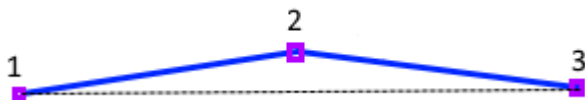
[XS\\_REBAR\\_RECOGNITION\\_MAXCURVE \(page 393\)](#)

## 19.15 XS\_REBAR\_RECOGNITION\_EXTRA\_POINT\_SHORTENING

Category in [Advanced options dialog \(page 29\)](#): **Concrete detailing**

Use this advanced option to set the default value for **Extra point shortening** that is used in rebar shape recognition and when reinforcing bars in rebar sets are generated.

**Extra point shortening** is used for defining whether two reinforcing bar legs ('1-2' and '2-3' in the image below) can be considered as one leg ('1-3').



Define the maximum allowed difference between the distances '1-3' and '1-2' + '2-3'.

The default value is 0.3 mm. The maximum value that you can use is 2.56 mm.

This advanced option is model specific and the setting is saved in the options database.

If needed, you can override this setting by modifying rebar definitions in the rebar catalog (`rebar_database.inp`) or by using the **Shape recognition** user-defined attributes of individual reinforcement objects.

### See also

[XS\\_REBAR\\_RECOGNITION\\_CURVE\\_TOLERANCE \(page 391\)](#)

[XS\\_REBAR\\_RECOGNITION\\_MAXCURVE \(page 393\)](#)

## 19.16 XS\_REBAR\_RECOGNITION\_HOOKS\_CONSIDERATION

Category in [Advanced options dialog \(page 29\)](#): **Concrete detailing**

Set this advanced option to `FALSE` to have Tekla Structures ignore hooks when it checks the shape of reinforcing bars, and to have Tekla Structures assign the same bending type to bars with and without hooks.

Set this advanced option to `TRUE` to have Tekla Structures take the hooks into account and to treat bars with or without hooks, or with different hooks, as different.

The default value is `TRUE`.

This advanced option is model specific and the setting is saved in the options database.

## 19.17 XS\_REBAR\_RECOGNITION\_MAXCURVE

Category in [Advanced options dialog \(page 29\)](#): **Concrete detailing**

Use this advanced option to set the default value for **Max curve radius requiring bending** that is used in rebar shape recognition.

**Max curve radius requiring bending** sets the maximum inner radius of an arc leg. Arc legs that exceed this maximum radius are treated as straight legs and do not need to be prebent in fabrication. On site these straight legs will again take the form of an arc when the bars are fixed.

The default value is 304800 mm.

This advanced option is model specific and the setting is saved in the options database.

If needed, you can override this setting by modifying rebar definitions in the rebar catalog (`rebar_database.inp`) or by using the **Shape recognition** user-defined attributes of individual reinforcement objects.

The thicker the bars, the larger the **Max curve radius requiring bending** value should be. For thin bars that can be bent on site, the value can be smaller.

### See also

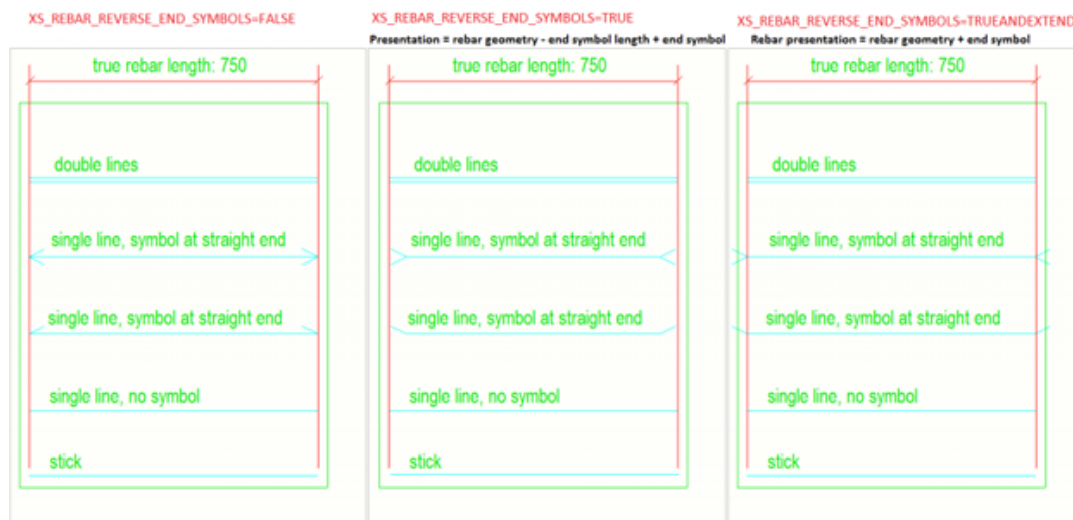
[XS\\_REBAR\\_RECOGNITION\\_CURVE\\_TOLERANCE \(page 391\)](#)

[XS\\_REBAR\\_RECOGNITION\\_EXTRA\\_POINT\\_SHORTENING \(page 392\)](#)

## 19.18 XS\_REBAR\_REVERSE\_END\_SYMBOLS

Category in [Advanced options dialog \(page 29\)](#): **Concrete detailing**

Use this advanced option to reverse the reinforcing bar end symbols to a different direction. When this advanced option is set to `TRUE`, the end symbol is drawn at a 135 degree angle (used commonly in Norway). If you use single line visualization and no symbol at straight end, use the value `TRUEANDEXTEND`. If you use `TRUE` for these kinds of reinforcing bars, they will be drawn too short. The default value is `FALSE`.



This advanced option is role specific. When the type **SYSTEM(ROLE)** is in use, the default value is used. When the type **MODEL(ROLE)** or **DRAWING(ROLE)** is in use, you can change the value, which is then the same for all users in the current model.

**See also**

[XS\\_REBAR\\_END\\_SYMBOL\\_MIN\\_SIZE \(page 387\)](#)

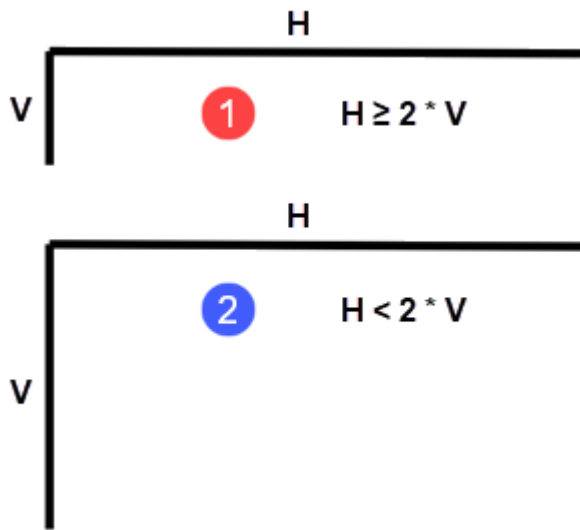
## 19.19 XS\_REBAR\_VERTICAL\_FACTOR

**This advanced option must be set in an initialization (.ini) file.**

When you create or modify a rebar set, Tekla Structures automatically attaches each bar in the rebar set to a concrete part. This concrete part is the parent part of the rebar set bar, and it is chosen according to a certain algorithm.

This advanced option sets a factor that can be used in fine-tuning which rebar set bars are considered horizontal, even though their bar planes are vertical. The default value for this factor is 2.

If a bar's overall horizontal extent **H** is longer than or equal to its overall vertical extent **V** multiplied by the default factor of 2, the bar is considered horizontal. Otherwise the bar is considered vertical.



(1) = horizontal bar, (2) = vertical bar

In general, a bar in a rebar set is considered horizontal if:

$$H \geq \text{XS\_REBAR\_VERTICAL\_FACTOR} * V$$

## 19.20 XS\_REBARSET\_BUFFER\_SIZE

Category in [Advanced options dialog \(page 29\)](#): Speed and accuracy

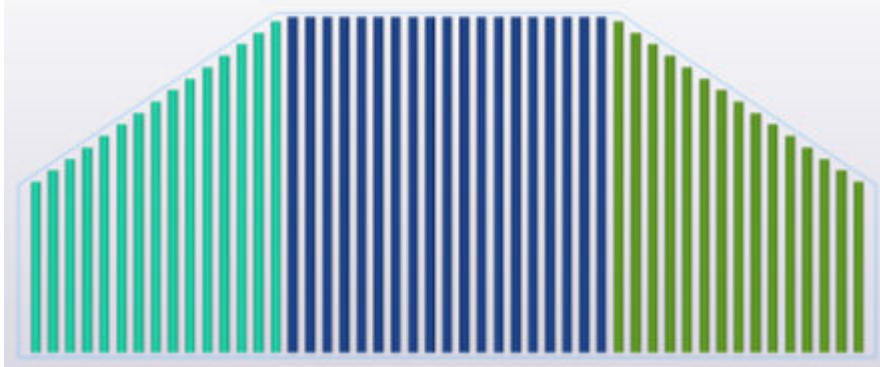
This advanced option defines the size of the memory cache used to store rebar set bars. When you increase the size, more rebar set bars can be kept in memory. This means that the rebar set bars are not regenerated so frequently, which will improve the performance. For optimum performance, the size should be greater or equal to the number of rebar set bars in the model.

This advanced option is user specific and the setting is saved in `options.bin` under the user folder, for example, in `C:\Users\\AppData\Local\Trimble\Tekla Structures\\UserSettings`. Restart Tekla Structures to activate the new value.

## 19.21 XS\_REBARSET\_COLOR\_BARGROUPS

Category in [Advanced options dialog \(page 29\)](#): **Concrete detailing**

Set this advanced option to `TRUE` to show bar groups within a rebar set using different colors in model views. For example:



When you set this advanced option to `TRUE`, the reinforcing bars in rebar sets will not be colored by class.

The default value is `FALSE`.

This advanced option is model specific and the setting is saved in the options database.

After changing the setting of this advanced option in the **Advanced options** dialog, redraw the model views.

---

**TIP** To quickly switch between the values `TRUE` and `FALSE`, go to the **Rebar** tab on the ribbon and click **Visibility** --> **Color groups**, or use the keyboard shortcut **Alt+7**.

---

## 19.22 XS\_REBARSET\_CREATION\_ANGLE\_TOLERANCE\_FOR\_CROSSING\_REBARS

Category in [Advanced options dialog \(page 29\)](#): **Concrete detailing**

Use this advanced option to define the tolerance for the angle between consecutive part faces when the rebar set bars are created. If the angle between a part face and the extension of the previous part face is less than the value of this advanced option, a rebar set leg face is created at the part face.

This advanced option applies to the rebar sets when they are created using the **Create crossing rebars** command. The default value is 45 (degrees).

This advanced option is model specific and the setting is saved in the options database.

**See also**

[XS\\_REBARSET\\_CREATION\\_ANGLE\\_TOLERANCE\\_FOR\\_LONGITUDINAL\\_REBARS](#)  
(page 397)

## 19.23 XS\_REBARSET\_CREATION\_ANGLE\_TOLERANCE\_FOR\_LONGITUDINAL\_REBARS

**Category in [Advanced options dialog \(page 29\)](#): Concrete detailing**

Use this advanced option to define the tolerance for the angle between consecutive part faces when the rebar set bars are created. If the angle between a part face and the extension of the previous part face is less than the value of this advanced option, a rebar set leg face is created at the part face.

This advanced option applies to the rebar sets when they are created using the **Create longitudinal rebars** command. The default value is 45 (degrees).

This advanced option is model specific and the setting is saved in the options database.

**See also**

[XS\\_REBARSET\\_CREATION\\_ANGLE\\_TOLERANCE\\_FOR\\_CROSSING\\_REBARS](#)  
(page 396)

## 19.24 XS\_REBARSET\_ENABLE\_BAR\_GROUPING\_WHEN\_SPACING\_DIFFERS

**Category in [Advanced options dialog \(page 29\)](#): Concrete detailing**

Use this advanced option to define whether spacing affects how reinforcing bars are grouped in rebar sets.

The default value is `TRUE`, which means that similar bars in adjacent spacing zones in a rebar set are grouped even when the spacing differs.

If this advanced option is set to `FALSE`, each spacing zone in a rebar set automatically creates a separate group.

This advanced option is model specific and the setting is saved in the options database.

After changing the setting of this advanced option, you need to update the existing rebar sets in the model. On the **Rebar** tab on the ribbon, click **More** --> **Regenerate** to activate the new setting.

## 19.25 XS\_REBARSET\_LEG\_CONNECTION\_TOLERANCE

**Category in [Advanced options dialog \(page 29\)](#): Concrete detailing**

Use this advanced option to connect rebar set bar legs together even though the leg face edges do not overlap exactly. Define the maximum gap between the leg faces that are automatically connected. If the value is bigger than the existing gap, the gap is ignored and the bar legs are connected.

The default value is 1.0 mm.

This advanced option is model specific and the setting is saved in the options database.

After changing the value of this advanced option, you need to update the existing rebar sets in the model. On the **Rebar** tab on the ribbon, click **More** --> **Regenerate** to activate the new value.

## 19.26 XS\_REBARSET\_MINIMUM\_BENDING\_ANGLE

**Category in [Advanced options dialog \(page 29\)](#): Concrete detailing**

Use this advanced option to control how small an angle is allowable between adjacent legs in a rebar set bar.

The default value is 0.1 degrees.

This advanced option is model specific and the setting is saved in the options database.

## 19.27 XS\_REBARSET\_MINIMUM\_LEG\_DEVIATION

**Category in [Advanced options dialog \(page 29\)](#): Concrete detailing**

Use this advanced option to define whether rounding settings are applied to certain reinforcing bar legs in rebar sets or not.

Tekla Structures compares each bar leg to a straight line. If the deviation of a leg from the line is less than the value of this advanced option, the leg is considered to be a part of a curved bar segment and the leg length is not rounded.

If the deviation is more than the value of this advanced option, Tekla Structures considers the leg to be a straight bar segment and then rounds the leg length according to the rounding settings.

Enter the value in millimeters. The default value is 10.

This advanced option is model specific and the setting is saved in the options database.

## 19.28 XS\_REBARSET\_REBAR\_LAYER\_FORMAT\_STRING

Category in [Advanced options dialog \(page 29\)](#): Concrete detailing

Use this advanced option to define the contents of the template attribute LAYER.

The default value is %LAYER\_PREFIX%%LAYER\_NUMBER%, for example T2 for the second layer of top bars.

This advanced option is model specific and the setting is saved in the options database.

## 19.29 XS\_REBARSET\_ROUNDING\_TOLERANCE

Category in [Advanced options dialog \(page 29\)](#): Concrete detailing

Tekla Structures applies a rounding tolerance before rounding the leg lengths in rebar sets. Using a rounding tolerance prevents unnecessarily changing the bar dimensions when they are very close to a whole number. The tolerance is added to each leg length before the leg length is rounded down, or subtracted before rounding up.

Use this advanced option to modify the rounding tolerance. The default value is 0.5 mm.

This advanced option is model specific and the setting is saved in the options database.

After changing the value of this advanced option, update the existing rebar sets in the model. Reopen the model, or on the **Rebar** tab on the ribbon, click **More** --> **Regenerate** to activate the new value. The leg lengths of existing rebar set bars might change.

## Example

The original leg lengths of a bar are 929.98 mm and 324.60 mm before rounding, and the rounding setting is **Down** 5 mm for the leg lengths.



- If the rounding tolerance is 0.001, the leg lengths are rounded down to 925 and 320.
- If the rounding tolerance is 0.5, the leg lengths are rounded to 930 and 325. These whole numbers are used because the difference from the original leg lengths is less than the rounding tolerance.

## 19.30 XS\_REBARSET\_SHOW\_END\_DETAIL\_MODIFIERS

Category in [Advanced options dialog \(page 29\)](#): **Concrete detailing**

Set this advanced option to `TRUE` to show the rebar set end detail modifiers when you select rebar set bars in the model.

If this advanced option is set to `FALSE`, end detail modifiers are not shown when you select rebar set bars.

The default value is `TRUE`.

This advanced option is model specific and the setting is saved in the options database.

---

**TIP** To quickly switch between the values `TRUE` and `FALSE`, go to the **Rebar** tab on the ribbon and click **Visibility** --> **End detail modifiers**, or use the keyboard shortcut **Alt+5**.

---

### See also

[XS\\_REBARSET\\_SHOW\\_PROPERTY\\_MODIFIERS \(page 402\)](#)

[XS\\_REBARSET\\_SHOW\\_SPLITTERS \(page 403\)](#)

[XS\\_REBARSET\\_SHOW\\_GUIDELINES \(page 401\)](#)

[XS\\_REBARSET\\_SHOW\\_MODIFIERS\\_CREATED\\_BY\\_COMPONENTS \(page 402\)](#)

## 19.31 XS\_REBARSET\_SHOW\_GUIDELINES

**Category in [Advanced options dialog \(page 29\)](#): Concrete detailing**

Set this advanced option to `TRUE` to show the rebar set guidelines when you select rebar set bars in the model.

If this advanced option is set to `FALSE`, rebar set guidelines are not shown when you select rebar set bars.

The default value is `TRUE`.

This advanced option is model specific and the setting is saved in the options database.

---

**TIP** To quickly switch between the values `TRUE` and `FALSE`, go to the **Rebar** tab on the ribbon and click **Visibility --> Guidelines**, or use the keyboard shortcut **Alt+2**.

---

### See also

[XS\\_REBARSET\\_SHOW\\_PROPERTY\\_MODIFIERS \(page 402\)](#)

[XS\\_REBARSET\\_SHOW\\_END\\_DETAIL\\_MODIFIERS \(page 400\)](#)

[XS\\_REBARSET\\_SHOW\\_SPLITTERS \(page 403\)](#)

[XS\\_REBARSET\\_SHOW\\_MODIFIERS\\_CREATED\\_BY\\_COMPONENTS \(page 402\)](#)

## 19.32 XS\_REBARSET\_SHOW\_LEGFACES

**Category in [Advanced options dialog \(page 29\)](#): Concrete detailing**

Set this advanced option to `TRUE` to show the rebar set leg faces and leg surfaces when you select rebar set bars in the model.

If this advanced option is set to `FALSE`, leg faces and leg surfaces are not shown when you select rebar set bars.

The default value is `FALSE`.

This advanced option is model specific and the setting is saved in the options database.

---

**TIP** To quickly switch between the values `TRUE` and `FALSE`, go to the **Rebar** tab on the ribbon and click **Visibility** --> **Leg faces**, or use the keyboard shortcut **Alt+1**.

---

### 19.33 XS\_REBARSET\_SHOW\_MODIFIERS\_CREATED\_BY\_COMPONENTS

Category in [Advanced options dialog \(page 29\)](#): **Concrete detailing**

Use this advanced option to control whether the rebar set modifiers that are created by components are shown or hidden in model views when you select rebar set bars.

The default value is `TRUE`, which means that the modifiers are shown.

Note that if you explode a component that has modifiers, the modifiers will be shown even if this advanced option is set to `FALSE`.

This advanced option does not affect the custom component views.

This advanced option is model specific and the setting is saved in the options database.

### 19.34 XS\_REBARSET\_SHOW\_PROPERTY\_MODIFIERS

Category in [Advanced options dialog \(page 29\)](#): **Concrete detailing**

Set this advanced option to `TRUE` to show the rebar set property modifiers when you select rebar set bars in the model.

If this advanced option is set to `FALSE`, property modifiers are not shown when you select rebar set bars.

The default value is `TRUE`.

This advanced option is model specific and the setting is saved in the options database.

---

**TIP** To quickly switch between the values `TRUE` and `FALSE`, go to the **Rebar** tab on the ribbon and click **Visibility** --> **Property modifiers**, or use the keyboard shortcut **Alt+3**.

---

### See also

[XS\\_REBARSET\\_SHOW\\_END\\_DETAIL\\_MODIFIERS \(page 400\)](#)

[XS\\_REBARSET\\_SHOW\\_SPLITTERS \(page 403\)](#)

[XS\\_REBARSET\\_SHOW\\_GUIDELINES \(page 401\)](#)

[XS\\_REBARSET\\_SHOW\\_MODIFIERS\\_CREATED\\_BY\\_COMPONENTS \(page 402\)](#)

## 19.35 XS\_REBARSET\_SHOW\_SPLITTERS

### Category in [Advanced options dialog \(page 29\)](#): Concrete detailing

Set this advanced option to `TRUE` to show the rebar set splitters when you select rebar set bars in the model.

If this advanced option is set to `FALSE`, splitters are not shown when you select rebar set bars.

The default value is `TRUE`.

This advanced option is model specific and the setting is saved in the options database.

---

**TIP** To quickly switch between the values `TRUE` and `FALSE`, go to the **Rebar** tab on the ribbon and click **Visibility** --> **Splitters**, or use the keyboard shortcut **Alt+4**.

---

### See also

[XS\\_REBARSET\\_SHOW\\_PROPERTY\\_MODIFIERS \(page 402\)](#)

[XS\\_REBARSET\\_SHOW\\_END\\_DETAIL\\_MODIFIERS \(page 400\)](#)

[XS\\_REBARSET\\_SHOW\\_GUIDELINES \(page 401\)](#)

[XS\\_REBARSET\\_SHOW\\_MODIFIERS\\_CREATED\\_BY\\_COMPONENTS \(page 402\)](#)

## 19.36 XS\_REBARSET\_SIMILAR\_GROUPING\_NUMBER

### Category in [Advanced options dialog \(page 29\)](#): Concrete detailing

Use this advanced option to define the minimum number of similar rebar set bars that can be automatically grouped.

The default value is 3.

This advanced option is model specific and the setting is saved in the options database.

After changing the value of this advanced option, you need to update the existing rebar sets in the model. On the **Rebar** tab on the ribbon, click **More** --> **Regenerate** to activate the new value.

If you need to override the value of this advanced option in certain rebar sets, enter a value for **Minimum number of bars in similar group** in the rebar set or property modifier user-defined attributes.

**See also**

[XS\\_REBARSET\\_SIMILAR\\_GROUPING\\_TOLERANCE \(page 404\)](#)

## 19.37 XS\_REBARSET\_SIMILAR\_GROUPING\_TOLERANCE

**Category in [Advanced options dialog \(page 29\)](#): Concrete detailing**

Use this advanced option to define which similar rebar set bars can be automatically grouped. Define the maximum allowed difference in the geometry of the bars that will be grouped.

The default value is 1.0 mm.

This advanced option is model specific and the setting is saved in the options database.

After changing the value of this advanced option, you need to update the existing rebar sets in the model. On the **Rebar** tab on the ribbon, click **More** --> **Regenerate** to activate the new value.

**See also**

[XS\\_REBARSET\\_TAPERED\\_LINEAR\\_GROUPING\\_TOLERANCE \(page 406\)](#)

[XS\\_REBARSET\\_TAPERED\\_CURVED\\_GROUPING\\_TOLERANCE \(page 404\)](#)

[XS\\_REBARSET\\_SIMILAR\\_GROUPING\\_NUMBER \(page 403\)](#)

## 19.38 XS\_REBARSET\_TAPERED\_CURVED\_GROUPING\_TOLERANCE

**Category in [Advanced options dialog \(page 29\)](#): Concrete detailing**

Use this advanced option to define which rebar set bars can automatically form a tapered bar group that follows a curve. Either one end or both ends of the grouped bars can follow a curve. Define the maximum allowed distance of the bar ends from the curve.

The default value is 10 mm.

This advanced option is model specific and the setting is saved in the options database.

After changing the value of this advanced option, you need to update the existing rebar sets in the model. On the **Rebar** tab on the ribbon, click **More** --> **Regenerate** to activate the new value.

If you need to override the value of this advanced option in certain rebar sets, enter a value for **Tapered curved tolerance** in the rebar set or property modifier user-defined attributes.

**See also**

[XS\\_REBARSET\\_TAPERED\\_LINEAR\\_GROUPING\\_TOLERANCE \(page 406\)](#)

[XS\\_REBARSET\\_SIMILAR\\_GROUPING\\_TOLERANCE \(page 404\)](#)

### 19.39 XS\_REBARSET\_TAPERED\_GROUP\_POSITION\_NUMBER\_FORMAT\_STRING

**Category in [Advanced options dialog \(page 29\)](#): Numbering**

Use this advanced option to define the contents of the reinforcement position numbers (GROUP\_POS) in tapered bar groups within rebar sets. You can also change or remove the separator and affect how many numbers are used to represent the position number. If you change the value, you need to renumber the model.

Use the following options or a combination of them:

| Option                | Description   |
|-----------------------|---|
| %PART_PREFIX%         | The prefix of the position number of the part that contains the reinforcing bar.  |
| %PART_START_NUMBER%   | The start number of the position number of the part that contains the reinforcing bar.  |
| %REBAR_PREFIX%        | The prefix of the position number of the reinforcing bar.   |
| %REBAR_SERIAL_NUMBER% | The position number without the prefix of the reinforcing bar.  |
| %REBAR_SEQ_POS%       | The sequence number of the reinforcing bar.   |
| %REBAR_POS%           | This is no longer used. Use %REBAR_SERIAL_NUMBER% instead.  |
| %REBAR_SIZE%          | The size of the reinforcing bar with the possible size prefix.<br><br>For example, in the USA environment the size prefix is #. |

| Option                   | Description   |
|--------------------------|---|
| %REBAR_SIZE_NUMBER%      | The size of the reinforcing bar without the size prefix.                                    |
| %CAST_UNIT_PREFIX%       | The prefix of the position number of the cast unit that contains the reinforcing bar.       |
| %CAST_UNIT_START_NUMBER% | The start number of the position number of the cast unit that contains the reinforcing bar. |

The default value is %REBAR\_PREFIX%%REBAR\_SERIAL\_NUMBER%.

This advanced option is model specific and the setting is saved in the options database.

### Example

The **Prefix** in the rebar set properties is set to R, the **Start number** is set to 1, and the **Size** is set to #6.

- If you set the advanced option to %REBAR\_SIZE%%REBAR\_PREFIX%%REBAR\_SERIAL\_NUMBER.3%, the result for the first reinforcing bar will be #6R001.
- If you set the advanced option to %REBAR\_SIZE\_NUMBER%%REBAR\_PREFIX%%REBAR\_SERIAL\_NUMBER.3% and number the model, the result for the first reinforcing bar is 6R001.

### See also

[XS\\_REBARSET\\_TAPERED\\_REBAR\\_POSITION\\_NUMBER\\_FORMAT\\_STRING](#)  
(page 407)

## 19.40 XS\_REBARSET\_TAPERED\_LINEAR\_GROUPING\_TOLERANCE

Category in [Advanced options dialog \(page 29\)](#): Concrete detailing

Use this advanced option to define which rebar set bars can automatically form a tapered bar group that follows a line. Define the maximum allowed distance of the bar ends from the line.

The default value is 0.5 mm.

This advanced option is model specific and the setting is saved in the options database.

After changing the value of this advanced option, you need to update the existing rebar sets in the model. On the **Rebar** tab on the ribbon, click **More** --> **Regenerate** to activate the new value.

If you need to override the value of this advanced option in certain rebar sets, enter a value for **Tapered linear tolerance** in the rebar set or property modifier user-defined attributes.

**See also**

[XS\\_REBARSET\\_TAPERED\\_CURVED\\_GROUPING\\_TOLERANCE \(page 404\)](#)

[XS\\_REBARSET\\_SIMILAR\\_GROUPING\\_TOLERANCE \(page 404\)](#)

## 19.41 XS\_REBARSET\_TAPERED\_REBAR\_POSITION\_NUMBER\_FORMAT\_STRING

**Category in [Advanced options dialog \(page 29\)](#): Numbering**

Use this advanced option to define the contents of the reinforcement position numbers (REBAR\_POS) of single bars in tapered bar groups within rebar sets. You can also change or remove the separator and affect how many numbers are used to represent the position number. If you change the value, you need to renumber the model.

Use the following options or a combination of them:

| Option                | Description   |
|-----------------------|---|
| %PART_PREFIX%         | The prefix of the position number of the part that contains the reinforcing bar.  |
| %PART_START_NUMBER%   | The start number of the position number of the part that contains the reinforcing bar.  |
| %REBAR_PREFIX%        | The prefix of the position number of the reinforcing bar.   |
| %REBAR_SERIAL_NUMBER% | The position number without the prefix of the reinforcing bar.  |
| %REBAR_SEQ_POS%       | The sequence number of the reinforcing bar.   |
| %REBAR_POS%           | This is no longer used. Use %REBAR_SERIAL_NUMBER% instead.  |
| %REBAR_SIZE%          | The size of the reinforcing bar with the possible size prefix.<br><br>For example, in the USA environment the size prefix is #. |
| %REBAR_SIZE_NUMBER%   | The size of the reinforcing bar without the size prefix.  |

| Option                   | Description  |
|--------------------------|--|
| %CAST_UNIT_PREFIX%       | The prefix of the position number of the cast unit that contains the reinforcing bar.  |
| %CAST_UNIT_START_NUMBER% | The start number of the position number of the cast unit that contains the reinforcing bar.  |
| %SUB_ID%                 | The running index number of the reinforcing bar in a tapered bar group within a rebar set.   |
| %SUB_ID_WITH_LETTERS%    | Same as above, but with letters.<br><br>Uses letters A-Z by default, but you can also define the valid letters with the advanced option <a href="#">XS_VALID_CHARS_FOR_REBAR_SUB_ID_WITH_LETTERS</a> (page 540). |

The default value is %REBAR\_PREFIX%%REBAR\_SERIAL\_NUMBER%.%SUB\_ID%.

This advanced option is model specific and the setting is saved in the options database.

### Example

The **Prefix** in the rebar set properties is set to R, the **Start number** is set to 1, and the **Size** is set to #6.

- If you set the advanced option to %REBAR\_SIZE%%REBAR\_PREFIX%%REBAR\_SERIAL\_NUMBER%.3%, the result for the first reinforcing bar will be #6R001.
- If you set the advanced option to %REBAR\_SIZE\_NUMBER%%REBAR\_PREFIX%%REBAR\_SERIAL\_NUMBER%.3% and number the model, the result for the first reinforcing bar is 6R001.

### See also

[XS\\_REBARSET\\_TAPERED\\_GROUP\\_POSITION\\_NUMBER\\_FORMAT\\_STRING](#) (page 405)

## 19.42 XS\_REBARSET\_USE\_GROUP\_NUMBER\_FOR\_BARS\_IN\_TAPERED\_GROUPS

### Category in [Advanced options dialog \(page 29\)](#): Numbering

Use this advanced option to define whether reinforcing bars in tapered bar groups within rebar sets are numbered using their group numbers, or as individual bars.

The default value is `TRUE`, which means that each bar in a tapered bar group is numbered using the group number.

If this advanced option is set to `FALSE`, bars in tapered bar groups are numbered as individual bars.

This advanced option is model specific and the setting is saved in the options database.

**See also**

[XS\\_REBARSET\\_TAPERED\\_GROUP\\_POSITION\\_NUMBER\\_FORMAT\\_STRING](#)  
(page 405)

[XS\\_REBARSET\\_TAPERED\\_REBAR\\_POSITION\\_NUMBER\\_FORMAT\\_STRING](#)  
(page 407)

## 19.43 XS\_REBAR\_USE\_ALWAYS\_METHOD\_A\_FOR\_90\_DEGREE\_HOOK\_DIMENSIONS

**This advanced option must be set in an initialization (.ini) file.**

When this advanced option is set to `TRUE`, the **SHLB/EHLB** hook properties will have the same values as the **SHLA/EHLA** properties in case the hook angle is approximately 95 degrees or less.

## 19.44 XS\_RECREATE\_MARKS\_IN\_INTELLIGENT\_CLONING

**Category in [Advanced options dialog \(page 29\)](#): Marking - general**

Set this advanced option to `ALL` to recreate all marks during intelligent cloning. If you leave the value out, marks are not recreated. By default, no value is set.

This advanced option is model specific and the setting is saved in the options database.

## 19.45 XS\_RECREATE\_UNMODIFIED\_DRAWINGS

**Category in [Advanced options dialog \(page 29\)](#): Drawing properties**

Use this advanced option to define whether drawings are recreated when you update an assembly, single-part, or cast unit drawing that has not been modified. Drawings are automatically recreated unless they have been edited and then saved, or they have been issued using the **Issue** functionality in **Document manager**.

- To prevent the recreation of the unmodified drawings, set the advanced option to `FALSE`.

- To allow the recreation of the unmodified drawings, set the advanced option to `TRUE`. This is the default value.

This advanced option is user specific and the setting is saved in `options.bin` under the user folder, for example, in `C:\Users\\AppData\Local\Trimble\Tekla Structures\\UserSettings`. Restart Tekla Structures to activate the new value.

## 19.46 XS\_REFERENCE\_CACHE

Category in [Advanced options dialog \(page 29\)](#): File locations

Use this advanced option to define the default location of the cache file that is created from the source file when you load a reference model in Tekla Structures for the first time. The advanced option is set to `C:\TeklaStructuresModels\RefCacheFolders` by default. You can also replace the path with `XS_RUNPATH` as follows: `%XS_RUNPATH%\RefCacheFolders`.

- 
- TIP** • You may sometimes want to change the default location of the cache file when you are working with multi-user models to reduce network traffic and disk usage in the server or to speed up the cache operation (if the local drive is faster than the server drive).
- When you are using different versions of Tekla Structures for different projects and you experience problems with reference models, empty the folder where the reference cache is created. The cache file is recreated the next time you open the reference model.
- 

This advanced option is user specific and the setting is saved in `options.bin` under the user folder, for example, in `C:\Users\\AppData\Local\Trimble\Tekla Structures\\UserSettings`. Restart Tekla Structures to activate the new value.

## 19.47 XS\_REFERENCE\_MODEL\_KEEP\_VERSIONS\_COUNT

Category in [Advanced options dialog \(page 29\)](#): Modeling properties

Use this advanced option to clean up old reference model revisions automatically. The cleanup is done when the reference file is updated. Use [XS\\_DELETE\\_UNNECESSARY\\_REFMODEL\\_FILES\\_SAFETY\\_PERIOD \(page 122\)](#) to set the time frame for the deletion. Tekla Structures deletes the reference models that have been imported at some point but are no longer used, and

are not displayed in the **Reference models** list. The data related to these reference models is deleted from the current data storage in the `<current model>\datastorage\ref` folder. The original imported reference model is not deleted from its actual folder, for example, from `.\Reference models`.

You can use the following values:

- 0: The cleanup is disabled. This is the default value.
- Any positive number.

For example, value 3 keeps two old revisions of the reference model, in addition to the current version.

This advanced option is model specific and the setting is saved in the options database.

## 19.48 XS\_REFERENCE\_USE\_RENDERED\_CLIPPING

Category in **Advanced options dialog (page 29)**: Import

Set this advanced option to `TRUE` to have Tekla Structures show only the center line of reference objects outside the work area in model views. This can be useful, for example, when viewing cylindrical DGN structures, such as piping. If you do not want to show only the center line, set it to `FALSE`. The default value is `TRUE`.

Tekla Structures then shows the objects as follows:

- Objects entirely inside work area are rendered.
- Objects entirely outside work area are hidden.
- Objects partly inside the work area are rendered inside work area, and wireframe outside work area.

This advanced option is user specific and the setting is saved in `options.bin` under the user folder, for example, in `C:\Users\<user>\AppData\Local\Trimble\Tekla Structures\<version>\UserSettings`. Restart Tekla Structures to activate the new value.

## 19.49 XS\_REFRESH\_ALSO\_LOCKED\_REFERENCE\_MODELS

Category in [Advanced options dialog \(page 29\)](#): **Import**

Set this advanced option to `TRUE` to refresh locked reference models with the



**Refresh** button. This advanced option is by default set to `FALSE`.

This advanced option is system specific.

## 19.50 XS\_REMEMBER\_LAST\_PLOT\_DIALOG\_VALUES

**This advanced option must be set in an initialization (.ini) file.**

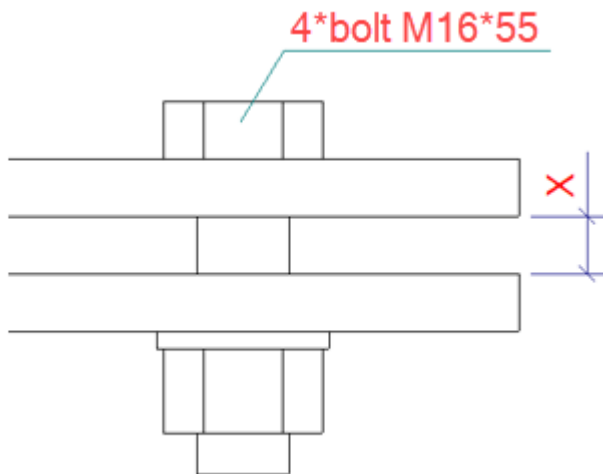
If you set this advanced option to `TRUE`, Tekla Structures remembers the latest settings that were used in the **Print Drawings** dialog when you open the dialog the next time. If you do not want to do this, enter `false`. The default value is `TRUE`.

## 19.51 XS\_REMOVE\_VOID\_FROM\_BOLT\_MATERIAL\_THICKNESS

Category in [Advanced options dialog \(page 29\)](#): **Modeling properties**

Set this advanced option to `TRUE` to remove the gap between two bolted material thicknesses, resulting in a shorter bolt length. This is required by, for example, mast builders. The default value is `FALSE`.

In the example below, the advanced option is set to `TRUE`. The value "X" will be removed from the bolt length.



This advanced option is model specific and the setting is saved in the options database.

## 19.52 XS\_RENDERED\_CURSOR\_LINE\_WIDTH

**Category in [Advanced options dialog \(page 29\)](#): Model views**

Use this advanced option to set cursor line width in model views.

- Possible values are 1, 2, or 4. Any other value is handled as 1.
- The default value is 2.

This advanced option is user specific and the setting is saved in `options.bin` under the user folder, for example, in `C:\Users\\AppData\Local\Trimble\Tekla Structures\\UserSettings`. Restart Tekla Structures to activate the new value.

## 19.53 XS\_RENDERED\_FIELD\_OF\_VIEW

**Category in [Advanced options dialog \(page 29\)](#): Model views**

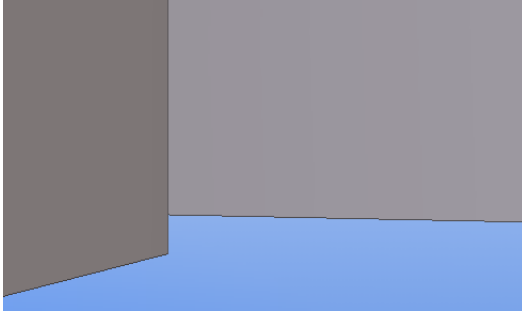
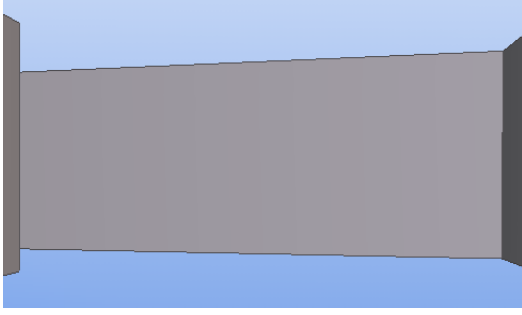
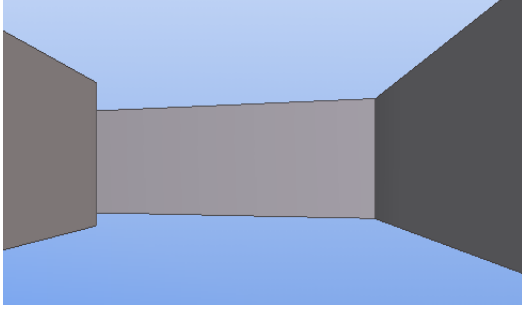
Use this advanced option to adjust the field of view setting in perspective views. This can be useful, for example, when using the **Fly** command in a tight space. The bigger the value, the more distance there is between the parts.

The default value is 60.0.

This advanced option is user specific and the setting is saved in `options.bin` under the user folder,

for example, in C:\Users\\AppData\Local\Trimble\Tekla Structures\\UserSettings. Restart Tekla Structures to activate the new value.

**Example**

| Field of view | Example  |
|---------------|--|
| 60.0          |    |
| 90.0          |   |
| 120.0         |  |

**19.54 XS\_RENDERED\_GL\_FOG\_END\_VALUE**

Category in [Advanced options dialog \(page 29\)](#): **Model views**

Note that this advanced option works only in model views that use the legacy OpenGL rendering instead of the DirectX rendering.

In model views, the distant objects appear progressively darker than the close ones. Use the advanced options `XS_RENDERED_GL_FOG_START_VALUE` and `XS_RENDERED_GL_FOG_END_VALUE` to control the shade of objects.

Use values from 0.0 to 1.0 to control the shade of objects. The higher the value, the darker the distant objects. Value 0 disables the fog effect. The default value for `XS_RENDERED_GL_FOG_END_VALUE` is 0.

This advanced option is user specific and the setting is saved in `options.bin` under the user folder, for example, in `C:\Users\\AppData\Local\Trimble\Tekla Structures\\UserSettings`. Restart Tekla Structures to activate the new value.

#### **See also**

[XS\\_RENDERED\\_GL\\_FOG\\_START\\_VALUE \(page 415\)](#)

## **19.55 XS\_RENDERED\_GL\_FOG\_START\_VALUE**

**Category in [Advanced options dialog \(page 29\)](#): Model views**

Note that this advanced option works only in model views that use the legacy OpenGL rendering instead of the DirectX rendering.

In model views, the distant objects appear progressively darker than the close ones. Use the advanced options `XS_RENDERED_GL_FOG_START_VALUE` and `XS_RENDERED_GL_FOG_END_VALUE` to control the shade of objects.

Use values from 0.0 to 1.0 to control the shade of objects. The higher the value, the darker the distant objects. Value 0 disables the fog effect. The default value for `XS_RENDERED_GL_FOG_START_VALUE` is 0.

This advanced option is user specific and the setting is saved in `options.bin` under the user folder, for example, in `C:\Users\\AppData\Local\Trimble\Tekla Structures\\UserSettings`. Restart Tekla Structures to activate the new value.

#### **See also**

[XS\\_RENDERED\\_GL\\_FOG\\_END\\_VALUE \(page 414\)](#)

## 19.56 XS\_RENDERED\_PIXEL\_TOLERANCE\_SCALE

Category in [Advanced options dialog \(page 29\)](#): **Model views**

Tekla Structures uses pixel tolerance to differentiate between clicking and dragging the mouse when zooming. Use this advanced option to define the pixel tolerance.

The default value is 0.7. If the mouse moves less than the specified value while the left mouse button is pressed down, it is treated as a click.

This is a system-specific advanced option.

## 19.57 XS\_REPORT\_BOLTS\_WITH\_SUPPORTING\_MEMBER

Category in [Advanced options dialog \(page 29\)](#): **Templates and symbols**

Use this advanced option to control whether site bolts are shown in the Bill of Materials (BOM) of the supporting member in reports and KSS files.

- FALSE: Site bolts are not shown in the BOM of the supporting member. This is the default value.
- TRUE: Site bolts will be included in the BOM of the supporting member.

This advanced option is user specific and the setting is saved in `options.bin` under the user folder, for example, in `C:\Users\\AppData\Local\Trimble\Tekla Structures\\UserSettings`. Restart Tekla Structures to activate the new value.

In the following BOM example, the advanced option is set to TRUE:

**ONE - COLUMN - C1**

| BILL OF MATERIAL          |     |                  |             |        |         |
|---------------------------|-----|------------------|-------------|--------|---------|
| MARK                      | QTY | DESCRIPTION      | LENGTH      | WEIGHT | REMARKS |
| C1                        | 1   | COLUMN           |             |        | SQ.2    |
| C1                        | 1   | W16X89           | 21'-11 1/4" | 1956   | A992    |
| BP2                       | 1   | PL3/4"X26"       | 2'-2"       | 144    | A36     |
| p7                        | 1   | FL3/8"X3 1/2"    | 1'-0"       | 4      | A36     |
|                           | 4   | 3/4"Ø A325N BOLT | 0'-2"       |        | Site    |
| TOTAL WEIGHT THIS DRAWING |     |                  |             | 2104   |         |

In the following BOM example, the advanced option is set to FALSE:

## ONE - COLUMN - C1

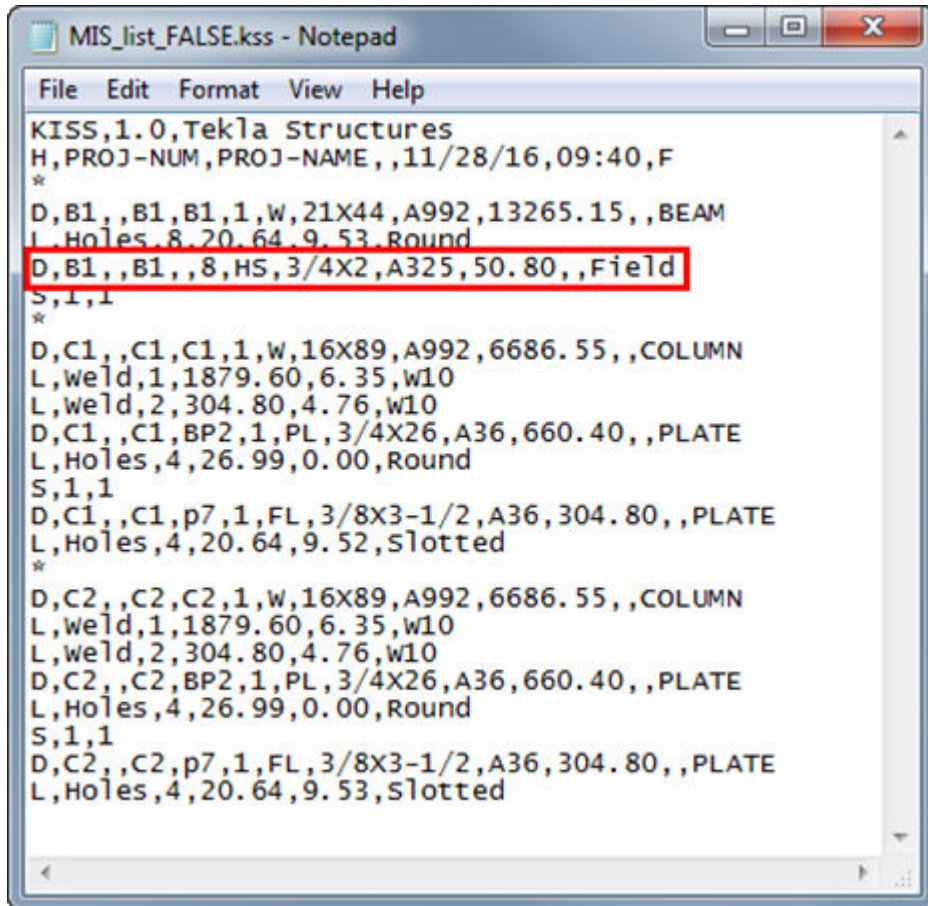
| BILL OF MATERIAL          |     |               |             |        |         |
|---------------------------|-----|---------------|-------------|--------|---------|
| MARK                      | QTY | DESCRIPTION   | LENGTH      | WEIGHT | REMARKS |
| C1                        | 1   | COLUMN        |             |        | SQ-2    |
| C1                        | 1   | W16X89        | 21'-11 1/4" | 1956   | A992    |
| BP2                       | 1   | PL3/4"X26"    | 2'-2"       | 144    | A36     |
| p7                        | 1   | FL3/8"X3 1/2" | 1'-0"       | 4      | A36     |
| TOTAL WEIGHT THIS DRAWING |     |               |             | 2104   |         |

In the following KSS file example, the advanced option is set to TRUE:

```

MIS_list_TRUE.kss - Notepad
File Edit Format View Help
KISS,1.0,Tekla Structures
H,PROJ-NUM,PROJ-NAME,,11/28/16,09:44,F
*
D,B1,,B1,B1,1,w,21X44,A992,13265.15,,BEAM
L,Holes,8,20.64,9.53,Round
S,1,1
*
D,C1,,C1,C1,1,w,16X89,A992,6686.55,,COLUMN
L,weld,1,18/9.60,6.35,w10
L,weld,2,304.80,4.76,w10
D,C1,,C1,BP2,1,PL,3/4X26,A36,660.40,,PLATE
L,Holes,4,26.99,0.00,Round
S,1,1
D,C1,,C1,p7,1,FL,3/8X3-1/2,A36,304.80,,PLATE
L,Holes,4,20.64,9.53,Slotted
D,C1,,C1,,4,HS,3/4X2,A325,50.80,,Field
*
D,C2,,C2,C2,1,w,16X89,A992,6686.55,,COLUMN
L,weld,1,18/9.60,6.35,w10
L,weld,2,304.80,4.76,w10
D,C2,,C2,BP2,1,PL,3/4X26,A36,660.40,,PLATE
L,Holes,4,26.99,0.00,Round
S,1,1
D,C2,,C2,p7,1,FL,3/8X3-1/2,A36,304.80,,PLATE
L,Holes,4,20.64,9.53,Slotted
D,C2,,C2,,4,HS,3/4X2,A325,50.80,,Field
  
```

In the following KSS file example, the advanced option is set to FALSE:



```
MIS_list_FALSE.kss - Notepad
File Edit Format View Help
KISS,1.0,Tekla Structures
H,PROJ-NUM,PROJ-NAME,,11/28/16,09:40,F
*
D,B1,,B1,B1,1,w,21X44,A992,13265.15,,BEAM
L,Holes,8,20.64,9.53,Round
D,B1,,B1,,8,HS,3/4X2,A325,50.80,,Field
S,1,1
*
D,C1,,C1,C1,1,w,16X89,A992,6686.55,,COLUMN
L,weld,1,1879.60,6.35,w10
L,weld,2,304.80,4.76,w10
D,C1,,C1,BP2,1,PL,3/4X26,A36,660.40,,PLATE
L,Holes,4,26.99,0.00,Round
S,1,1
D,C1,,C1,p7,1,FL,3/8X3-1/2,A36,304.80,,PLATE
L,Holes,4,20.64,9.52,Slotted
*
D,C2,,C2,C2,1,w,16X89,A992,6686.55,,COLUMN
L,weld,1,1879.60,6.35,w10
L,weld,2,304.80,4.76,w10
D,C2,,C2,BP2,1,PL,3/4X26,A36,660.40,,PLATE
L,Holes,4,26.99,0.00,Round
S,1,1
D,C2,,C2,p7,1,FL,3/8X3-1/2,A36,304.80,,PLATE
L,Holes,4,20.64,9.53,Slotted
```

## 19.58 XS\_REPORT\_OUTPUT\_DIRECTORY

Category in [Advanced options dialog \(page 29\)](#): **File locations**

This advanced option defines the folder where Tekla Structures saves reports. If the full path appears in the report file name field in the **Report** dialog, Tekla Structures ignores this setting. The default value is `.\Reports`.

## 19.59 XS\_RESTORE\_ENABLES

**This advanced option must be set in an initialization (.ini) file.**

Set this advanced option to `TRUE` to be able to save and load checkbox values in dialogs. `FALSE` is the default value.

## 19.60 XS\_RIBBON\_CONFIGURATION\_CARBON

**This advanced option must be set in an initialization (.ini) file.**

Use this advanced option to control which ribbon is shown for a specified role for those users who are using the Tekla Structures Carbon configuration. The role-specific initialization files (`role_<role>.ini`), for example, `role_Steel_Detailer.ini` or `role_Rebar_Detailer.ini` contain the advanced option.

The advanced option needs to point the configuration identifier of the ribbon file, either to the configuration identifier of the legacy on-premises license configuration, or to the configuration identifier of the Tekla Structures subscription configuration. It is not possible to make up new configuration identifiers.

### Example:

For the users who select the **Precast Concrete Detailing** role, you could have the following settings in the `role_Precast_Detailer.ini` file:

```
set XS_RIBBON_CONFIGURATION_CARBON=albl_up_Carbon
set XS_RIBBON_CONFIGURATION_GRAPHITE=albl_up_PC_Detailing
set XS_RIBBON_CONFIGURATION_DIAMOND=albl_up_PC_Detailing
```

### See also

[XS\\_RIBBON\\_CONFIGURATION\\_GRAPHITE](#) (page 420)

[XS\\_RIBBON\\_CONFIGURATION\\_DIAMOND](#) (page 419)

## 19.61 XS\_RIBBON\_CONFIGURATION\_DIAMOND

**This advanced option must be set in an initialization (.ini) file.**

Use this advanced option to control which ribbon is shown for a specified role for those users who are using the Tekla Structures Diamond configuration. The role-specific initialization files (`role_<role>.ini`), for example, `role_Steel_Detailer.ini` or `role_Rebar_Detailer.ini` contain the advanced option.

The advanced option needs to point the configuration identifier of the ribbon file, either to the configuration identifier of the legacy on-premises license configuration, or to the configuration identifier of the Tekla Structures subscription configuration. It is not possible to make up new configuration identifiers.

### Example:

For the users who select the **Precast Concrete Detailing** role, you could have the following settings in the `role_Precast_Detailer.ini` file:

```
set XS_RIBBON_CONFIGURATION_CARBON=albl_up_Carbon
set XS_RIBBON_CONFIGURATION_GRAPHITE=albl_up_PC_Detailing
set XS_RIBBON_CONFIGURATION_DIAMOND=albl_up_PC_Detailing
```

#### See also

[XS\\_RIBBON\\_CONFIGURATION\\_CARBON \(page 419\)](#)

[XS\\_RIBBON\\_CONFIGURATION\\_GRAPHITE \(page 420\)](#)

## 19.62 XS\_RIBBON\_CONFIGURATION\_GRAPHITE

**This advanced option must be set in an initialization (.ini) file.**

Use this advanced option to control which ribbon is shown for a specified role for those users who are using the Tekla Structures Graphite configuration. The role-specific initialization files (`role_<role>.ini`), for example, `role_Steel_Detailer.ini` or `role_Rebar_Detailer.ini` contain the advanced option.

The advanced option needs to point the configuration identifier of the ribbon file, either to the configuration identifier of the legacy on-premises license configuration, or to the configuration identifier of the Tekla Structures subscription configuration. It is not possible to make up new configuration identifiers.

#### Example:

For the users who select the **Precast Concrete Detailing** role, you could have the following settings in the `role_Precast_Detailer.ini` file:

```
set XS_RIBBON_CONFIGURATION_CARBON=albl_up_Carbon
set XS_RIBBON_CONFIGURATION_GRAPHITE=albl_up_PC_Detailing
set XS_RIBBON_CONFIGURATION_DIAMOND=albl_up_PC_Detailing
```

#### See also

[XS\\_RIBBON\\_CONFIGURATION\\_CARBON \(page 419\)](#)

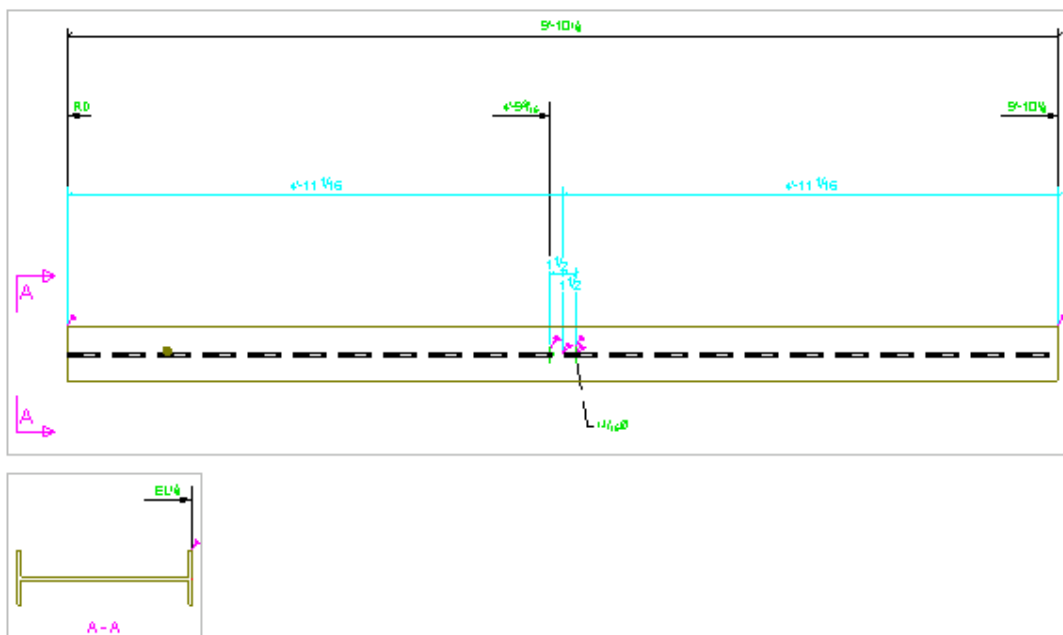
[XS\\_RIBBON\\_CONFIGURATION\\_DIAMOND \(page 419\)](#)

## 19.63 XS\_ROTATE\_CUT\_VIEWS

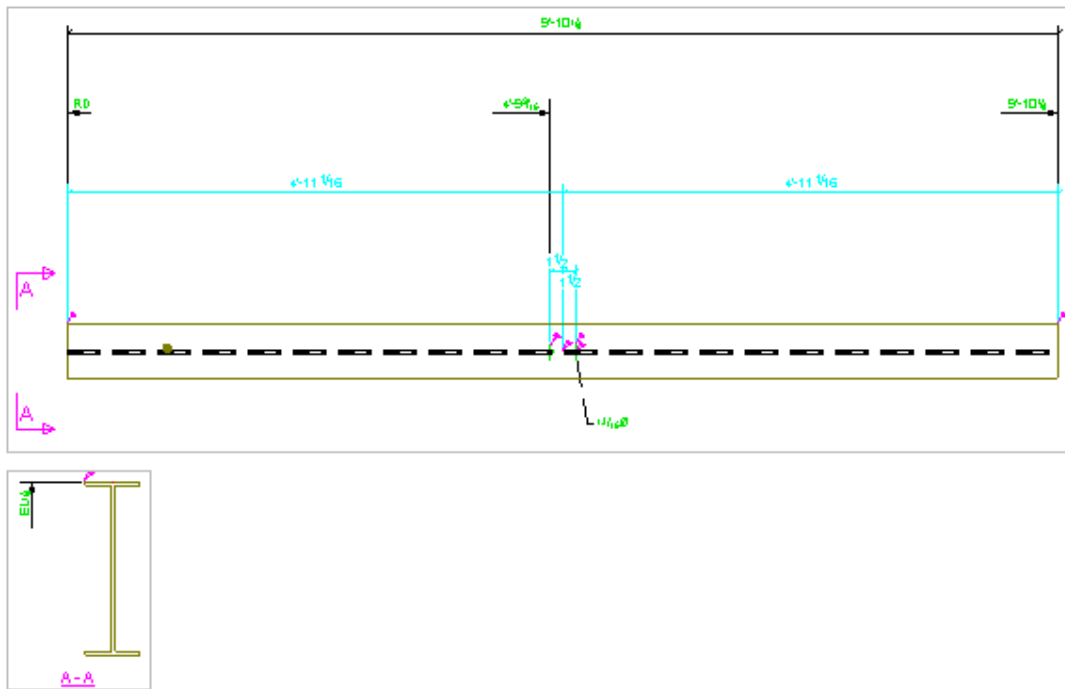
Category in [Advanced options dialog \(page 29\)](#): Drawing views

Use this advanced option to specify the rotation of the automatically created section views. The options are `BY_SYMBOL_MAIN_VIEW` and `BY_MAIN_VIEW`. This advanced option only works if you have one integrated dimension type in your view settings.

`BY_SYMBOL_MAIN_VIEW` (default) uses the orientation of the view that contains the section symbol. This only applies to section views that Tekla Structures creates automatically. Manually created views have the same rotation as the view they are created from.



`BY_MAIN_VIEW` uses the same orientation as the main view.



This advanced option is model specific and the setting is saved in the options database.

## 19.64 XS\_RUN\_AT\_STARTUP

**Category in [Advanced options dialog \(page 29\)](#): File locations**

Tekla Structures automatically launches any executable (.exe) files in the folders defined for this advanced option.

You can use folders on any local drives or mapped network drives. You can enter several folders separated by a semicolon (;).

The default value of this advanced option is:

```
..\<version>\bin\applications\Tekla\ApplicationStartup;..\<version>\environments\common\extensions\ApplicationStartup\
```

This advanced option is user specific and the setting is saved in options.bin under the user folder, for example, in C:\Users\<user>\AppData\Local\Trimble\Tekla Structures\<version>\UserSettings. Restart Tekla Structures to activate the new value.

## 19.65 XS\_RUNPATH

**This advanced option must be set in an initialization (.ini) file.**

This advanced option is system specific and is read from `teklastructures.ini`. Generally, there is no need to modify system-specific settings. Do not modify them if you are not an administrator.

This advanced option points to the folder where Tekla Structures searches for models by default. When you open the **New** dialog, the default model folder is displayed in the **Place in** box.

---

**NOTE** This advanced option does not affect the folder paths used when you open an existing model.

---

### Example

```
set XS_RUNPATH=C:\TeklaStructuresModels\
```

## 19.66 XSR\_USE\_NO\_FEET\_SEPARATOR

**Category in [Advanced options dialog \(page 29\)](#): Templates and symbols**

Set this advanced option to `TRUE` to use a space instead of the feet separator in drawing tables and reports, for example, 2 4"1/4. To use the feet separator, use the value `FALSE`. The default value is `FALSE`.

You also need to set `XSR_USE_NO_FEET_SYMBOL`.

This advanced option is model specific and the setting is saved in the options database.

### See also

[XSR\\_USE\\_NO\\_FEET\\_SYMBOL \(page 423\)](#)

## 19.67 XSR\_USE\_NO\_FEET\_SYMBOL

**Category in [Advanced options dialog \(page 29\)](#): Templates and symbols**

Set this advanced option to `TRUE` to omit the feet symbol in drawing tables and reports, for example, 2-4"1/4. If you do not want to omit the feet symbol, use the value `FALSE`. The default value is `FALSE`.

This advanced option is model specific and the setting is saved in the options database.

## 19.68 XSR\_USE\_NO\_INCH\_SYMBOL

Category in [Advanced options dialog \(page 29\)](#): **Templates and symbols**

Set this advanced option to `TRUE` to omit the inch symbol in drawing tables and reports, for example, 2-4 ¼. If you do not want to omit the inch symbol, use the value `FALSE`. The default value is `FALSE`.

You also need to set `XSR_USE_NO_FEET_SYMBOL` and `XSR_USE_NO_FEET_SEPARATOR`.

This advanced option is model specific and the setting is saved in the options database.

### See also

[XSR\\_USE\\_NO\\_FEET\\_SEPARATOR \(page 423\)](#)

[XSR\\_USE\\_NO\\_FEET\\_SYMBOL \(page 423\)](#)

## 19.69 XSR\_USE\_ZERO\_FEET\_VALUE

Category in [Advanced options dialog \(page 29\)](#): **Templates and symbols**

Set this advanced option to `TRUE` to force Tekla Structures to show zero feet for values less one foot, for example, 0'-6"¾. If you do not want to show zero feet values, use the value `FALSE`. The default value is `FALSE`.

---

**NOTE** Setting this advanced option affects also the following:

- Length values in part and bolt marks
  - Length values in templates (template attribute `LENGTH`)
- 

This advanced option is model specific and the setting is saved in the options database.

### See also

[XSR\\_BOLT\\_LENGTH\\_USE\\_ONLY\\_INCHES \(page 382\)](#)

## 19.70 XSR\_USE\_ZERO\_INCH\_FOR\_FRACTIONS

Category in [Advanced options dialog \(page 29\)](#): **Templates and symbols**

Set this advanced option to `TRUE` to show zero inches for values only containing fractions, for example, 2'-3/4 or 0"1/4. If you do not want to do this, use the value `FALSE`. The default value is `FALSE`.

This advanced option is model specific and the setting is saved in the options database.

## 19.71 XSR\_USE\_ZERO\_INCH\_VALUE

Category in [Advanced options dialog \(page 29\)](#): **Templates and symbols**

Set this advanced option to `TRUE` to show zero inches for values only containing feet and fractions, for example, 2'-0"3/4 or 1/4. If you do not want to do this, use the value `FALSE`. The default value is `FALSE`.

This advanced option is model specific and the setting is saved in the options database.

# 20 Advanced options - S

## 20.1 XS\_SAVE\_WITH\_COMMENT

Category in [Advanced options dialog \(page 29\)](#): **Multi-user**

Set this advanced option to `TRUE` (default) to enable the saving of the model revision comments in multi-user models and models shared with Tekla Model Sharing.

## 20.2 XS\_SCALE\_COPIED\_OR\_MOVED\_OBJECTS\_IN\_DRAWINGS

Category in [Advanced options dialog \(page 29\)](#): **Drawing properties**

Use this advanced option to define the scaling of the objects that are copied or moved between drawing views that have different scales.

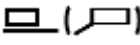

- To scale the objects according to the view scales, set the advanced option to `TRUE`.
- To keep the object sizes constant, set the advanced option to `FALSE` (default).

This advanced option is model specific and the setting is saved in the options database.

## 20.3 XS\_SCALE\_MARKS\_TO\_FIT\_LIMIT

Category in [Advanced options dialog \(page 29\)](#): **Marking - parts**

Use this advanced option to fit part marks as close as possible along the part they belong to by scaling the text height. Set the minimum scale with this advanced option.

Scaling works only with leader line options  **Along line or leader line** and  **Along line**.

The default value is 1.0. This means that if you do not set the advanced option, Tekla Structures does not scale marks. Tekla Structures scales the text height in steps so that first it tries the scale of 0.9. If the mark does not fit, Tekla Structures scales the mark by 0.8, and so on.

This advanced option is model specific and the setting is saved in the options database.

### Example

```
XS_SCALE_MARKS_TO_FIT_LIMIT=0.5
```

## 20.4 XS\_SCREW\_DIAMOND\_WITHOUT\_PHI

Category in [Advanced options dialog \(page 29\)](#): **Marking - bolts**

Set this advanced option to `TRUE` to prevent Tekla Structures from placing a phi symbol  $\emptyset$  outside the frame of bolt marks (diamond type only). The default value is `FALSE`.

This advanced option is model specific and the setting is saved in the options database.

## 20.5 XS\_SDNF\_CONVERT\_PL\_PROFILE\_TO\_PLATE

Category in [Advanced options dialog \(page 29\)](#): **Export**

Set this advanced option to `TRUE` to convert plate profiles (PL) to contour plates in the SDNF import and export. Works with SDNF versions 2.0 and 3.0. If you do not want to convert plate profiles to contour plates, set it to `FALSE`. The default value is `TRUE`.

In Tekla Structures, you can create a plate in two ways, either as a beam using start and end points (and width given in the profile name like PL10\*100), or as a contour plate where you need to define all corner points. When you set this advanced option to `TRUE`, the plate profiles are converted in the export

or import to contour plates, where all corner points are defined in addition to the profile thickness. When you set this advanced option to `FALSE`, the plate profiles are not converted and are handled as beams where width is included in the profile name.

This advanced option is model specific and the setting is saved in the options database.

## 20.6 XS\_SDNF\_EXPORT\_INCLUDE\_GLOBAL\_ID

**Category in [Advanced options dialog \(page 29\)](#): Export**

Set this advanced option to `TRUE` to revert to the FrameWorksPlus ID number in the SDNF export. The default value is `FALSE`.

This advanced option only affects version 2.0 SDNF export, but not version 3.0 export.

This advanced option is model specific and the setting is saved in the options database.

## 20.7 XS\_SDNF\_IMPORT\_MIRROR\_SWAP\_OFFSETS

**Category in [Advanced options dialog \(page 29\)](#): Import**

Set this advanced option to `TRUE` to swap the end point offsets and start point offsets in the SDNF import when an imported part is mirrored already in the SDNF software. If you set this advanced option to `FALSE`, the end point and start point offsets are not swapped. The default value is `TRUE`.

This advanced option is user specific and the setting is saved in `options.bin` under the user folder, for example, in `C:\Users\\AppData\Local\Trimble\Tekla Structures\\UserSettings`. Restart Tekla Structures to activate the new value.

## 20.8 XS\_SDNF\_IMPORT\_STORE\_MEMBER\_NUMBER

**Category in [Advanced options dialog \(page 29\)](#): Import**

Set this advanced option to `TRUE` to have Tekla Structures store the FrameWorksPlus ID number in the SDNF import. Tekla Structures stores the ID number in the user-defined attribute `SDNF_MEMBER_NUMBER`. If you do not

want to store the FrameWorksPlus ID number, set the option to `FALSE`. The default value is `TRUE`.

This advanced option is model specific and the setting is saved in the options database.

## 20.9 XS\_SECONDARY\_PART\_HARDSTAMP

**Category in [Advanced options dialog \(page 29\)](#): CNC**

Set to `TRUE` to include hard stamps for main parts and any kind of secondary parts in DSTV files. Set to `FALSE` to create hard stamps only for main parts. The default value is `FALSE`.

This advanced option is model specific and the setting is saved in the options database.

## 20.10 XS\_SECTION\_LINE\_COLOR\_RGB

**Category in [Advanced options dialog \(page 29\)](#): Hatching**

---

**NOTE** The section line color defined for the advanced option `XS_SECTION_LINE_COLOR_RGB` overrides the section line color selected in the drawing, view, or object level properties.

---

Use this advanced option to add extra lines in different colors around automatic hatching in section views.

You can enter a single color index value (such as 160 for the standard Tekla Structures red color) or a specific custom RGB color. For an RGB color, enter three numeric values separated by spaces (each value in the range 0 to 255). For example, for a specific shade of green, enter 0 220 50.



---

**NOTE** To show lines around hatching, and to be able to add extra lines in different colors, you may need to set advanced option [XS\\_DRAW\\_ALL\\_SECTION\\_EDGES\\_IN\\_DRAWINGS \(page 159\)](#) to `TRUE` in an initialization file.

---


















This advanced option is model specific and the setting is saved in the options database.

Legacy Tekla Structures index values and the corresponding colors:

|   |   |
|---|---|
| 0 |  Black |
| 1 |  White |

|   |   |
|---|---|
| 2 |  Red     |
| 3 |  Green   |
| 4 |  Blue    |
| 5 |  Cyan    |
| 6 |  Yellow  |
| 7 |  Magenta |

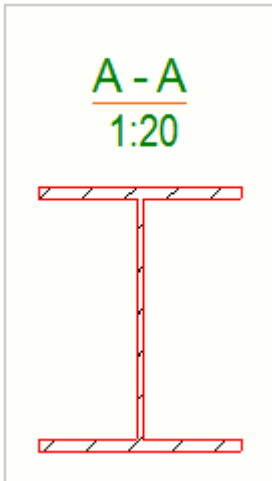
Standard Tekla Structures index values and the corresponding colors:

|     |  |
|-----|--|
| 152 |  Invisible    |
| 153 |  Black        |
| 160 |  Red          |
| 161 |  Green        |
| 162 |  Blue         |
| 163 |  Cyan         |
| 164 |  Yellow       |
| 165 |  Magenta      |
| 154 |  Brown       |
| 155 |  Dark green |
| 156 |  Dark blue  |
| 157 |  Blue-green |
| 158 |  Orange     |
| 159 |  Gray       |
| 130 |  Gray 30    |
| 131 |  Gray 50    |
| 132 |  Gray 70    |
| 133 |  Gray 90    |

In the image below, the advanced option has been set to 0:




In the next example, the value 160 is used:



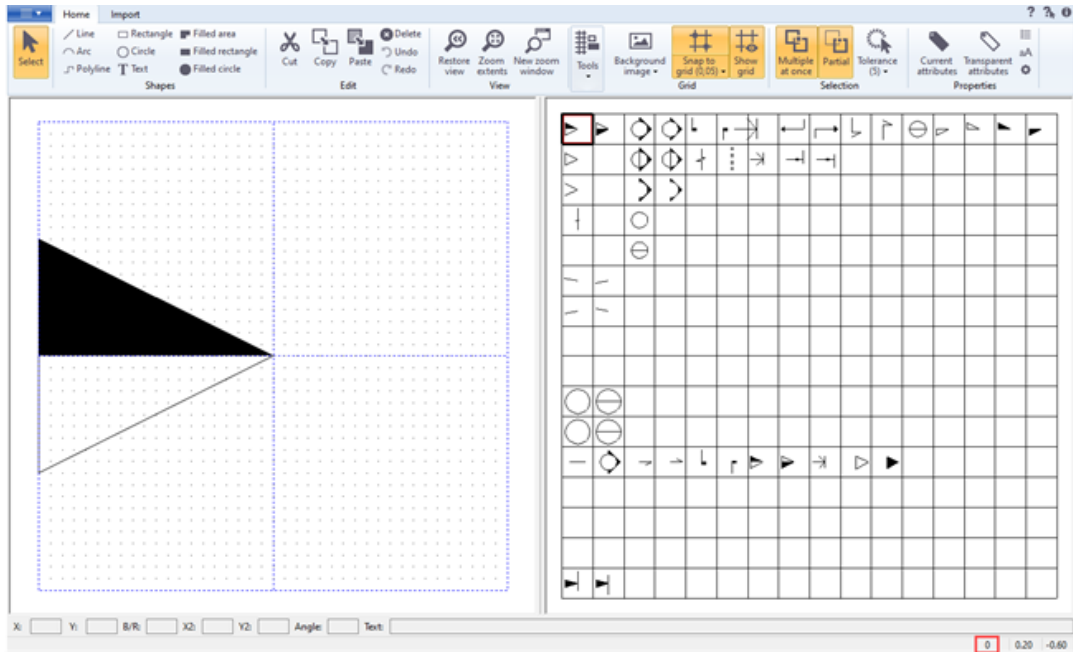
## 20.11 XS\_SECTION\_SYMBOL\_LEFT\_ARROW\_SYMBOL

**Category in [Advanced options dialog \(page 29\)](#): Drawing properties**

Use this advanced option to define the custom arrow symbol Tekla Structures uses as the section start symbol. To use a custom arrow symbol, select **Custom** from the **Start** list in the section mark properties.

By default, Tekla Structures uses the symbol no 1  in the `sections.sym` file (located usually in the folder `\environments\common\symbols\`). To use another symbol, enter the symbol file name first, then the @ sign and then the number of the symbol, for example `sections@1`.

Here's the symbol 0 selected in Symbol Editor:



To open Symbol Editor, click **File** --> **Editors** --> **Symbol editor**. There you can open different symbol files and check the included symbols and their numbers.

This advanced option is model specific and the setting is saved in the options database.

## 20.12 XS\_SECTION\_SYMBOL\_REFERENCE

**Category in [Advanced options dialog \(page 29\)](#): Drawing properties**

You can move section views from one drawing to another. This advanced option defines the reference text for section symbols of the section views moved to another drawing, and is shown in the drawing where you move the section view from. You can enter free text, user-defined attributes (%UDA\_NAME%, %USERDEFINED.UDA\_NAME%), or template attributes (%ATTRIBUTE\_NAME%).

If you enter user-defined attributes or template attributes, use single % characters around them in the **Advanced options** dialog. %DRAWING\_TITLE% is the default value, and %TITLE% gives the same result. If you use one of these attributes, the section symbol gets the drawing name entered in the **Name** field in the drawing properties dialog. If you enter %TITLE1%, %TITLE2%, or %TITLE3%, the section symbol gets the text from the **Title 1 - Title 3** fields in the drawing properties. You can also use the format %DR\_TITLE1%, %DR\_TITLE2%, and %DR\_TITLE3% to do the same.

If you make any changes to the section symbol properties in the drawing **where the view was moved from**, a *Relation update needed* message will

be displayed in the **Changes** column of the drawing **where the views was moved to**. To update the drawing, select it and click **Update** at the bottom.

For more information about moving views to another drawing, see Copy, link, or move drawing views.

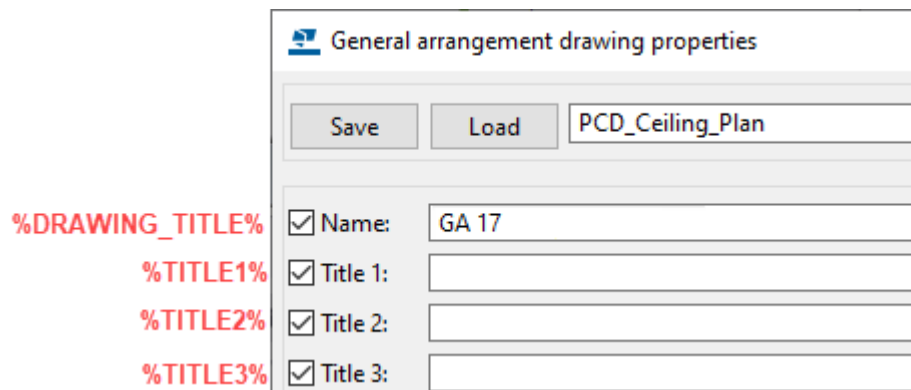
This advanced option is model specific and the setting is saved in the options database.

### Example

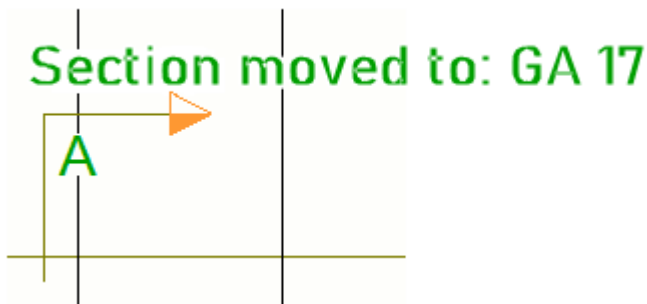
To use a combination of a text and an attribute, enter the desired text and the attribute as the value for `XS_SECTION_SYMBOL_REFERENCE`:

Section view moved to: %DRAWING\_TITLE%

In this example, the section view was moved from an assembly drawing to a general arrangement drawing with the name GA 17.




The following text will be shown in the section symbol in the assembly drawing:



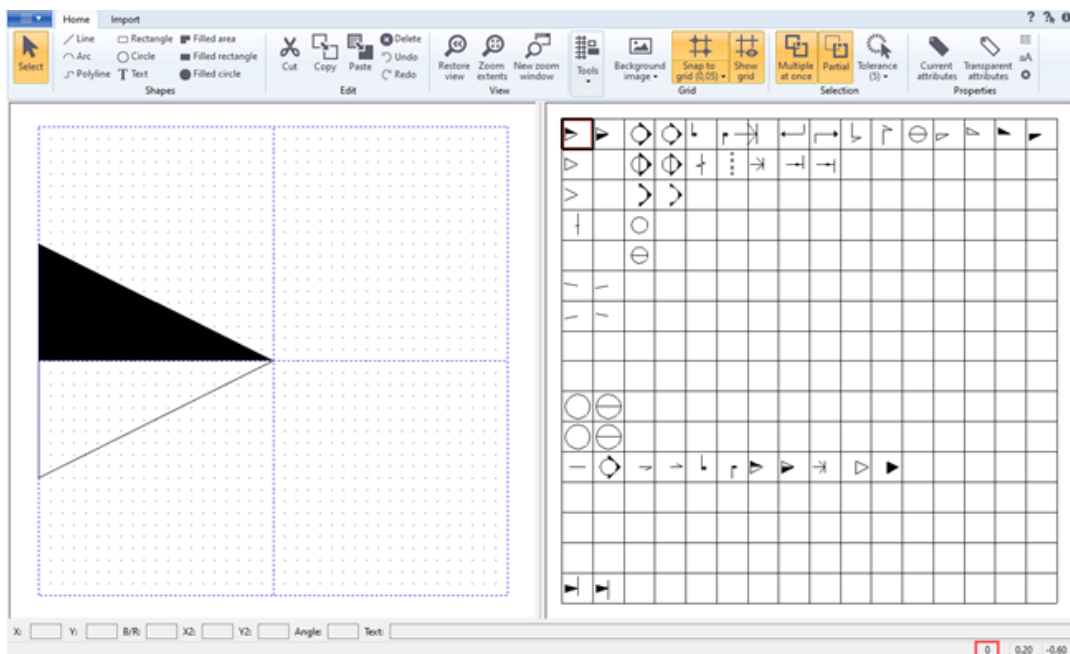
## 20.13 XS\_SECTION\_SYMBOL\_RIGHT\_ARROW\_SYMBOL

Category in [Advanced options dialog \(page 29\)](#): Drawing properties

Use this advanced option to define the custom arrow symbol Tekla Structures uses as the section end symbol. To use a custom arrow symbol, select **Custom** from the **End** list in the section mark properties.

By default Tekla Structures uses the symbol no 0  in the `sections.sym` file (located usually in the folder `..\environments\common\symbols\`). To use another symbol, enter the symbol file name first, then the @ sign and then the number of the symbol, for example `sections@0`.

Here's the symbol selected in Symbol Editor:



To open Symbol Editor, click **File** --> **Editors** --> **Symbol editor**. There you can open different symbol files and check the included symbols and their numbers.

This advanced option is model specific and the setting is saved in the options database.

### See also

[XS\\_SECTION\\_SYMBOL\\_LEFT\\_ARROW\\_SYMBOL \(page 431\)](#)

## 20.14 XS\_SECTION\_VIEW\_REFERENCE

Category in [Advanced options dialog \(page 29\)](#): Drawing properties

You can move drawing views from one drawing to another. This advanced option sets the reference text for section view labels for sections moved to another drawing. You can enter free text, user-defined attributes (%UDA\_NAME%, %USERDEFINED.UDA\_NAME%), or template attributes (%ATTRIBUTE\_NAME%).

If you enter user-defined attributes or template attributes, use single % characters around them in the **Advanced options** dialog. The %DRAWING\_TITLE% attribute is the default value, and the %TITLE% attribute gives the same result. If you use these attributes, the view label gets the drawing name entered in the **Name** field in the drawing properties dialog. If you enter %TITLE1%, %TITLE2%, or %TITLE3%, the view label gets the text from the **Title 1 - Title 3** fields in drawing properties. You can also use the format %DR\_TITLE1%, %DR\_TITLE2%, and %DR\_TITLE3% to do the same.

| Attribute       | Checked                             | Value       |
|-----------------|-------------------------------------|-------------|
| %DRAWING_TITLE% | <input checked="" type="checkbox"/> | Name: GA 17 |
| %TITLE1%        | <input checked="" type="checkbox"/> | Title 1:    |
| %TITLE2%        | <input checked="" type="checkbox"/> | Title 2:    |
| %TITLE3%        | <input checked="" type="checkbox"/> | Title 3:    |

This advanced option is model specific and the setting is saved in the options database.

**See also**

[XS\\_SECTION\\_SYMBOL\\_REFERENCE \(page 432\)](#)

## 20.15 XS\_SET\_FIXEDMAINVIEW\_UDA\_TO\_AFFECT\_NUMBERING

Category in [Advanced options dialog \(page 29\)](#): Numbering

To activate the **Show top-in-form face** for non-concrete material, use the advanced option XS\_SET\_FIXEDMAINVIEW\_UDA\_TO\_AFFECT\_NUMBERING. The allowed options are STEEL, TIMBER, and MISC. You can also combine the options, use a comma (,) as a separator.

This advanced option affects numbering. If parts have different options selected for **Fixed drawing main view**, they get different assembly position numbers.

To show the top-in-form face in drawings and set which view is used in drawings as the main (front) view, go to the user-defined properties of a non-concrete part and select the **Fixed drawing main view** option that you want. The options are **Top, Back, Bottom, Start, End,** and **Front**.

This advanced option is model specific and the setting is saved in the options database.

## 20.16 XS\_SET\_HATCH\_ORIGIN\_INTO\_VIEW\_ORIGIN

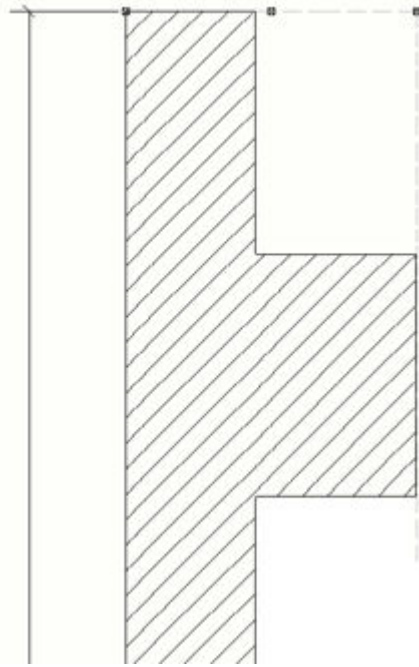
Category in [Advanced options dialog \(page 29\)](#): **Hatching**

To draw hatches consistently between parts and set to origin, set the advanced option `XS_SET_HATCH_ORIGIN_INTO_VIEW_ORIGIN` to `TRUE` and the scaling and rotation of hatches to zero (0). The default value is `FALSE`.

For automatic hatches, the scale and rotation are set in the `.htc` file, for example, `CONCRETE, 0, hardware_LINES, , 120`, where the value 0 (or empty) sets auto scale and rotation to false.

For manual hatches, the scale and rotation are set in the part or shape properties, where you need to set the **Scale** option to **Custom** and select the **Keep ratio of x and y** checkbox.

In the example below, the parts that belong to the same cast unit are hatched consistently.



This advanced option is model specific and the setting is saved in the options database.

## 20.17 XS\_SET\_MAX\_POINT\_CLOUD\_POINT\_COUNT

**Category in [Advanced options dialog \(page 29\)](#): Model views**

Use this advanced option to set the default maximum number of points in a point cloud in a view. The default value is 10 000 000 (10 million). This advanced option does not affect how many points are imported, only how many points are shown.

If you discover speed issues, set the count smaller. When the count is smaller, the point cloud appears less dense. If you use a higher value, the dense point cloud may provide more surface kind of appearance due to the smaller point distance.

Changing this advanced option can also be done after attaching the point cloud. Let's say you have 10 000 000 points in the point cloud, and you set `XS_SET_MAX_POINT_CLOUD_POINT_COUNT` to 1000, and attach the point cloud to the model. Then, 10 000 000 points are in the model, but as the advanced option is set to 1000, only 1000 of the points are shown, evenly distributed within the view. If you change the advanced option value to 1 000 000 after you have attached the point cloud, 1 000 000 points are shown, evenly distributed within the view. There is no need for reimport after changing the advanced option.

This advanced option is system specific and is read from environment files. Generally, there is no need to modify system-specific settings. Do not modify them if you are not an administrator.

Restart Tekla Structures after changing the value to activate the new setting.

## 20.18 XS\_SHARING\_INFO\_URL

Category in [Advanced options dialog \(page 29\)](#): **Multi-user**

Use this advanced option to set the Tekla Model Sharing management server address.

This advanced option is system-specific. Generally, there is no need to modify system-specific settings. Do not modify them if you are not an administrator.

## 20.19 XS\_SHARING\_JOIN\_SHOW\_AVAILABLE\_VERSIONS

---

**NOTE** We recommend you to set this advanced option in **File menu --> Sharing --> Sharing settings**. Select the **Show available updates when joining the model** option.

---

Use this advanced option to show a list of all the available baselines and updates which to join in Tekla Model Sharing. The list is shown when a user joins a model.

If needed, the advanced option can be set in initialization files. Set `XS_SHARING_JOIN_SHOW_AVAILABLE_VERSIONS` to `TRUE` in initialization files to enable the list.

This advanced option is user-specific.

## 20.20 XS\_SHARING\_READIN\_SHOW\_AVAILABLE\_VERSIONS

---

**NOTE** We recommend you to set this advanced option in **File menu --> Sharing --> Sharing settings**. Select the **Show available updates when reading in the changes** option.

---

Use this advanced option to show a list of available updates when a user reads in the model changes in Tekla Model Sharing.

If needed, the advanced option can be set in initialization files. Set `XS_SHARING_READIN_SHOW_AVAILABLE_VERSIONS` to `TRUE` in initialization files to enable the list.

This advanced option is user-specific.

## 20.21 XS\_SHARING\_READIN\_SHOW\_CHANGEMANAGER

---

**NOTE** We recommend you to set this advanced option in **File menu --> Sharing --> Sharing settings**. Select the **Show changes after read in** option.

---

Use this advanced option to show a list model changes at the bottom pane after you have read in the model changes in Tekla Model Sharing.

If needed, the advanced option can be set in initialization files. Set `XS_SHARING_READIN_SHOW_CHANGEMANAGER` to `TRUE` in initialization files.

This advanced option is user-specific.

## 20.22 XS\_SHARING\_READIN\_SHOW\_CHANGEMANAGER\_CONFLICTSONLY

---

**NOTE** We recommend you to set this advanced option in **File menu --> Sharing --> Sharing settings**. Select the **Show changes after read in** and **Only when conflicts exist** options.

---

Use this advanced option to show a list model changes at the bottom pane after you have read in the model changes in Tekla Model Sharing and when there are conflicts.

If needed, the advanced option can be set in initialization files. Set `XS_SHARING_READIN_SHOW_CHANGEMANAGER` and `XS_SHARING_READIN_SHOW_CHANGEMANAGER_CONFLICTSONLY` to `TRUE` in initialization files.

This advanced option is user-specific.

## 20.23 XS\_SHARING\_TEMP

Category in [Advanced options dialog \(page 29\)](#): **Multi-user**

Use this advanced option to define the temporary folder for Tekla Model Sharing packet management. The default is the Windows temporary folder.

Note that the folder path can be maximum 70 characters long.

This advanced option is user specific and the setting is saved in `options.bin` under the user folder, for example, in `C:\Users\\AppData\Local\Trimble\Tekla Structures\\UserSettings`. Restart Tekla Structures to activate the new value.

## 20.24 XS\_SHOP\_BOLT\_MARK\_STRING\_FOR\_SIZE

Category in [Advanced options dialog \(page 29\)](#): **Marking - bolts**

Use this advanced option to define the contents of the **Size** element in bolt marks (workshop). The default value is `%BOLT_NUMBER%*D%HOLE.DIAMETER% - M%DIAMETER%x%LENGTH%`.

This advanced option is only used when there is a bolt and the hole is a normal one.

You can use any combination of text and the following options as the value for this advanced option. You can use the options in any order, and make calculations.

- BOLT\_NUMBER
- DIAMETER
- LENGTH
- HOLE.DIAMETER
- LONG\_HOLE\_X
- LONG\_HOLE\_Y
- LONGHOLE\_MIN (the shorter of the slotted hole dimensions)
- LONGHOLE\_MAX (the longer of the slotted hole dimensions)
- BOLT\_STANDARD
- BOLT\_MATERIAL
- BOLT\_ASSEMBLY\_TYPE
- BOLT\_COUNTERSUNK
- BOLT\_SHORT\_NAME

- BOLT\_FULL\_NAME

Enclose each option in % characters.

---

**NOTE** If you define this advanced option in an .ini file, use double percent signs %% around the options. For example, %%BOLT\_NUMBER%%\*D%  
%HOLE.DIAMETER%%.

---

To use special characters, enter a backslash (\) followed by an ASCII number.

With length-type options, but not in calculations, you can specify the number of decimals. For example, HOLE.DIAMETER.2 shows (tapped) hole diameters with two decimals.

This advanced option is model specific and the setting is saved in the options database.

## 20.25 XS\_SHOP\_BOLT\_MARK\_STRING\_FOR\_SIZE\_IN\_GA

**Category in [Advanced options dialog \(page 29\)](#): Marking - bolts**

Use this advanced option to define the contents of the size element in bolt marks for workshop bolts in general arrangement drawings.

This advanced option is only used when there is a bolt and the hole is a normal one.

You can use any combination of text and the following options as the value for this advanced option. You can use the options in any order, and make calculations.

- BOLT\_NUMBER
- DIAMETER
- LENGTH
- HOLE.DIAMETER
- LONG\_HOLE\_X
- LONG\_HOLE\_Y
- LONGHOLE\_MIN (the shorter of the slotted hole dimensions)
- LONGHOLE\_MAX (the longer of the slotted hole dimensions)
- BOLT\_STANDARD
- BOLT\_MATERIAL
- BOLT\_ASSEMBLY\_TYPE
- BOLT\_COUNTERSUNK
- BOLT\_SHORT\_NAME

- BOLT\_FULL\_NAME

Enclose each option in % characters.

---

**NOTE** If you define this advanced option in an `.ini` file, use double percent signs %% around the options. For example, %%BOLT\_NUMBER%%\*D%  
%HOLE.DIAMETER%%.

---

To use special characters, enter a backslash (\) followed by an ASCII number.

With length-type options, but not in calculations, you can specify the number of decimals. For example, HOLE.DIAMETER.2 shows (tapped) hole diameters with two decimals.

This advanced option is model specific and the setting is saved in the options database.

**See also**

[XS\\_SHOP\\_HOLE\\_MARK\\_STRING\\_FOR\\_SIZE\\_IN\\_GA](#) (page 443)

[XS\\_SHOP\\_LONGHOLE\\_MARK\\_STRING\\_FOR\\_SIZE\\_IN\\_GA](#) (page 445)

## 20.26 XS\_SHOP\_HOLE\_MARK\_STRING\_FOR\_SIZE

**Category in [Advanced options dialog \(page 29\)](#): Marking - bolts**

Use this advanced option to define the contents of the **Size** element in hole marks (workshop). For example, to show bolt number and hole diameter, enter %BOLT\_NUMBER%\*D%HOLE.DIAMETER%.

This advanced option is only used when there is a hole, no bolt (and the hole is a normal one).

You can use any combination of text and the following options as the value for this advanced option. You can use the options in any order, and make calculations.

- BOLT\_NUMBER
- DIAMETER
- LENGTH
- HOLE.DIAMETER
- LONG\_HOLE\_X
- LONG\_HOLE\_Y
- LONGHOLE\_MIN (the shorter of the slotted hole dimensions)
- LONGHOLE\_MAX (the longer of the slotted hole dimensions)
- BOLT\_STANDARD

- BOLT\_MATERIAL
- BOLT\_ASSEMBLY\_TYPE
- BOLT\_COUNTERSUNK
- BOLT\_SHORT\_NAME
- BOLT\_FULL\_NAME

Enclose each option in % characters.

---

**NOTE** If you define this advanced option in an `.ini` file, use double percent signs `%%` around the options. For example, `%%BOLT_NUMBER%%*D%%HOLE.DIAMETER%%`.

---

To use special characters, enter a backslash (\) followed by an ASCII number.

With length-type options, but not in calculations, you can specify the number of decimals. For example, `HOLE.DIAMETER.2` shows (tapped) hole diameters with two decimals.

This advanced option is model specific and the setting is saved in the options database.

## 20.27 XS\_SHOP\_HOLE\_MARK\_STRING\_FOR\_SIZE\_IN\_GA

**Category in [Advanced options dialog \(page 29\)](#): Marking - bolts**

Use this advanced option to define the contents of the size element in hole marks for workshop bolts in general arrangement drawings.

This advanced option is only used when there is a hole, no bolt (and the hole is a normal one).

You can use any combination of text and the following options as the value for this advanced option. You can use the options in any order, and make calculations.

- BOLT\_NUMBER
- DIAMETER
- LENGTH
- HOLE.DIAMETER
- LONG\_HOLE\_X
- LONG\_HOLE\_Y
- LONGHOLE\_MIN (the shorter of the slotted hole dimensions)
- LONGHOLE\_MAX (the longer of the slotted hole dimensions)
- BOLT\_STANDARD

- BOLT\_MATERIAL
- BOLT\_ASSEMBLY\_TYPE
- BOLT\_COUNTERSUNK
- BOLT\_SHORT\_NAME
- BOLT\_FULL\_NAME

Enclose each option in % characters.

---

**NOTE** If you define this advanced option in an `.ini` file, use double percent signs `%%` around the options. For example, `%%BOLT_NUMBER%%*D%  
%HOLE.DIAMETER%%`.

---

To use special characters, enter a backslash (\) followed by an ASCII number.

With length-type options, but not in calculations, you can specify the number of decimals. For example, `HOLE.DIAMETER.2` shows (tapped) hole diameters with two decimals.

This advanced option is model specific and the setting is saved in the options database.

## 20.28 XS\_SHOP\_LONGHOLE\_MARK\_STRING\_FOR\_SIZE

**Category in [Advanced options dialog \(page 29\)](#): Marking - bolts**

Use this advanced option to define the contents of the **Size** element in slotted hole marks

(workshop). The default value is `%BOLT_NUMBER%*D%HOLE.DIAMETER%  
(%HOLE.DIAMETER+LONGHOLE_MIN%x%HOLE.DIAMETER+LONGHOLE_MAX%) -  
M%DIAMETER%x%LENGTH%`.

This advanced option is only used when there is a slotted hole.

You can use any combination of text and the following options as the value for this advanced option. You can use the options in any order, and make calculations.

- BOLT\_NUMBER
- DIAMETER
- LENGTH
- HOLE.DIAMETER
- LONG\_HOLE\_X
- LONG\_HOLE\_Y
- LONGHOLE\_MIN (the shorter of the slotted hole dimensions)

- LONGHOLE\_MAX (the longer of the slotted hole dimensions)
- BOLT\_STANDARD
- BOLT\_MATERIAL
- BOLT\_ASSEMBLY\_TYPE
- BOLT\_COUNTERSUNK
- BOLT\_SHORT\_NAME
- BOLT\_FULL\_NAME

Enclose each option in % characters.

---

**NOTE** If you define this advanced option in an `.ini` file, use double percent signs `%%` around the options. For example, `%%BOLT_NUMBER%%*D%  
%HOLE.DIAMETER%%`.

---

To use special characters, enter a backslash (`\`) followed by an ASCII number.

With length-type options, but not in calculations, you can specify the number of decimals. For example, `HOLE.DIAMETER.2` shows (tapped) hole diameters with two decimals.

This advanced option is model specific and the setting is saved in the options database.

## 20.29 XS\_SHOP\_LONGHOLE\_MARK\_STRING\_FOR\_SIZE\_IN\_GA

**Category in [Advanced options dialog \(page 29\)](#): Marking - bolts**

Use this advanced option to define the contents of the size element in slotted hole marks for workshop bolts in general arrangement drawings.

This advanced option is only used when there is a slotted hole.

You can use any combination of text and the following options as the value for this advanced option. You can use the options in any order, and make calculations.

- BOLT\_NUMBER
- DIAMETER
- LENGTH
- HOLE.DIAMETER
- LONG\_HOLE\_X
- LONG\_HOLE\_Y
- LONGHOLE\_MIN (the shorter of the slotted hole dimensions)

- LONGHOLE\_MAX (the longer of the slotted hole dimensions)
- BOLT\_STANDARD
- BOLT\_MATERIAL
- BOLT\_ASSEMBLY\_TYPE
- BOLT\_COUNTERSUNK
- BOLT\_SHORT\_NAME
- BOLT\_FULL\_NAME

Enclose each option in % characters.

---

**NOTE** If you define this advanced option in an `.ini` file, use double percent signs `%%` around the options. For example, `%%BOLT_NUMBER%%*D%  
%HOLE.DIAMETER%%`.

---

To use special characters, enter a backslash (`\`) followed by an ASCII number.

With length-type options, but not in calculations, you can specify the number of decimals. For example, `HOLE.DIAMETER.2` shows (tapped) hole diameters with two decimals.

This advanced option is model specific and the setting is saved in the options database.

## 20.30 XS\_SHOP\_OVERSIZEDHOLE\_MARK\_STRING\_FOR\_SIZE

**Category in [Advanced options dialog \(page 29\)](#): Marking - bolts**

Use this advanced option to define the contents of the **Size** element in marks for oversized bolt holes (workshop). The default value is `%BOLT_NUMBER%*D%HOLE.DIAMETER%`.

This advanced option is only used when there is an oversized hole.

You can use any combination of text and the following options as the value for this advanced option. You can use the options in any order, and make calculations.

- BOLT\_NUMBER
- DIAMETER
- LENGTH
- HOLE.DIAMETER
- LONG\_HOLE\_X
- LONG\_HOLE\_Y
- LONGHOLE\_MIN (the shorter of the slotted hole dimensions)

- LONGHOLE\_MAX (the longer of the slotted hole dimensions)
- BOLT\_STANDARD
- BOLT\_MATERIAL
- BOLT\_ASSEMBLY\_TYPE
- BOLT\_COUNTERSUNK
- BOLT\_SHORT\_NAME
- BOLT\_FULL\_NAME

Enclose each option in % characters.

---

**NOTE** If you define this advanced option in an `.ini` file, use double percent signs `%%` around the options. For example, `%%BOLT_NUMBER%%*D%%  
%HOLE.DIAMETER%%`.

---

To use special characters, enter a backslash (`\`) followed by an ASCII number.

With length-type options, but not in calculations, you can specify the number of decimals. For example, `HOLE.DIAMETER.2` shows (tapped) hole diameters with two decimals.

This advanced option is model specific and the setting is saved in the options database.

#### See also

[XS\\_SITE\\_OVERSIZEDHOLE\\_MARK\\_STRING\\_FOR\\_SIZE \(page 476\)](#)

[XS\\_SHOP\\_OVERSIZEDHOLE\\_MARK\\_STRING\\_FOR\\_SIZE\\_IN\\_GA \(page 447\)](#)

## 20.31 XS\_SHOP\_OVERSIZEDHOLE\_MARK\_STRING\_FOR\_SIZE\_IN\_GA

Category in [Advanced options dialog \(page 29\)](#): **Marking - bolts**

Use this advanced option to define the contents of the **Size** element in oversized hole marks for workshop bolts in general arrangement drawings.

This advanced option is only used when there is an oversized hole.

You can use any combination of text and the following options as the value for this advanced option. You can use the options in any order, and make calculations.

- BOLT\_NUMBER
- DIAMETER
- LENGTH

- HOLE.DIAMETER
- LONG\_HOLE\_X
- LONG\_HOLE\_Y
- LONGHOLE\_MIN (the shorter of the slotted hole dimensions)
- LONGHOLE\_MAX (the longer of the slotted hole dimensions)
- BOLT\_STANDARD
- BOLT\_MATERIAL
- BOLT\_ASSEMBLY\_TYPE
- BOLT\_COUNTERSUNK
- BOLT\_SHORT\_NAME
- BOLT\_FULL\_NAME

Enclose each option in % characters.

---

**NOTE** If you define this advanced option in an `.ini` file, use double percent signs %% around the options. For example, `%%BOLT_NUMBER%%*D%%HOLE.DIAMETER%%`.

---

To use special characters, enter a backslash (\) followed by an ASCII number.

With length-type options, but not in calculations, you can specify the number of decimals. For example, `HOLE.DIAMETER.2` shows (tapped) hole diameters with two decimals.

This advanced option is model specific and the setting is saved in the options database.

**See also**

[XS\\_SITE\\_OVERSIZEDHOLE\\_MARK\\_STRING\\_FOR\\_SIZE\\_IN\\_GA](#) (page 477)

[XS\\_SHOP\\_OVERSIZEDHOLE\\_MARK\\_STRING\\_FOR\\_SIZE](#) (page 446)

## 20.32 XS\_SHOP\_TAPPEDHOLE\_MARK\_STRING\_FOR\_SIZE

**Category in [Advanced options dialog \(page 29\)](#): Marking - bolts**

Use this advanced option to define the contents of the **Size** element in marks for tapped bolt holes (workshop). The default value is `%%BOLT_NUMBER%%*\216%%HOLE.DIAMETER.1% TAP M%%BOLT_DIAMETER%%`.

This advanced option is only used when there is a tapped hole.

You can use any combination of text and the following options as the value for this advanced option. You can use the options in any order, and make calculations.

- BOLT\_NUMBER
- DIAMETER
- LENGTH
- HOLE.DIAMETER
- LONG\_HOLE\_X
- LONG\_HOLE\_Y
- LONGHOLE\_MIN (the shorter of the slotted hole dimensions)
- LONGHOLE\_MAX (the longer of the slotted hole dimensions)
- BOLT\_STANDARD
- BOLT\_MATERIAL
- BOLT\_ASSEMBLY\_TYPE
- BOLT\_COUNTERSUNK
- BOLT\_SHORT\_NAME
- BOLT\_FULL\_NAME

Enclose each option in % characters.

---

**NOTE** If you define this advanced option in an `.ini` file, use double percent signs `%%` around the options. For example, `%%BOLT_NUMBER%%*D%  
%HOLE.DIAMETER%%`.

---

To use special characters, enter a backslash (\) followed by an ASCII number.

With length-type options, but not in calculations, you can specify the number of decimals. For example, `HOLE.DIAMETER.2` shows (tapped) hole diameters with two decimals.

This advanced option is model specific and the setting is saved in the options database.

### See also

[XS\\_SITE\\_TAPPEDHOLE\\_MARK\\_STRING\\_FOR\\_SIZE \(page 478\)](#)

[XS\\_SHOP\\_TAPPEDHOLE\\_MARK\\_STRING\\_FOR\\_SIZE\\_IN\\_GA \(page 449\)](#)

## 20.33 XS\_SHOP\_TAPPEDHOLE\_MARK\_STRING\_FOR\_SIZE\_IN\_GA

Category in [Advanced options dialog \(page 29\)](#): Marking - bolts

Use this advanced option to define the contents of the **Size** element in tapped hole marks for workshop bolts in general arrangement drawings.

This advanced option is only used when there is a tapped hole.

You can use any combination of text and the following options as the value for this advanced option. You can use the options in any order, and make calculations.

- BOLT\_NUMBER
- DIAMETER
- LENGTH
- HOLE.DIAMETER
- LONG\_HOLE\_X
- LONG\_HOLE\_Y
- LONGHOLE\_MIN (the shorter of the slotted hole dimensions)
- LONGHOLE\_MAX (the longer of the slotted hole dimensions)
- BOLT\_STANDARD
- BOLT\_MATERIAL
- BOLT\_ASSEMBLY\_TYPE
- BOLT\_COUNTERSUNK
- BOLT\_SHORT\_NAME
- BOLT\_FULL\_NAME

Enclose each option in % characters.

---

**NOTE** If you define this advanced option in an `.ini` file, use double percent signs `%%` around the options. For example, `%%BOLT_NUMBER%%*D%  
%HOLE.DIAMETER%%`.

---

To use special characters, enter a backslash (`\`) followed by an ASCII number.

With length-type options, but not in calculations, you can specify the number of decimals. For example, `HOLE.DIAMETER.2` shows (tapped) hole diameters with two decimals.

This advanced option is model specific and the setting is saved in the options database.

**See also**

[XS\\_SITE\\_TAPPEDHOLE\\_MARK\\_STRING\\_FOR\\_SIZE\\_IN\\_GA \(page 480\)](#)

[XS\\_SHOP\\_TAPPEDHOLE\\_MARK\\_STRING\\_FOR\\_SIZE \(page 448\)](#)

## 20.34 XS\_SHORTENING\_SYMBOL\_COLOR\_RGB

**Category in [Advanced options dialog \(page 29\)](#): Drawing properties**

Use this advanced option to set the color of the view shortening symbol in a drawing. Leave the value empty to automatically use the same color as the part color.



You can enter a single color index value (such as 160 for the standard Tekla Structures red color) or a specific custom RGB color. For an RGB color, enter three numeric values separated by spaces (each value in the range 0 to 255). For example, for a specific shade of green, enter 0 220 50.




This advanced option is model specific and the setting is saved in the options database.

Legacy Tekla Structures index values and the corresponding colors:

|   |   |
|---|---|
| 0 |  Black   |
| 1 |  White   |
| 2 |  Red     |
| 3 |  Green   |
| 4 |  Blue    |
| 5 |  Cyan    |
| 6 |  Yellow  |
| 7 |  Magenta |

Standard Tekla Structures index values and the corresponding colors:








|     |   |
|-----|---|
| 152 |  Invisible |
| 153 |  Black     |
| 160 |  Red       |
| 161 |  Green     |
| 162 |  Blue      |
| 163 |  Cyan      |
| 164 |  Yellow    |
| 165 |  Magenta   |
| 154 |  Brown     |

|     |  |
|-----|--|
| 155 |  Dark green |
| 156 |  Dark blue  |
| 157 |  Blue-green |
| 158 |  Orange     |
| 159 |  Gray       |
| 130 |  Gray 30    |
| 131 |  Gray 50    |
| 132 |  Gray 70    |
| 133 |  Gray 90    |

## 20.35 XS\_SHORTENING\_SYMBOL\_LINE\_TYPE

Category in [Advanced options dialog \(page 29\)](#): Drawing properties

Use this advanced option to set the line type of the view shortening symbol. Enter an integer value. Default is a solid line. See below for integer values for different line types.

|   |   |
|---|---|
|  | 1 |
|  | 2 |
|  | 3 |
|  | 4 |
|  | 5 |
|  | 6 |
|  | 7 |

This advanced option is model specific and the setting is saved in the options database.

## 20.36 XS\_SHORTENING\_SYMBOL\_WITH\_ZIGZAG

Category in [Advanced options dialog \(page 29\)](#): Drawing properties

Use this advanced option to set the shortening symbol line shape. If you do not want to use zigzag, set this advanced option to `FALSE`. `TRUE` is the default.

This advanced option is model specific and the setting is saved in the options database.

---

**TIP** You can control the appearance of the view shortening symbol with the advanced options [XS\\_SHORTENING\\_SYMBOL\\_COLOR\\_RGB](#) (page 451) and [XS\\_SHORTENING\\_SYMBOL\\_LINE\\_TYPE](#) (page 452).

To use a view shortening symbol instead of the empty area, set the advanced options [XS\\_DRAW\\_VERTICAL\\_VIEW\\_SHORTENING\\_SYMBOLS\\_TO\\_PARTS](#) (page 184) and [XS\\_DRAW\\_HORIZONTAL\\_VIEW\\_SHORTENING\\_SYMBOLS\\_TO\\_PARTS](#) (page 178) to `TRUE`.

---

## 20.37 XS\_SHOW\_EMPTY\_MARKS

Category in [Advanced options dialog](#) (page 29): **Drawing properties**

Use this advanced option to control the behavior of manually added marks and notes in drawings when the content in the properties is not defined for the object type you have selected in the drawing.

This advanced option is user specific and the setting is saved in `options.bin` under the user folder, for example, in `C:\Users\\AppData\Local\Trimble\Tekla Structures\\UserSettings`. Restart Tekla Structures to activate the new value.

### Tekla Structures version 2023 SP5 and later

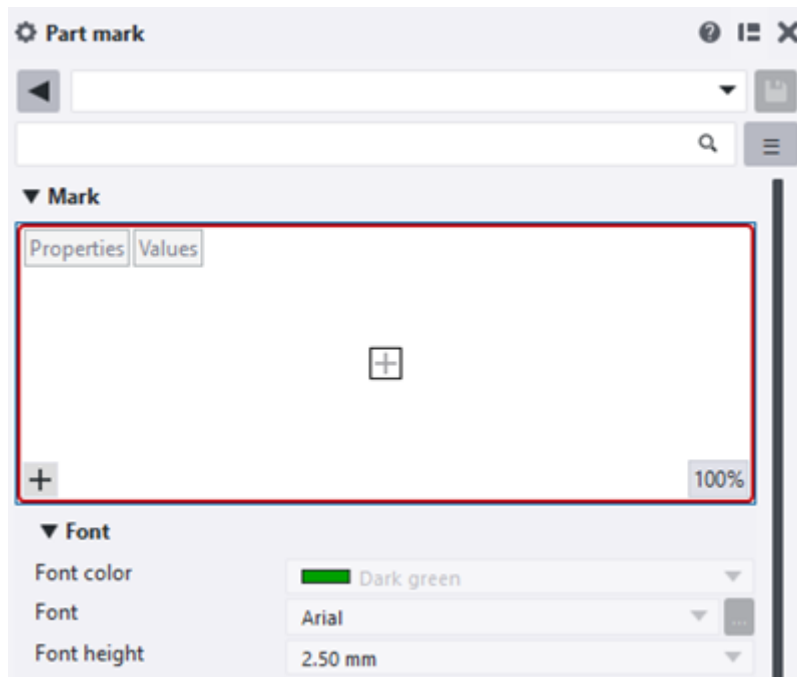
If you set `XS_SHOW_EMPTY_MARKS` to `TRUE` (default):


- Tekla Structures creates the marks or notes that have no content with the "Content not defined" text.
- The following status bar message is displayed: "Marks without content have been created. Use the `XS_SHOW_EMPTY_MARKS` advanced option to control this. - - Add elements to the mark content and click **Modify**."
- You can double-click the mark or note and add the content in the property pane.
- You can also change the advanced option value to `FALSE` to change the functionality.

If you set `XS_SHOW_EMPTY_MARKS` to `FALSE`:

- Tekla Structures creates the marks that have no content and selects these empty marks in the drawing.
- The following status bar message is displayed: "Invisible marks without content have been created - - Add elements to the mark content and click **Modify**."

- If marks of only one mark type without content have been created, the property pane shows up immediately indicating in the visual editor that the content is not defined, and you can add the desired content.



- If marks of two or more mark types without content have been created:
  - Property pane shows up, and there is an exclamation mark next to the object type list arrow button  indicating that the list contains mark types with empty marks.
  - The property pane keeps all marks with empty content visible in the object type list so that you can select each mark type and fix the problems.

### Tekla Structures version 2022 from SP11 onwards

If you set `XS_SHOW_EMPTY_MARKS` to `TRUE` (default):

- Tekla Structures creates the marks or notes with a text element set to "Content not defined".
- The following status bar message is displayed: "Marks without content have been created. Use `XS_SHOW_EMPTY_MARKS` to control this. -- Add elements to mark content and press **Modify**."
- You can double-click the mark or note and add the content in the properties dialog.

If you set `XS_SHOW_EMPTY_MARKS` to `FALSE`:

- The mark or note properties dialog is displayed and you can add the mark or note text.

- The following status bar message is displayed: "Invisible marks without content have been created -- Add elements to mark content and press **Modify.**"

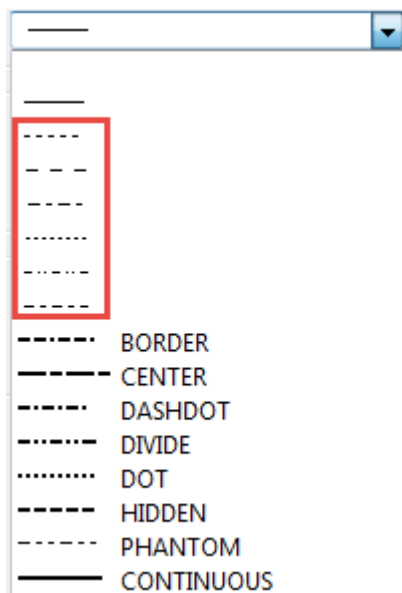
## 20.38 XS\_SHOW\_HARDWARE\_DASHED\_LINE\_IN\_PIXEL\_SCALE

Category in [Advanced options dialog \(page 29\)](#): Drawing properties

Set `XS_SHOW_HARDWARE_DASHED_LINE_IN_PIXEL_SCALE` to `FALSE` to activate the functionality, where dashed hardware line scale is the same as in printed and exported drawings, and the dashed hardware lines work in the same way as the custom lines.

Dashed hardware line types are scaled by pixels by default (`TRUE`), which means that they look the same in all zoom levels.

Dashed hardware lines are the first couple of lines in the line list:



This advanced option is user specific and the setting is saved in `options.bin` under the user folder, for example, in `C:\Users\\AppData\Local\Trimble\Tekla Structures\\UserSettings`. Restart Tekla Structures to activate the new value.

## 20.39 XSR\_SHOW\_INCH\_MARK\_IN\_PROFILE\_NAMES

Category in [Advanced options dialog \(page 29\)](#): **Templates and symbols**

Use this advanced option to show or hide the inch symbol in the profile name in reports and templates. When you set the advanced option to `TRUE`, the profile appears like this: PL2 1/2"X20". When you set the advanced option to `FALSE`, the profile appears like this: PL2 1/2X20. The default value is `TRUE`.

This advanced option is model specific and the setting is saved in the options database.

**See also**

[XS\\_PROFILE\\_DISPLAY\\_INCH\\_MARK\\_AFTER\\_FRACTIONS\\_IN\\_REPORTS \(page 379\)](#)

## 20.40 XS\_SHOW\_LICENSE\_ERROR\_MESSAGE\_FOR\_BYPASS\_INI

**This advanced option must be set in an initialization (.ini) file.**

If you use the `Bypass.ini` file to bypass the Tekla Structures startup screen, set this advanced option to `TRUE` to show error messages that relate to obtaining a license.

This advanced option is system specific and is read from `teklastructures.ini`. It can also be set locally, see your environment `.ini` file (`env_<environment_name>.ini`). Generally, there is no need to modify system-specific settings. Do not modify them if you are not an administrator.

## 20.41 XS\_SHOW\_NOTIFICATION\_REPORT

Category in [Advanced options dialog \(page 29\)](#): **Modeling properties**

Set this advanced option to `TRUE` to run and display a notification report from the whole model when you open a model.

You can use the notification report to:

- list assignments on all objects (drawings, parts, and assemblies).
- report the following, for example:
  - how many assemblies there are in the model
  - how many assembly drawings have been created
  - how many of the assembly drawings have been approved
  - how many of the assembly drawings have been issued for production

The report template used is called `notification_report`, and you can edit it in Template Editor. The notification report reports anything you want, not just assignments. You need to customize the report template to report the things you want. For example, some environments do not have all attributes available, like `ASSIGNED_TO` or `ASSIGNED_BY`, for parts and assemblies.

The report template is located under the `..\ProgramData\Trimble\Tekla Structures\<version>\environments\<environment>` folder. The exact location may vary depending on the folder structure of your environment files. The report is saved under the current model folder.

If you do not want to display the notification report upon opening a model, set this advanced option to `FALSE`, which is the default value.

This advanced option is model specific and the setting is saved in the options database.

Example of the notification report containing list of drawing assignments:

```

-----
PROJECT NEWS!!!!

This is an automatic newflash for project participants

This message is shown when anyone opens the model or runs "notification_report" report template
-----
NOTIFICATION OF ASSIGNMENTS CONTRACT NO: 1          Page: 1
Objects assigned to user1                          Date: 07.11.2016
-----
Object      Name      Assigned to  Assigned by  Comment
-----
A Drawing   [A.1] PLATE   user1        user2        OK
A Drawing   [C.2] COLUMN user1        user2        OK
-----
0 assemblies, 0 parts and 2 drawings have been assigned to
-----

```

## 20.42 XS\_SHOW\_PERFORM\_NUMBERING\_MESSAGE

Category in [Advanced options dialog \(page 29\)](#): Numbering

Use this advanced option to show or hide the **Perform numbering** button in the warning message that Tekla Structures displays if you try to create a drawing without numbering or when numbering is not up to date.

- By default, this advanced option is set to `TRUE` and the numbering button is shown.
- To hide the button, set this advanced option to `FALSE`.

Consider hiding the numbering button in the multi-user mode, because unnecessary or unplanned numbering may take a while in large models or break project numbering. This can occur if **Synchronize with master model**

**(save-numbering-save)** checkbox is not selected in the **Numbering Setup** dialog.

This advanced option is model specific and the setting is saved in the options database.

## 20.43 XS\_SHOW\_PROGRESS\_BAR\_FOR\_PROJECT\_STATUS\_VISUALIZATION

Category in [Advanced options dialog \(page 29\)](#): **Model views**

Use this advanced option for defining whether the progress bar for project status visualization is displayed.

To display the progress bar, set this advanced option to `TRUE` (default). If you do not want to display the progress bar, set this advanced option to `FALSE`.

This advanced option is user specific and the setting is saved in `options.bin` under the user folder, for example, in `C:\Users\\AppData\Local\Trimble\Tekla Structures\\UserSettings`. Restart Tekla Structures to activate the new value.

## 20.44 XS\_SHOW\_REVISION\_MARK\_ON\_DRAWING\_LIST

Category in [Advanced options dialog \(page 29\)](#): **Drawing properties**

Set this advanced option to `TRUE` to have Tekla Structures include the **Revision mark** in **Document manager** instead of the **Revision number**. The default value is `FALSE`. This means that the revision number is shown.

This advanced option is user specific and the setting is saved in `options.bin` under the user folder, for example, in `C:\Users\\AppData\Local\Trimble\Tekla Structures\\UserSettings`. Restart Tekla Structures to activate the new value.

## 20.45 XS\_SHOW\_SHADOW\_FOR\_ORTHO\_IN\_DX

Category in [Advanced options dialog \(page 29\)](#): **Model views**

Use this advanced option to control whether shadows are shown in the DirectX rendered model views when the orthogonal projection is on. Shadows

are more noticeable in the perspective projection than in the orthogonal projection.

By default, this advanced option is set to `FALSE`.

If you change the value, you need to reopen the view to activate the new value.

**See also**

[XS\\_SHOW\\_SHADOW\\_FOR\\_PERSPECTIVE\\_IN\\_DX \(page 459\)](#)

[XS\\_USE\\_ANTI\\_ALIASING\\_IN\\_DX \(page 505\)](#)

## 20.46 XS\_SHOW\_SHADOW\_FOR\_PERSPECTIVE\_IN\_DX

**Category in [Advanced options dialog \(page 29\)](#): Model views**

Use this advanced option to control whether shadows are shown in the DirectX rendered model views when the perspective projection is on. Shadows are more noticeable in the perspective projection than in the orthogonal projection.

By default, this advanced option is set to `TRUE`.

If you change the value, you need to reopen the view to activate the new value.

**See also**

[XS\\_SHOW\\_SHADOW\\_FOR\\_ORTHO\\_IN\\_DX \(page 458\)](#)

[XS\\_USE\\_ANTI\\_ALIASING\\_IN\\_DX \(page 505\)](#)

## 20.47 XS\_SHOW\_SITE\_STUDS\_IN\_ASSEMBLY\_DRAWINGS

**Category in [Advanced options dialog \(page 29\)](#): Drawing properties**

Set this advanced option to `TRUE` (default) to show site studs in assembly drawings. If you set it to `FALSE`, the site studs are not shown.

This advanced option is model specific and the setting is saved in the options database.

## 20.48 XS\_SHOW\_STATISTICS\_IN\_DX

**Category in [Advanced options dialog \(page 29\)](#): Model views**

Use this advanced option to show statistics and the used rendering device in the DirectX rendered model views. The statistics are shown in the lower left corner of the model view, as frames per second measurement.

With this advanced option you can easily verify that you are using a proper graphics hardware accelerator for the Tekla Structures model views, especially in the case of multiple GPUs such as laptops, which often have both CPU built accelerator and an external, much more powerful graphics accelerator

By default, the advanced option is set to `FALSE`.

If you change the value, you need to reopen the view to activate the new value.

Note that this advanced option has no effect on the legacy OpenGL rendered model views.

## 20.49 XS\_SHOW\_STUDS\_IN\_WORKSHOP\_DRAWINGS

**Category in [Advanced options dialog \(page 29\)](#): Drawing properties**

Set this advanced option to `TRUE` to show workshop studs in single-part drawings. The default value is `FALSE`.

This advanced option is model specific and the setting is saved in the options database.

## 20.50 XS\_SHOW\_TEMPLATE\_LOG\_MESSAGES

**Category in [Advanced options dialog \(page 29\)](#): Templates and symbols**

Set this advanced option to `TRUE` to show error messages related to template attributes in the log file. Set it to `FALSE` to hide these messages. By default, this advanced option is set to `FALSE`.

This advanced option is user specific and the setting is saved in `options.bin` under the user folder, for example, in `C:\Users\\AppData\Local\Trimble\Tekla Structures\\UserSettings`. Restart Tekla Structures to activate the new value.

## 20.51 XS\_SINGLE\_CENTERED\_SCREW

Category in [Advanced options dialog \(page 29\)](#): **Single-part views in assembly drawings**

Use to control the dimensioning of centrally-located bolts in single-part views included in assembly drawings in integrated dimensioning. Possible values are:

- 0 = Dimensions the centered bolts spread.
- 5 = Dimensions the bolts to the main part center-lines.
- 6 = Overrides the **Secondary part bolt internal dimensions** setting for centered bolts. This only applies to bolts located centrally on the part.

This advanced option is model specific and the setting is saved in the options database.

## 20.52 XS\_SINGLE\_CLOSE\_DIMENSIONS

Category in [Advanced options dialog \(page 29\)](#): **Single-part views in assembly drawings**

Use to close dimensions in single-part views included in an assembly drawing.

- 0 = Does not close dimensions
- 1 = Closes dimensions in the x direction and leaves others open. This is the default value.
- 2 = Closes all dimensions

This advanced option is model specific and the setting is saved in the options database.

## 20.53 XS\_SINGLE\_CLOSE\_SHORT\_DIMENSIONS

Category in [Advanced options dialog \(page 29\)](#): **Single-part views in assembly drawings**

Use to close short dimensions in single-part views included in assembly drawings. The default value is 1. If you do not want to close short dimensions, enter 0.

This advanced option is model specific and the setting is saved in the options database.

## 20.54 XS\_SINGLE\_COMBINE\_DISTANCE

Category in [Advanced options dialog \(page 29\)](#): **Single-part views in assembly drawings**

Use to set a distance for combining dimensions in single-part views included in assembly drawings. Enter a decimal value, for example 400.0.

By default, this advanced option is not set to any value.

This advanced option is model specific and the setting is saved in the options database.

## 20.55 XS\_SINGLE\_COMBINE\_MIN\_DISTANCE

Category in [Advanced options dialog \(page 29\)](#): **Single-part views in assembly drawings**

Use to set a minimum distance for combining dimensions in single-part views included in assembly drawings. Enter a decimal value, for example 200.0.

By default, this advanced option is not set to any value.

This advanced option is model specific and the setting is saved in the options database.

## 20.56 XS\_SINGLE\_COMBINE\_WAY

Category in [Advanced options dialog \(page 29\)](#): **Single-part views in assembly drawings**

Use to combine dimensions in single-part views included in assembly drawings. The options correspond to the combining order on the General tab of the **Dimensioning Properties** dialog. By default, this advanced option is not set to any value.

- Option 0 prevents dimensions from being combined.
- Option 1 combines part position dimensions with part internal dimensions, and bolt group internal dimensions with bolt edge distances. Bolt position dimensions are not combined with bolt internal dimensions.
- Option 2 combines the part position dimension with part internal dimensions and bolt group internal dimensions. Bolt internal dimensions are combined with bolt position dimensions. Edge distances are shown separately.
- Option 3 combines bolt internal dimensions and position dimensions in the same dimension line.








- Option 4 combines bolt group position dimensions with part position dimensions. Part and bolt internal dimensions are not combined with this option, but bolt internal dimensions are combined with bolt edge distances.
- Option 5 combines internal dimensions and the position dimension of bolt groups where there are several bolt groups.
- Option 4 . 5 uses a combination of option 5 for the main part and a combination of option 4 for the secondary parts.

This advanced option is model specific and the setting is saved in the options database.

## 20.57 XS\_SINGLE\_DIMENSION\_TYPE

**Category in [Advanced options dialog \(page 29\)](#): Single-part views in assembly drawings**

Use to set a dimension type for single-part views included in assembly drawings. The options are:

- 1 =  Relative, point to point dimensions. This is the default value.
- 2 =  Absolute, dimensions from a common start point.
- 3 =  Relative and absolute, a combination of point to point and common start point.
- 4 =  US absolute, dimensions from a common start point, which include a running dimension mark (RD).
- 16 =  US absolute 2, similar to US absolute, but it changes short dimensions to relative.
- 35 =  Absolute plus short relatives, which is similar to Absolute, but it changes short dimensions to relative. Also called internal absolute. This option may show both dimensions, but it does not show relative dimensions when dimensions are long. This option shows the absolute dimensions inside the dimension lines.
- 99 =  Absolute plus all relatives above the absolutes, which is similar to Relative and absolute, but it places the relative dimensions above the absolute.

This advanced option is model specific and the setting is saved in the options database.

## 20.58 XS\_SINGLE\_DRAW\_PART\_AS

Category in [Advanced options dialog \(page 29\)](#): Single-part views in assembly drawings

Use to define how parts appear (their representation type) in single-part views included in assembly drawings. The options are:

- 1 (default) solid
- 4 workshop solid (round tubes open)
- 2 symbol form

This advanced option is model specific and the setting is saved in the options database.

## 20.59 XS\_SINGLE\_EXCLUDE

Category in [Advanced options dialog \(page 29\)](#): Single-part views in assembly drawings

Use to exclude single-part views from assembly drawings. The options are:

- NONE includes all single part views.
- MAIN\_SHAFT includes single part views of all parts, except assembly main parts.
- ALL\_SHAFTS includes single part views of all parts, except those with another object welded to them (i.e. main parts).
- AUTO (default) includes single part views of all parts, except the longest main part in the assembly.
- ALL\_BUT\_MAIN\_PART includes single part views of assembly main parts only.
- STANDARD includes single-part views of all parts, except standard parts. You can add STANDARD after any of the existing values, for example MAIN\_SHAFT\_AND\_STANDARD creates single-part drawing from all but main part or standard parts.

This advanced option is model specific and the setting is saved in the options database.

## 20.60 XS\_SINGLE\_FORWARD\_OFFSET

Category in [Advanced options dialog \(page 29\)](#): **Single-part views in assembly drawings**

Use to set the distance Tekla Structures uses to search for the base point of a dimension in single-part views included in an assembly drawing. If Tekla Structures does not find a base point (corner) within the defined forward offset search distance, it uses an edge point. Enter the value as a decimal, for example 250.0.

This advanced option is model specific and the setting is saved in the options database.

## 20.61 XS\_SINGLE\_NO\_RELATIVE\_SHAPE\_DIMENSIONS

Category in [Advanced options dialog \(page 29\)](#): **Dimensioning - parts**

Set this advanced option to `TRUE` (default) to force shape dimensions to be the same as the dimension type you select. If you do not want to do this, set it to `FALSE`.

This advanced option is model specific and the setting is saved in the options database.

**See also**

[XS\\_NO\\_RELATIVE\\_SHAPE\\_DIMENSIONS \(page 343\)](#)

## 20.62 XS\_SINGLE\_NO\_SHORTEN

Category in [Advanced options dialog \(page 29\)](#): **Single-part views in assembly drawings**

Set this advanced option to `TRUE` to display single-part views in drawings without shortening parts. The default value is `FALSE`.

This advanced option is model specific and the setting is saved in the options database.

## 20.63 XS\_SINGLE\_ORIENTATION\_MARK

Category in [Advanced options dialog \(page 29\)](#): **Single-part views in assembly drawings**

You can display orientation symbols in single-part views included in assembly drawings. To show the orientation symbols in single-part views, set this advanced option to `TRUE`.

In assembly drawing properties, do the following:

1. In assembly drawing properties, click **Layout** and go to the **Other** tab.
2. Set the option **Single-part attributes** to **Current attributes**. Tekla Structures takes the orientation mark settings from the current single-part drawing properties. If you select other attributes, the visibility of the orientation symbols is set according to the selected attribute file.

The default value is `FALSE`.

This advanced option is model specific and the setting is saved in the options database.

## 20.64 XS\_SINGLE\_PART\_DRAWING\_VIEW\_TITLE

Category in [Advanced options dialog \(page 29\)](#): **Drawing properties**

Use to define a title for single-part drawing views in multidrawings. You can use any of the following to define the title:

Enter any combination of text and options, and enclose each option in percent symbols (%).

Example: No. %MODEL\_NUMBER%, Marked %PART\_POS%

The options are:

- PART\_NAME
- PART\_MATERIAL
- PART\_POS
- ASSEMBLY\_POS
- MODEL\_NUMBER
- LENGTH
- PROFILE
- MAIN\_PART\_LENGTH
- DRAWING\_BASE\_NAME

- DRAWING\_NAME

This advanced option is model specific and the setting is saved in the options database.

## 20.65 XS\_SINGLE\_PART\_EXTREMA

**Category in [Advanced options dialog \(page 29\)](#): Single-part views in assembly drawings**

Use to display overall dimensions in single-part views included in assembly drawings. Enter one of the following values:

- 0 = None
- 2 = Once
- 3 = All

This advanced option is model specific and the setting is saved in the options database.

## 20.66 XS\_SINGLE\_PART\_SHAPE

**Category in [Advanced options dialog \(page 29\)](#): Single-part views in assembly drawings**

Use to show or hide shape dimensions in single part views in assembly drawings.

Set to 1 (default) to show shape dimensions in single-part views.

Set to 0 to hide shape dimensions in single-part views.

Tekla Structures automatically creates radius dimensions for curved chamfers in single-part drawings when you use shape dimensions.

This advanced option is model specific and the setting is saved in the options database.

## 20.67 XS\_SINGLE\_SCALE

**Category in [Advanced options dialog \(page 29\)](#): Single-part views in assembly drawings**

Use to set the scale of single-part views included in assembly drawings. Enter a decimal value. By default, this advanced option is not set to any value.

This advanced option is model specific and the setting is saved in the options database.

### **Example**

To have Tekla Structures use the scale 1/10, enter 10.0.

This advanced option is related to the advanced option [XS\\_USE\\_EXISTING\\_SINGLE\\_PART\\_DRAWINGS\\_SCALE \(page 514\)](#).

## 20.68 XS\_SINGLE\_SCREW\_INTERNAL

**Category in [Advanced options dialog \(page 29\)](#): Single-part views in assembly drawings**

Use to show or hide internal bolt dimensions in single part views included in assembly drawings.

Set to 1 to show internal bolt dimensions.

Set to 0 to hide internal bolt dimensions.

By default, this advanced option is not set to any value.

This advanced option is model specific and the setting is saved in the options database.

## 20.69 XS\_SINGLE\_SCREW\_POSITIONS

**Category in [Advanced options dialog \(page 29\)](#): Single-part views in assembly drawings**

Use to include position dimensions for bolts in single-part views included in assembly drawings. Enter one of the following values:

- 0 = Off
- 1 = On

This advanced option is model specific and the setting is saved in the options database.

## 20.70 XS\_SINGLE\_USE\_WORKING\_POINTS

**Category in [Advanced options dialog \(page 29\)](#): Single-part views in assembly drawings**

Use to include dimensions from work points in single-part views included in assembly drawings. Enter one of the following values:

- 0 = None (default)
- 1 = Main part
- 2 = Working points
- 3 = Both

This advanced option is model specific and the setting is saved in the options database.

## 20.71 XS\_SINGLE\_X\_DIMENSION\_TYPE

**Category in [Advanced options dialog \(page 29\)](#): Single-part views in assembly drawings**

Use to set the dimension type for single-part views included in assembly drawings. These are otherwise like straight dimensions set with the advanced option `XS_SINGLE_X_DIMENSION_TYPE` but they override the straight setting for horizontal dimensions.

- 0 = Tekla Structures uses straight dimension settings
- 1 = Relative, point to point dimensions. This is the default value.
- 2 = Absolute, dimensions from a common start point.
- 3 = Relative and absolute, a combination of point to point and common start point.
- 4 = US absolute, dimensions from a common start point, which include a running dimension mark (RD).
- 16 = US absolute 2, similar to US absolute, but it changes short dimensions to relative.
- 35 = Absolute plus short relatives, which is similar to Absolute, but it changes short dimensions to relative. Also called internal absolute. This option may show both dimensions, but it does not show relative dimensions when dimensions are long. This option shows the absolute dimensions inside the dimension lines.

- 99 = Absolute plus all relatives above the absolutes, which is similar to Relative and absolute, but it places the relative dimensions above the absolute.

This advanced option is model specific and the setting is saved in the options database.

## 20.72 XS\_SITE\_BOLT\_MARK\_STRING\_FOR\_SIZE

Category in [Advanced options dialog \(page 29\)](#): Marking - bolts

Use to define the contents of the **Size** element in bolt marks (site). The default value is %BOLT\_NUMBER%\*D%HOLE.DIAMETER%.

This advanced option is only used when there is a bolt and the hole is a normal one.

You can use any combination of text and the following options as the value for this advanced option. You can use the options in any order, and make calculations.

- BOLT\_NUMBER
- DIAMETER
- LENGTH
- HOLE.DIAMETER
- LONG\_HOLE\_X
- LONG\_HOLE\_Y
- LONGHOLE\_MIN (the shorter of the slotted hole dimensions)
- LONGHOLE\_MAX (the longer of the slotted hole dimensions)
- BOLT\_STANDARD
- BOLT\_MATERIAL
- BOLT\_ASSEMBLY\_TYPE
- BOLT\_COUNTERSUNK
- BOLT\_SHORT\_NAME
- BOLT\_FULL\_NAME

Enclose each option in % characters.

---

**NOTE** If you define this advanced option in an `.ini` file, use double percent signs %% around the options. For example, %%BOLT\_NUMBER%%\*D%HOLE.DIAMETER%%.

---

To use special characters, enter a backslash (\) followed by an ASCII number.

With length-type options, but not in calculations, you can specify the number of decimals. For example, `HOLE.DIAMETER.2` shows (tapped) hole diameters with two decimals.

This advanced option is model specific and the setting is saved in the options database.

## 20.73 XS\_SITE\_BOLT\_MARK\_STRING\_FOR\_SIZE\_IN\_GA

**Category in [Advanced options dialog \(page 29\)](#): Marking - bolts**

Use to define the contents of the size element in bolt marks for site bolts in general arrangement drawings.

This advanced option is only used when there is a bolt and the hole is a normal one.

You can use any combination of text and the following options as the value for this advanced option. You can use the options in any order, and make calculations.

- BOLT\_NUMBER
- DIAMETER
- LENGTH
- HOLE.DIAMETER
- LONG\_HOLE\_X
- LONG\_HOLE\_Y
- LONGHOLE\_MIN (the shorter of the slotted hole dimensions)
- LONGHOLE\_MAX (the longer of the slotted hole dimensions)
- BOLT\_STANDARD
- BOLT\_MATERIAL
- BOLT\_ASSEMBLY\_TYPE
- BOLT\_COUNTERSUNK
- BOLT\_SHORT\_NAME
- BOLT\_FULL\_NAME

Enclose each option in % characters.

---

**NOTE** If you define this advanced option in an `.ini` file, use double percent signs `%%` around the options. For example, `%%BOLT_NUMBER%%*D%%HOLE.DIAMETER%%`.

---

To use special characters, enter a backslash (`\`) followed by an ASCII number. With length-type options, but not in calculations, you can specify the number of decimals. For example, `HOLE.DIAMETER.2` shows (tapped) hole diameters with two decimals.

This advanced option is model specific and the setting is saved in the options database.

**See also**

[XS\\_SITE\\_HOLE\\_MARK\\_STRING\\_FOR\\_SIZE\\_IN\\_GA](#) (page 473)

[XS\\_SITE\\_LONGHOLE\\_MARK\\_STRING\\_FOR\\_SIZE\\_IN\\_GA](#) (page 475)

## 20.74 XS\_SITE\_HOLE\_MARK\_STRING\_FOR\_SIZE

**Category in [Advanced options dialog \(page 29\)](#): Marking - bolts**

Use to define the contents of the **Size** element in hole marks (site). For example, to show bolt number and hole diameter in the mark, enter `%%BOLT_NUMBER%%*D%%HOLE.DIAMETER%%`.

This advanced option is only used when there is a hole, no bolt (and the hole is a normal one).

You can use any combination of text and the following options as the value for this advanced option. You can use the options in any order, and make calculations.

- BOLT\_NUMBER
- DIAMETER
- LENGTH
- HOLE.DIAMETER
- LONG\_HOLE\_X
- LONG\_HOLE\_Y
- LONGHOLE\_MIN (the shorter of the slotted hole dimensions)
- LONGHOLE\_MAX (the longer of the slotted hole dimensions)
- BOLT\_STANDARD
- BOLT\_MATERIAL

- BOLT\_ASSEMBLY\_TYPE
- BOLT\_COUNTERSUNK
- BOLT\_SHORT\_NAME
- BOLT\_FULL\_NAME

Enclose each option in % characters.

---

**NOTE** If you define this advanced option in an `.ini` file, use double percent signs %% around the options. For example, `%%BOLT_NUMBER%%*D%%  
%HOLE.DIAMETER%%`.

---

To use special characters, enter a backslash (\) followed by an ASCII number.

With length-type options, but not in calculations, you can specify the number of decimals. For example, `HOLE.DIAMETER.2` shows (tapped) hole diameters with two decimals.

This advanced option is model specific and the setting is saved in the options database.

## 20.75 XS\_SITE\_HOLE\_MARK\_STRING\_FOR\_SIZE\_IN\_GA

**Category in [Advanced options dialog \(page 29\)](#): Marking - bolts**

Use to define the contents of the size element in hole marks for site bolts in general arrangement drawings.

This advanced option is only used when there is a hole, no bolt (and the hole is a normal one).

You can use any combination of text and the following options as the value for this advanced option. You can use the options in any order, and make calculations.

- BOLT\_NUMBER
- DIAMETER
- LENGTH
- HOLE.DIAMETER
- LONG\_HOLE\_X
- LONG\_HOLE\_Y
- LONGHOLE\_MIN (the shorter of the slotted hole dimensions)
- LONGHOLE\_MAX (the longer of the slotted hole dimensions)
- BOLT\_STANDARD
- BOLT\_MATERIAL

- BOLT\_ASSEMBLY\_TYPE
- BOLT\_COUNTERSUNK
- BOLT\_SHORT\_NAME
- BOLT\_FULL\_NAME

Enclose each option in % characters.

---

**NOTE** If you define this advanced option in an `.ini` file, use double percent signs %% around the options. For example, `%%BOLT_NUMBER%%*D%%HOLE.DIAMETER%%`.

---

To use special characters, enter a backslash (\) followed by an ASCII number.

With length-type options, but not in calculations, you can specify the number of decimals. For example, `HOLE.DIAMETER.2` shows (tapped) hole diameters with two decimals.

This advanced option is model specific and the setting is saved in the options database.

**See also**

[XS\\_SITE\\_BOLT\\_MARK\\_STRING\\_FOR\\_SIZE\\_IN\\_GA \(page 471\)](#)

[XS\\_SITE\\_LONGHOLE\\_MARK\\_STRING\\_FOR\\_SIZE\\_IN\\_GA \(page 475\)](#)

## 20.76 XS\_SITE\_LONGHOLE\_MARK\_STRING\_FOR\_SIZE

**Category in [Advanced options dialog \(page 29\)](#): Marking - bolts**

Use to define the contents of the **Size** element in slotted hole marks (site). The default value is `%%BOLT_NUMBER%%*D%%HOLE.DIAMETER%% (%HOLE.DIAMETER+LONGHOLE_MIN%x%HOLE.DIAMETER+LONGHOLE_MAX%)`.

This advanced option is only used when there is a slotted hole.

You can use any combination of text and the following options as the value for this advanced option. You can use the options in any order, and make calculations.

- BOLT\_NUMBER
- DIAMETER
- LENGTH
- HOLE.DIAMETER
- LONG\_HOLE\_X
- LONG\_HOLE\_Y

- LONGHOLE\_MIN (the shorter of the slotted hole dimensions)
- LONGHOLE\_MAX (the longer of the slotted hole dimensions)
- BOLT\_STANDARD
- BOLT\_MATERIAL
- BOLT\_ASSEMBLY\_TYPE
- BOLT\_COUNTERSUNK
- BOLT\_SHORT\_NAME
- BOLT\_FULL\_NAME

Enclose each option in % characters.

---

**NOTE** If you define this advanced option in an `.ini` file, use double percent signs `%%` around the options. For example, `%%BOLT_NUMBER%%*D%%  
%HOLE.DIAMETER%%`.

---

To use special characters, enter a backslash (\) followed by an ASCII number.

With length-type options, but not in calculations, you can specify the number of decimals. For example, `HOLE.DIAMETER.2` shows (tapped) hole diameters with two decimals.

This advanced option is model specific and the setting is saved in the options database.

## 20.77 XS\_SITE\_LONGHOLE\_MARK\_STRING\_FOR\_SIZE\_IN\_GA

Category in [Advanced options dialog \(page 29\)](#): **Marking - bolts**

Use to define the contents of the size element in longhole marks for site bolts in general arrangement drawings.

This advanced option is only used when there is a slotted hole.

You can use any combination of text and the following options as the value for this advanced option. You can use the options in any order, and make calculations.

- BOLT\_NUMBER
- DIAMETER
- LENGTH
- HOLE.DIAMETER
- LONG\_HOLE\_X
- LONG\_HOLE\_Y

- LONGHOLE\_MIN (the shorter of the slotted hole dimensions)
- LONGHOLE\_MAX (the longer of the slotted hole dimensions)
- BOLT\_STANDARD
- BOLT\_MATERIAL
- BOLT\_ASSEMBLY\_TYPE
- BOLT\_COUNTERSUNK
- BOLT\_SHORT\_NAME
- BOLT\_FULL\_NAME

Enclose each option in % characters.

---

**NOTE** If you define this advanced option in an `.ini` file, use double percent signs `%%` around the options. For example, `%%BOLT_NUMBER%%*D%  
%HOLE.DIAMETER%%`.

---

To use special characters, enter a backslash (\) followed by an ASCII number.

With length-type options, but not in calculations, you can specify the number of decimals. For example, `HOLE.DIAMETER.2` shows (tapped) hole diameters with two decimals.

This advanced option is model specific and the setting is saved in the options database.

**See also**

[XS\\_SITE\\_HOLE\\_MARK\\_STRING\\_FOR\\_SIZE\\_IN\\_GA \(page 473\)](#)

[XS\\_SITE\\_BOLT\\_MARK\\_STRING\\_FOR\\_SIZE\\_IN\\_GA \(page 471\)](#)

## 20.78 XS\_SITE\_OVERSIZEDHOLE\_MARK\_STRING\_FOR\_SIZE

**Category in [Advanced options dialog \(page 29\)](#): Marking - bolts**

Use to define the contents of the **Size** element in marks for oversized bolt holes (site). The default value is `%BOLT_NUMBER%*D%HOLE.DIAMETER%`.

This advanced option is only used when there is an oversized hole.

You can use any combination of text and the following options as the value for this advanced option. You can use the options in any order, and make calculations.

- BOLT\_NUMBER
- DIAMETER
- LENGTH

- HOLE.DIAMETER
- LONG\_HOLE\_X
- LONG\_HOLE\_Y
- LONGHOLE\_MIN (the shorter of the slotted hole dimensions)
- LONGHOLE\_MAX (the longer of the slotted hole dimensions)
- BOLT\_STANDARD
- BOLT\_MATERIAL
- BOLT\_ASSEMBLY\_TYPE
- BOLT\_COUNTERSUNK
- BOLT\_SHORT\_NAME
- BOLT\_FULL\_NAME

Enclose each option in % characters.

---

**NOTE** If you define this advanced option in an `.ini` file, use double percent signs `%%` around the options. For example, `%%BOLT_NUMBER%%*D%%  
%HOLE.DIAMETER%%`.

---

To use special characters, enter a backslash (`\`) followed by an ASCII number.

With length-type options, but not in calculations, you can specify the number of decimals. For example, `HOLE.DIAMETER.2` shows (tapped) hole diameters with two decimals.

This advanced option is model specific and the setting is saved in the options database.

**See also**

[XS\\_SHOP\\_OVERSIZEDHOLE\\_MARK\\_STRING\\_FOR\\_SIZE \(page 446\)](#)

[XS\\_SITE\\_OVERSIZEDHOLE\\_MARK\\_STRING\\_FOR\\_SIZE\\_IN\\_GA \(page 477\)](#)

## 20.79 XS\_SITE\_OVERSIZEDHOLE\_MARK\_STRING\_FOR\_SIZE\_IN\_GA

**Category in [Advanced options dialog \(page 29\)](#): Marking - bolts**

Use to define the contents of the **Size** element in oversized hole marks for site bolts in general arrangement drawings.

This advanced option is only used when there is an oversized hole.

You can use any combination of text and the following options as the value for this advanced option. You can use the options in any order, and make calculations.

- BOLT\_NUMBER
- DIAMETER
- LENGTH
- HOLE.DIAMETER
- LONG\_HOLE\_X
- LONG\_HOLE\_Y
- LONGHOLE\_MIN (the shorter of the slotted hole dimensions)
- LONGHOLE\_MAX (the longer of the slotted hole dimensions)
- BOLT\_STANDARD
- BOLT\_MATERIAL
- BOLT\_ASSEMBLY\_TYPE
- BOLT\_COUNTERSUNK
- BOLT\_SHORT\_NAME
- BOLT\_FULL\_NAME

Enclose each option in % characters.

---

**NOTE** If you define this advanced option in an `.ini` file, use double percent signs `%%` around the options. For example, `%%BOLT_NUMBER%%*D%  
%HOLE.DIAMETER%%`.

---

To use special characters, enter a backslash (\) followed by an ASCII number.

With length-type options, but not in calculations, you can specify the number of decimals. For example, `HOLE.DIAMETER.2` shows (tapped) hole diameters with two decimals.

This advanced option is model specific and the setting is saved in the options database.

### See also

[XS\\_SHOP\\_OVERSIZEDHOLE\\_MARK\\_STRING\\_FOR\\_SIZE\\_IN\\_GA \(page 447\)](#)

[XS\\_SITE\\_OVERSIZEDHOLE\\_MARK\\_STRING\\_FOR\\_SIZE \(page 476\)](#)

## 20.80 XS\_SITE\_TAPPEDHOLE\_MARK\_STRING\_FOR\_SIZE

Category in [Advanced options dialog \(page 29\)](#): Marking - bolts

Use to define the contents of the **Size** element in marks for tapped bolt holes (site). The default value is `%BOLT_NUMBER%\216%HOLE.DIAMETER.1% TAP M%BOLT_DIAMETER%`.

This advanced option is only used when there is a tapped hole.

You can use any combination of text and the following options as the value for this advanced option. You can use the options in any order, and make calculations.

- BOLT\_NUMBER
- DIAMETER
- LENGTH
- HOLE.DIAMETER
- LONG\_HOLE\_X
- LONG\_HOLE\_Y
- LONGHOLE\_MIN (the shorter of the slotted hole dimensions)
- LONGHOLE\_MAX (the longer of the slotted hole dimensions)
- BOLT\_STANDARD
- BOLT\_MATERIAL
- BOLT\_ASSEMBLY\_TYPE
- BOLT\_COUNTERSUNK
- BOLT\_SHORT\_NAME
- BOLT\_FULL\_NAME

Enclose each option in % characters.

---

**NOTE** If you define this advanced option in an `.ini` file, use double percent signs `%%` around the options. For example, `%%BOLT_NUMBER%%*D%  
%HOLE.DIAMETER%%`.

---

To use special characters, enter a backslash (\) followed by an ASCII number.

With length-type options, but not in calculations, you can specify the number of decimals. For example, `HOLE.DIAMETER.2` shows (tapped) hole diameters with two decimals.

This advanced option is model specific and the setting is saved in the options database.

## See also

[XS\\_SHOP\\_TAPPEDHOLE\\_MARK\\_STRING\\_FOR\\_SIZE \(page 448\)](#)

[XS\\_SITE\\_TAPPEDHOLE\\_MARK\\_STRING\\_FOR\\_SIZE\\_IN\\_GA \(page 480\)](#)

## 20.81 XS\_SITE\_TAPPEDHOLE\_MARK\_STRING\_FOR\_SIZE\_IN\_GA

### Category in [Advanced options dialog \(page 29\)](#): Marking - bolts

Use to define the contents of the **Size** element in tapped hole marks for site bolts in general arrangement drawings.

This advanced option is only used when there is a tapped hole.

You can use any combination of text and the following options as the value for this advanced option. You can use the options in any order, and make calculations.

- BOLT\_NUMBER
- DIAMETER
- LENGTH
- HOLE.DIAMETER
- LONG\_HOLE\_X
- LONG\_HOLE\_Y
- LONGHOLE\_MIN (the shorter of the slotted hole dimensions)
- LONGHOLE\_MAX (the longer of the slotted hole dimensions)
- BOLT\_STANDARD
- BOLT\_MATERIAL
- BOLT\_ASSEMBLY\_TYPE
- BOLT\_COUNTERSUNK
- BOLT\_SHORT\_NAME
- BOLT\_FULL\_NAME

Enclose each option in % characters.

---

**NOTE** If you define this advanced option in an `.ini` file, use double percent signs `%%` around the options. For example, `%%BOLT_NUMBER%%*D%  
%HOLE.DIAMETER%%.`

---

To use special characters, enter a backslash (\) followed by an ASCII number.

With length-type options, but not in calculations, you can specify the number of decimals. For example, `HOLE.DIAMETER.2` shows (tapped) hole diameters with two decimals.

This advanced option is model specific and the setting is saved in the options database.

#### See also

[XS\\_SHOP\\_TAPPEDHOLE\\_MARK\\_STRING\\_FOR\\_SIZE\\_IN\\_GA](#) (page 449)

[XS\\_SITE\\_TAPPEDHOLE\\_MARK\\_STRING\\_FOR\\_SIZE](#) (page 478)

## 20.82 XS\_SKIP\_START\_UP\_SIGNIN\_ON\_PREMISE\_LICENSING

Use this advanced option to bypass the **Tekla Structures - Setup** dialog (the sign in dialog) during the Tekla Structures startup if you are using the on-premises licensing, and you do not want to or cannot sign in. To bypass the sign in dialog, set the advanced option to `TRUE`.

This advanced option must be read by Tekla Structures in the early stages of starting up. You can set it in the `Bypass.ini` file, or as a [Windows environment variable](#) or in a batch file.

## 20.83 XS\_SNAPSHOT\_DIRECTORY

Category in [Advanced options dialog \(page 29\)](#): **File locations**

Use this advanced option to define the folder where Tekla Structures saves the screenshots when you go to the **View** tab (**Views** in drawings) and click **Screenshot**. If you do not define a path, Tekla Structures saves the screenshots in the current model folder. The default value is `.\screenshots\`.

If the defined folder does not exist, Tekla Structures automatically creates it when you take a screenshot.

This advanced option is user specific and the setting is saved in `options.bin` under the user folder, for example, in `C:\Users\\AppData\Local\Trimble\Tekla Structures\\UserSettings`. Restart Tekla Structures to activate the new value.

#### Example

```
c:\temp\
```

## 20.84 XS\_SOLID\_BUFFER\_SIZE

Category in [Advanced options dialog \(page 29\)](#): **Speed and accuracy**

Use this advanced option to define the size of the solid object buffer. The value is the number of simple average solids. The buffer size setting depends on your environment.

Tekla Structures creates a buffer in system RAM to store the solid representation of parts it creates during certain processes. For example, Tekla Structures creates solid objects when numbering a model. When this buffer fills up, Tekla Structures erases the contents in order to continue using the buffer.

When you increase the buffer size, Tekla Structures keeps more solid objects in the memory, and does not have to recreate them so often. Increasing this value also increases the memory used by the processes. Decreasing this value decreases the memory requirements, but also the performance as Tekla Structures has to recreate solid objects more often.

Testing various settings is the best way to optimize the solid object buffer size. Remember that opening Tekla Structures windows uses some RAM, and that other programs also use RAM for various processes.

For optimum performance for large models under restricted memory conditions, consider having the solid cache size in between  $0.2 - 5 * \text{the number of parts in your model}$ . To find out the number of parts in the model, go to the **Edit** tab and click **Inquire --> Model size**.

In 64-bit machines you do not usually have to change the default value. If the amount of memory is large, keep the buffer size at least as large as the number of parts in the model.

This advanced option is user specific and the setting is saved in `options.bin` under the user folder, for example, in `C:\Users\\AppData\Local\Trimble\Tekla Structures\\UserSettings`. Restart Tekla Structures to activate the new value.

## 20.85 XS\_SOLID\_USE\_HIGHER\_ACCURACY

**This advanced option must be set in an initialization (.ini) file.**

---

**NOTE** This advanced option increases the number of faces in solid objects, which slows down Tekla Structures. We recommend using this advanced option only when needed.

---

When you set this advanced option to `TRUE` in the `options.ini` file in the model folder:

- When you have set part representation to **Exact** in the **Display** dialog, parts are shown with roundings. Also weld polygons include profile roundings.
- When the advanced option [XS\\_DISPLAY\\_FILLET\\_EDGES](#) (page 148) is set to TRUE, lines are shown between the roundings and straight segments of parts.
- Part volume, area and net weight are closer to real manufactured values.

Set this advanced option to TRUE in the `options.ini` file in model folder. The default value is FALSE.

### Limitations

- Do not activate this advanced option when you create NC/DSTV files, because it can lead to inaccuracies in the exported data.
- Do not activate this advanced option when you create single part or assembly drawings, because it can lead to unnecessary dimension line creation.
- In components, some stiffeners might bite into flanges of columns or beams.
- Some bolt edge distances are not correctly calculated.

### See also

[XS\\_CS\\_CHAMFER\\_DIVIDE\\_ANGLE](#) (page 111)

## 20.86 XS\_STACKED\_FRACTION\_TYPE

Category in [Advanced options dialog](#) (page 29): **Imperial units**

Use this advanced option to define the appearance of fractions. You can use stacked fractions in drawings, text, marks etc., but not in templates. The options are (from left to right in the illustration):

1/16      $\frac{1}{16}$      1/16     1<sub>16</sub>

- NOT\_STACKED
- DASH
- SLASH
- WITHOUT\_SLASH

If you do not want to use stacked fractions, set this advanced option to `NOT_STACKED`, (default) or use a backslash character ( \ ) before the slash character ( / ) in the text (e.g. 1\ /16).

This advanced option is model specific and the setting is saved in the options database.

## 20.87 XS\_STANDARD\_GUSSET\_WIDTH\_TOLERANCE

Category in [Advanced options dialog \(page 29\)](#): **Components**

Use this advanced option to define the tolerance between the actual and standard widths of gusset plates created using modeling tools or connections. Tekla Structures uses a standard plate file to define the default plate width including the tolerance value. Enter the value in millimeters, for example 1.0.

Components that use this advanced option are:

- **Welded gusset (10)**
- **Bolted gusset (11)**
- **Tube gusset (20)**
- **Corner tube gusset (56)**
- **Corner bolted gusset (57)**
- **Wraparound gusset (58)**
- **Hollow brace wraparound gusset (59)**
- **Wraparound gusset cross (60)**
- **Gusseted cross (62)**
- **Corner wrapped gusset (63)**

This advanced option is model specific and the setting is saved in the options database.

## 20.88 XS\_STANDARD\_STIFFENER\_WIDTH\_TOLERANCE

Category in [Advanced options dialog \(page 29\)](#): **Components**

Use this advanced option to define the tolerance between the actual and standard widths of stiffener plates created by:

- **Stiffened shear plate (17)**
- **Stiffened end plate (27)**
- **Stub (28)**

- **Haunch (40)**
- **Partial stiff end plate (65)**
- **Beam with stiffeners (129)**
- **Column with shear plate (131)**
- **Bolted moment connection (134)**
- **Beam to beam stub (135)**
- **Clip angle (141)**
- **Bent plate (151)**
- **Moment connection (181)**
- **Column with stiffeners W (182)**
- **Column with stiffeners (186)**
- **Column with stiffeners S (187)**
- **Stiffeners (1003)**
- **Web stiffened base plate (1016)**
- **Multiple stiffeners (1064)**

Enter the value in millimeters. Do not use the value 0. The advanced option is set to 10 by default.

This advanced option is model specific and the setting is saved in the options database.

## 20.89 XS\_STD\_LOCALE

**This advanced option is system specific and should be set in the `lang_<CurrentLanguage>.ini` files.**

Use this advanced option to be able to open drawings in a situation where you have English Tekla Structures and multi-byte locale Windows operating system. Set it to one of the following values in the `lang_<CurrentLanguage>.ini` file, depending on the locale of your operating system:

- `set XS_STD_LOCALE=japanese`
- `set XS_STD_LOCALE=chinese-traditional`
- `set XS_STD_LOCALE=chinese-simplified`
- `set XS_STD_LOCALE=russian_us.1251`
- `set XS_STD_LOCALE=korean_korea.949`

If you set `XS_STD_LOCALE` to any other value, or leave the value out, English locale is used by default.

---

**NOTE** For more information on locales, see [Language Identifiers and Locales](#).

For an example on how to get characters displayed correctly by changing the locale and the `XS_STD_LOCALE` advanced option value, see [How to get Cyrillic characters displayed correctly?](#)

---

## 20.90 XS\_STD\_PART\_MODEL

Category in [Advanced options dialog \(page 29\)](#): **Numbering**

To use standard parts in numbering, enter the standard part model folder path as the value for this advanced option. A standard-part model contains only standard parts with specific part prefixes. As Tekla Structures carries out the numbering, it compares all of the parts in the current model to the standard-part model. The numbering applies any part position numbers (only the part prefix) found in the standard-part model to all identical parts found in the current model. To not use standard parts, leave the value out.

This advanced option is model specific and the setting is saved in the options database.

### Example

```
XS_STD_PART_MODEL=C:\TeklaStructuresModels\StandardParts\
```

## 20.91 XS\_STEEL1\_TS\_PAGE\_9\_EXTENSION

**This advanced option must be set in an initialization (.ini) file.**

Use this advanced option for localizing the contents of Component page 9. By default standard component settings are used. For example, in the USA environment, you can use the value `_usimp`.

## 20.92 XS\_STEEL1\_TS\_PAGE\_10\_EXTENSION

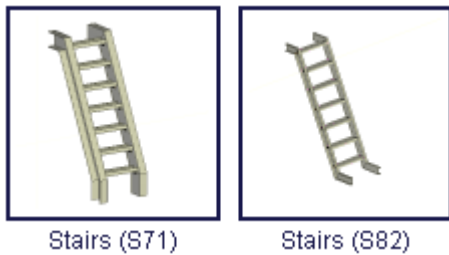
**This advanced option must be set in an initialization (.ini) file.**

Use this advanced option for localizing the contents of Component page 10 (catalog steps in stair components). By default standard component settings are used.

Step profiles are coming from `steps.dat` file, which is environment specific. To get a profile visible in the catalogue step/step profile list in the **Stairs** component dialog, the names of the profiles have to be listed also in the environment-specific `.inp` file in the `\TeklaStructures\\applications\steel1` folder. There are different files for each environment: `ts_page_10_australasia.inp`, `ts_page_10_austria.inp`, `ts_page_10_china.inp`, and so on. For example, in the USA environment, you can use the value `_usimp` for this advanced option.

Affected stair components and options:

- **Stairs (S71)**: Stair setup tab: Catalogue step
- **Stairs (S82)**: Parameters tab: Step profile



For Stairs S71, the **Step type** must be set to **Catalogue step**, to be able to select the step profile from the **Catalogue step** list.

## 20.93 XS\_STORE\_MULTIPLE\_BAK\_FILES

Category in [Advanced options dialog \(page 29\)](#): **File locations**

Set this advanced option to `TRUE` to store multiple versions of the backup copy of the model database. The default value is `FALSE`.

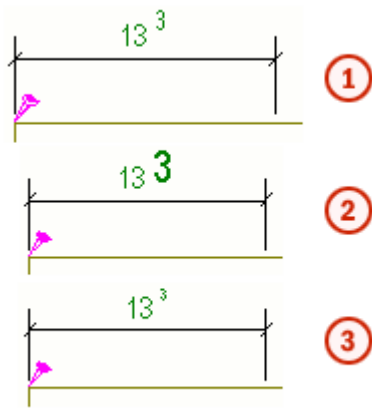
A new copy of the `.bak` backup file is created each time the model is saved. The name of each backup file includes the date and time the file was created. Old or unnecessary files need to be deleted manually.

## 20.94 XS\_SUPERSCRIPT\_HEIGHT\_FACTOR

Category in [Advanced options dialog \(page 29\)](#): **Dimensioning - general**

Use this advanced option to set the scale factor for the text height in superscripts used in dimensions. The default is `0.7`.

This advanced option is model specific and the setting is saved in the options database.



(1) 0.7

(2) 1.5

(3) 0.5

## 20.95 XS\_SUPERSCRIPT\_USED\_IN\_DRAWING\_TEXTS

**Category in [Advanced options dialog \(page 29\)](#): Dimensioning - general**

Set this advanced option to `TRUE` to enable the showing of superscript in texts in drawings, and to `FALSE` to disable it. The default is `TRUE`.

This advanced option is model specific and the setting is saved in the options database.

## 20.96 XS\_SUPPORT\_TOOL\_EXCLUDE\_ALL\_FILES

This advanced option must be set in the `user.ini` or `teklastructures.ini` file.

Set this advanced option to `TRUE` to prevent the support tool from preselecting all files for sending in your support request. By default, Tekla Structures selects all files, which might cause problems with large models. Note that this advanced option does not work if you define it in the `options.ini` file.

## 20.97 XS\_SWITCH\_MULTI\_NUMBERS\_FOR

Category in [Advanced options dialog \(page 29\)](#): **Numbering**

Use this advanced option to define the order in which multidrawing numbers, and part or assembly numbers appear in multi-numbers. The options are: NONE, ASSEMBLIES, PARTS and ASSEMBLIES\_AND\_PARTS. The default value is ASSEMBLIES\_AND\_PARTS.

This advanced option is model specific and the setting is saved in the options database.

### Example

If this advanced option is set to PARTS, the presentation of multinumbers for parts is 101a, not a101.

### See also

[XS\\_USE\\_MULTI\\_NUMBERING\\_FOR \(page 517\)](#)

## 20.98 XS\_SWITCH\_POS\_NUMBERS\_FOR

Category in [Advanced options dialog \(page 29\)](#): **Numbering**

Use this advanced option to change the prefix that you define for Tekla Structures assembly and/or part marks to a suffix (for example, A1 becomes 1A). The options are NONE, PARTS, ASSEMBLIES, and ASSEMBLIES\_AND\_PARTS. The default value is ASSEMBLIES\_AND\_PARTS.

---

**NOTE** The advanced options [XS\\_ASSEMBLY\\_POSITION\\_NUMBER\\_FORMAT\\_STRING \(page 59\)](#) and [XS\\_PART\\_POSITION\\_NUMBER\\_FORMAT\\_STRING \(page 359\)](#) override the advanced option XS\_SWITCH\_POS\_NUMBERS\_FOR. XS\_SWITCH\_POS\_NUMBERS\_FOR has no impact on assembly and/or part position numbers if you use XS\_ASSEMBLY\_POSITION\_NUMBER\_FORMAT\_STRING and/or XS\_PART\_POSITION\_NUMBER\_FORMAT\_STRING.

---

This advanced option is model specific and the setting is saved in the options database.

## 20.99 SYMEDHOME

Category in [Advanced options dialog \(page 29\)](#): **Templates and symbols**

This advanced option points to the location of the Symbol Editor program file `symed.exe`. The default value is `%XSBIN%`.

This advanced option is system specific and is read from environment files. Generally, there is no need to modify system-specific settings. Do not modify them if you are not an administrator.

## 20.100 XS\_SYSTEM

Category in [Advanced options dialog \(page 29\)](#): **File locations**

---

**NOTE** This advanced option is only meant for administrators.

---

This advanced option specifies the location of the Tekla Structures system folder. The system folder contains files that define the default settings for Tekla Structures, such as:

- standard files
- data files (.dat)
- property files
- hatch pattern files
- drawing files
- template files
- report files.

### Specifying more than one system folder

You can specify more than one system folder to define different settings for different roles. Use the role options defined in the `env_<environment>.ini` file to specify system folders for each role in `XS_SYSTEM`. Enter the role options separated by semicolons.

For example, each of these role options specifies the folders that contain the settings specific to that role:

- `XS_STEEL (\Steel)`
- `XS_CONCRETE (\Concrete)`
- `XS_ENGINEERING (\Engineering)`
- `XS_PRECAST (\Precast)`

This example shows the option for the steel role in the `env_<environment>.ini` file:

```
set XS_STEEL=%XSDATADIR%\environments\Steel\master_drawings\;%XSDATADIR%
\environments\Steel\model_filters\;%XSDATADIR%
\environments\Steel\model_settings\
```

Tekla Structures searches the folders starting with the last folder in the list. In this example, the `%XSDATADIR%\environments\common\system\` folder is searched first:

```
set
XS_SYSTEM=%XS_STEEL%;%XS_ENGINEERING%;%XS_CONTRACTOR%;%XS_GENERAL%;%XSDATA
DIR%\environments\common\system\
```

If there are files with the same names in several folders, the one that is read last is used. In the example above, files found from `XS_STEEL` are used instead of the files with identical names in other folders.

This is a system-specific advanced option and cannot be changed.

## 20.101 XS\_SYSTEM\_INTERNAL

Category in [Advanced options dialog \(page 29\)](#): File locations

---

**WARNING** Do not change the value of this advanced option.

---

This advanced option is only meant for administrators.

This advanced option defines the location of the read-only Tekla Structures system folder that contains files that are used internally by Tekla Structures. The system internal folder contains standard, data (.dat), and property files. This folder is always read by default.

If you have created your own custom standard files or do not want to use the system internal files, you can optionally disable the use of the system internal folder. Add `XS_DISABLE_SYSTEM_INTERNAL=true` to your environment .ini file (`env_<environment_name>.ini`).

---

**NOTE** Disabling the use of the system internal folder might remove paths to some important configuration files, which might prevent some components from working as intended.

---

### See also

[XS\\_SYSTEM \(page 490\)](#)

# 21 Advanced options - T

## 21.1 TEMPLATE\_FONT\_CONVERSION\_FILE

**Category in [Advanced options dialog \(page 29\)](#): Templates and symbols**

This advanced option points to the location of the Tekla Structures system font (Template Editor font) conversion file `template_fonts.cnv`. By default the path is `%DXK_FONTPATH%\template_fonts.cnv` meaning, for example, `C:\ProgramData\Trimble\Tekla Structures\<version>\environments\common\fonts\template_fonts.cnv`. This file is used for mapping Tekla Structures system fonts (fixfont, romsim, romsim8, romco) to Windows fonts in DWG/DXF export.

The syntax: `<Template Editor font>= windows font [* width correction factor]`

For example: `romco = Times New Roman * 0.5`

There is another conversion file, `dxmf_fonts.cnv`, that converts the True Type fonts to SHX fonts.

This advanced option is system specific and is read from environment files. Generally, there is no need to modify system-specific settings. Do not modify them if you are not an administrator.

## 21.2 XS\_TEMPLATE\_DIRECTORY

**Category in [Advanced options dialog \(page 29\)](#): File locations**

This advanced option points to the folders containing template (`*.tpl`) and report (`*.rpt`) files.

This advanced option is model specific and the setting is saved in the options database.

You can define several folder paths. Use a semicolon to separate the folder paths.

Templates are searched in several folders in a certain search order.

## 21.3 XS\_TEMPLATE\_DIRECTORY\_SYSTEM

**This advanced option must be set in an initialization (.ini) file.**

This advanced option is system specific and is read from environment files. Generally, there is no need to modify system-specific settings. Do not modify them if you are not an administrator.

This advanced option is used in `env_<environment_name>.ini` environment initialization files to define the location of environment-specific templates (`.tpl`) and reports (`.rpt`). You can use semicolon-separated lists of folder paths.

Other users than administrators can define local folders using the advanced options `XS_FIRM`, `XS_PROJECT` and `XS_TEMPLATE_DIRECTORY`.

### Example

```
set XS_TEMPLATE_DIRECTORY_SYSTEM=%XSDATADIR%
\environments\uk\general\template\
```

### See also

[XS\\_TEMPLATE\\_DIRECTORY \(page 492\)](#)

[XS\\_FIRM \(page 267\)](#)

[XS\\_PROJECT \(page 380\)](#)

## 21.4 XS\_TEMPLATE\_MARK\_SUB\_DIRECTORY

**Category in [Advanced options dialog \(page 29\)](#): File locations**

Use this advanced option to change the name of the subfolder where Tekla Structures searches for the templates that you use in marks. When you are adding a template in a mark, the available templates are displayed in the **Mark content - template** dialog. You cannot define several folders by using semicolon-separated lists of folder paths.

By default, `mark` is the value for this advanced option. You can create another folder with another name and save your mark templates there, and enter the name of that folder as the value for this advanced option.

This advanced option is model specific and the setting is saved in the options database.

## Example

Example of using another folder:

```
XS_TEMPLATE_MARK_SUB_DIRECTORY=my_mark_tpl
```

The mark templates are in this example case searched from the following folders in the following order:

```
%XS_TEMPLATE_DIRECTORY%\my_mark_tpl
```

```
ModelDir\my_mark_tpl
```

```
%XS_PROJECT%\my_mark_tpl
```

```
%XS_FIRM%\my_mark_tpl
```

```
%XS_TEMPLATE_DIRECTORY_SYSTEM%\my_mark_tpl
```

```
%XS_SYSTEM%\my_mark_tpl
```

## 21.5 XS\_TEXT\_ORIENTATION\_EPSILON

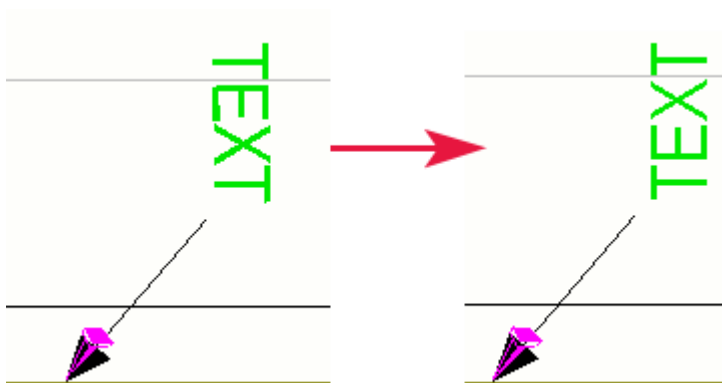
Category in [Advanced options dialog \(page 29\)](#): Drawing properties

Use this advanced option to define the point where dimension mark text that is positioned almost vertically is turned so that it is faced the other way around.

The default is 0.1, which is 5.72958 degrees. For example, if you want the text to change (flip) at 100 degrees (or 10 off 90), you need to set this advanced option to .175.

This advanced option is model specific and the setting is saved in the options database.

### Example



## 21.6 XS\_THICKNESS\_PARAMETER\_IS\_CROSS\_SECTION\_THICKNESS

Category in [Advanced options dialog \(page 29\)](#): Profiles

Use this advanced option to define the method to measure the thickness of parts (flanges, plates, walls and so on). When set to `FALSE`, the thickness parameter of the profile defines the actual thickness. When set to `TRUE`, the thickness parameter defines the cross section thickness (which is not same as the actual thickness if the part is sloped).

The default value is `FALSE`. We recommend that you use this value.

The change applies to the following profile types:

- SPD
- EPD
- I
- RHS
- PD
- P

## 21.7 XS\_TPLED\_INI

Category in [Advanced options dialog \(page 29\)](#): File locations

Use this advanced option to define the location of the `tplcd.ini` file. The `tplcd.ini` file controls environment-specific template settings.

This is a system-specific advanced option.

### Example

```
..\ProgramData\Trimble\Tekla  
Structures\<<version>\environments\default\template\settings\
```

For more information about Template Editor, see Template Editor user's guide on the [Tekla Structures PDF documentation](#) page.

## 21.8 XS\_TRY\_TO\_KEEP\_LOCATION\_IN\_FREEPLACING

Category in [Advanced options dialog \(page 29\)](#): Drawing properties

Use this advanced option to fine-tune the functionality of arranging annotation objects using the **Arrange objects** command in drawings.

This advanced option is set to `TRUE` by default, meaning that the **Arrange objects** command tries to find a new location for the selected object as close to the current location as possible. If the current location is free, the object is not moved at all.

When this advanced option is set to `FALSE`, the **Arrange objects** command works the same way as **Ignore current locations**.

This advanced option is model specific and the setting is saved in the options database.

## 21.9 XS\_TSEP\_TO\_BE\_INSTALLED\_ORG\_DIR

**This advanced option must be set in an initialization (.ini) file.**

This advanced option defines the location of a shared folder that contains `.tsep` packages. Your Tekla Structures manages this folder and its contents.

When you set this advanced option in the `user.ini` file, any `.tsep` packages in the shared folder are automatically installed.

## 21.10 XS\_TUBE\_UNWRAP\_LIMIT\_THICKNESS

**Category in [Advanced options dialog \(page 29\)](#) in Advanced options: Drawing properties**

Use this advanced option to define how Tekla Structures draws tubes.

Set to a decimal value. Tekla Structures individually draws the inner and outer surfaces of tubes that are thicker than this value. The value is always given in millimeters, regardless of the units used in the model.

This advanced option is model specific and the setting is saved in the options database.

---

**NOTE** If the advanced option `XS_TUBE_UNWRAP_WITH_CUT_HOLES` is set to `TRUE`, this advanced option has no effect.

---

## 21.11 XS\_TUBE\_UNWRAP\_PAPER\_THICKNESS

Category in [Advanced options dialog \(page 29\)](#) in **Advanced options: Drawing properties**

This advanced option lengthens unfolded tubes by the following multiplication factor:

$$\text{factor} = 1.0 + 2 * \text{XS\_TUBE\_UNWRAP\_PAPER\_THICKNESS} / \text{diameter}$$

The default value is 0.0.

---

**NOTE** If the advanced option `XS_TUBE_UNWRAP_WITH_CUT_HOLES` is set to `TRUE`, this advanced option has no effect.

---

This advanced option is model specific and the setting is saved in the options database.

### Example

Tube d=219

When you set the advanced option to 0, the unwrapped length of the tube ( $1.0 * \pi * \text{diameter}$ ) = 688.

When the advanced option is set to 10, the length of the unfolded tube =  $\text{factor} * \text{diameter} * \pi = (1.0 + 2 * 10 / 219) * 219 * 3.14 = 751$

## 21.12 XS\_TUBE\_UNWRAP\_USE\_PLATE\_PROFILE\_TYPE\_IN\_NC

Category in [Advanced options dialog \(page 29\)](#) in **Advanced options: CNC**

To use the plate profile type B in the NC file header data for unwrapped round tubes, set this advanced option to `TRUE`. To use RO for round tubes, set it to `FALSE`. The default value is `TRUE`.

This advanced option only works for straight tubes, not for polybeam tubes.

This advanced option is model specific and the setting is saved in the options database.

---

**WARNING** Use this advanced option only when you have set the advanced option `XS_TUBE_UNWRAP_WITH_CUT_HOLES` to `TRUE`.

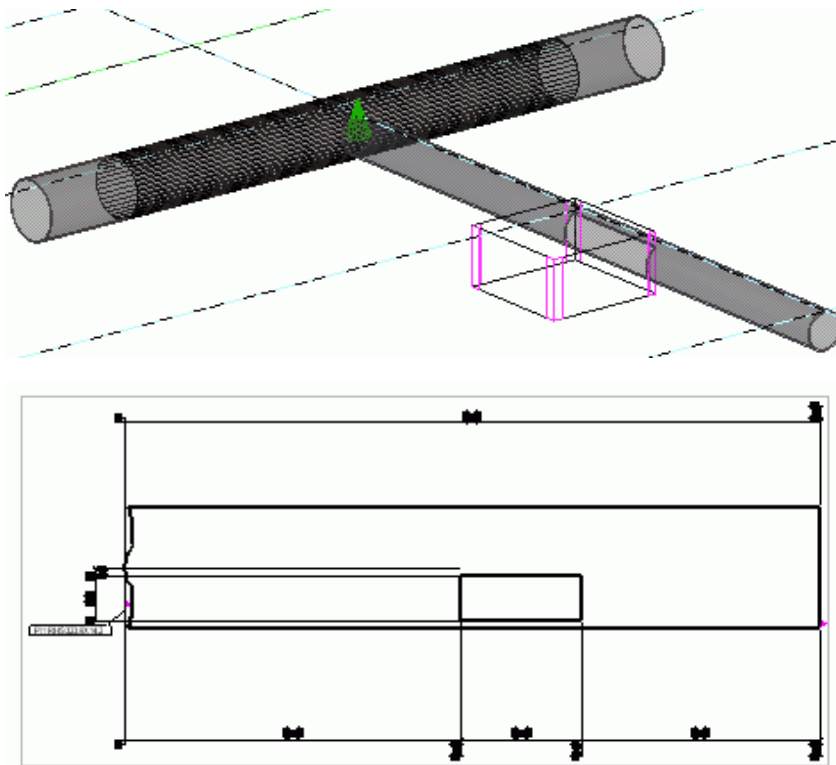
---

## 21.13 XS\_TUBE\_UNWRAP\_WITH\_CUT\_HOLES

Category in [Advanced options dialog \(page 29\)](#): Drawing properties

Set this advanced option to `TRUE` to include cut holes in workshop drawings or NC files of unwrapped CHS (circular hollow section) profiles.

This advanced option is set to `TRUE` by default. If you set it to `FALSE`, then the previously existing unwrapping method is applied.



This advanced option is model specific and the setting is saved in the options database.

- 
- NOTE** • If you set this advanced option to `TRUE`, the advanced options `XS_TUBE_UNWRAP_LIMIT_THICKNESS` and `XS_TUBE_UNWRAP_PAPER_THICKNESS` have no effect.
- Using this advanced option does not affect conical tube profiles.
-

# 22 Advanced options - U

## 22.1 XS\_UEL\_IMPORT\_FOLDER

**This advanced option must be set in an initialization (.ini) file.** It is system-specific. We recommend setting this advanced option in the `user.ini` file

You can collect all the `.uel` files exported from your custom components and sketched profiles in folders, then automatically import them into new models. Use this advanced option to point to the folders that contain the `.uel` files. You must still manually export the custom components and sketched profiles to these folders.

To point to several folders, separate the folder paths with a semicolon. For example:

```
set XS_UEL_IMPORT_FOLDER=%XSDATADIR%
\environments\default\components_sketches\;%XSDATADIR%
\environments\common\components_sketches\concrete\;%XSDATADIR%
\environments\common\components_sketches\steel\;%XSDATADIR%
\environments\common\components_sketches\
```

When this advanced option is set and you create a new model, Tekla Structures automatically imports the `.uel` files into the model.

---

**NOTE** To use the custom components and related sketched profiles in existing models, import the `.uel` files through the **Applications & components** catalog. If the `.uel` files only contain sketched profiles, import them through the profile catalog.

---

### See also

[XSDATADIR \(page 114\)](#)

## 22.2 XS\_UNDERLINE\_AFTER\_POSITION\_NUMBER\_IN\_HARDSTAMP

Category in [Advanced options dialog \(page 29\)](#) in **Advanced options: CNC**

Set this advanced option to `TRUE` to have an underscore ( `_` ) after the part position (without an assembly position) in a hardstamp.

The default value is `FALSE`.

This advanced option is model specific and the setting is saved in the options database.

## 22.3 XS\_UNFOLDING\_ANGLE\_DIM\_FORMAT

Category in [Advanced options dialog \(page 29\)](#): **Dimensioning - unfolding**

Use this advanced option to define the format of angle dimension text by entering an integer 0 - 7. The default value is 1. Enter one of the following values:

- 0 = ###
- 1 = ###[.#]
- 2 = ###.#
- 3 = ###[.##]
- 4 = ###.##
- 5 = ###[.###]
- 6 = ###.###
- 7 = ### #/#

This advanced option is model specific and the setting is saved in the options database.

## 22.4 XS\_UNFOLDING\_DONT\_USE\_NEUTRAL\_AXIS\_FOR\_RADIUS

Category in [Advanced options dialog \(page 29\)](#): **Dimensioning - unfolding**

This advanced option affects the length calculation of the curved polybeams. Set this advanced option to `TRUE` to calculate the unfolded length along the inner surface of the curved polybeam. Set this advanced option to `FALSE` to calculate the unfolded length along the neutral axis (center line) of the polybeam. The default value is `TRUE`.

Depending on the set value you might end up having similar looking curved objects in the model but just with different lengths, as this advanced option affects the reported lengths of the polybeams only, not curved beams (beams with radius).

This advanced option is model specific and the setting is saved in the options database.

Note that this advanced option does not work if [XS\\_USE\\_OLD\\_POLYBEAM\\_LENGTH\\_CALCULATION \(page 523\)](#) is set to `TRUE`.

---

**NOTE** The settings in the `unfold_corner_ratios.inp` override this advanced option.

---

## 22.5 XS\_UNFOLDING\_ANGLE\_DIM\_PRECISION

Category in [Advanced options dialog \(page 29\)](#): Dimensioning - unfolding

Use this advanced option to define the precision of angle dimension text. Enter an integer 1 - 10. The default value is 10. Enter one of the following values:

- 1 = 0.00
- 2 = 0.50
- 3 = 0.33
- 4 = 0.25
- 5 = 1/8
- 6 = 1/16
- 7 = 1/32
- 8 = 1/10
- 9 = 1/100
- 10 = 1/1000

Values 1 - 4 are intended for defining precision with rounding. For example, with precision 0.33 the actual dimension 50.40 is shown as 50.33. Values 5 - 7 are used for imperial units only. Values 8 - 10 are used for defining precision without rounding.

This advanced option is model specific and the setting is saved in the options database.

## 22.6 XS\_UNFOLDING\_PLANE\_EPSILON

Category in [Advanced options dialog \(page 29\)](#): **Dimensioning - unfolding**

Use this advanced option to specify the limit for checking if all section points are on the same plane. If the points are on the same plane, the part can be unfolded. Enter the value in millimeters. The default value is 0.01 mm.

This advanced option is model specific and the setting is saved in the options database.

## 22.7 XS\_UNIQUE\_NUMBERS

Category in [Advanced options dialog \(page 29\)](#): **Numbering**

Set this advanced option to `TRUE` to have Tekla Structures create unique position numbers for all parts when numbering, even if they are equal. The default value is `FALSE`.

## 22.8 XS\_UNIQUE\_ASSEMBLY\_NUMBERS

Category in [Advanced options dialog \(page 29\)](#): **Numbering**

Set this advanced option to `TRUE` if you want Tekla Structures to create unique position numbers for all assemblies when numbering, even if they are identical.

The default value is `FALSE`.

Parts are still numbered the same way as before.

This advanced option is model specific and the setting is saved in the options database.

## 22.9 XS\_UPDATE\_MARK\_PLACING\_IN\_DRAWING

Category in [Advanced options dialog \(page 29\)](#): **Marking - parts**

Use this advanced option to update the position of the updated marks in specific drawing types. Use the letters in the following table to specify the drawing types.

| Letter | Drawing type         |
|--------|----------------------|
| W      | Single-part drawings |

| Letter | Drawing type                 |
|--------|------------------------------|
| A      | Assembly drawings            |
| M      | Multidrawings                |
| G      | General arrangement drawings |
| C      | Cast unit drawings           |

The default value is AMW, which means that the mark position is updated in assembly drawings, multidrawings and single-part drawings.

This advanced option is model specific and the setting is saved in the options database.

### Example

To update the position of updated part marks in single-part, assembly, multi-, and general arrangement drawings:

```
XS_UPDATE_MARK_PLACING_IN_DRAWING=WAMG
```

## 22.10 XS\_UPDATE\_MARKS\_IN\_FROZEN\_DRAWINGS

Category in [Advanced options dialog \(page 29\)](#): **Marking - general**

Set this advanced option to `TRUE` to automatically update marks in frozen drawings and create new marks if new parts have been added. If you set it to `FALSE`, Tekla Structures only updates parts and bolts. The default value is `TRUE`.

This advanced option is model specific and the setting is saved in the options database.

## 22.11 XS\_UPSIDE\_DOWN\_TEXT\_ALLOWED

Category in [Advanced options dialog \(page 29\)](#): **Concrete detailing**

Set this advanced option to `TRUE` to have the text reading direction indicate the part installation direction. If there are similar asymmetric parts with different orientation, some part marks may be placed upside down. When you set the advanced option to `FALSE` (default), none of the part marks are created upside down, so the text reading direction does not indicate the installation direction. If you set this advanced option to

- `CONCRETE`, only concrete marks and texts are upside down
- `STEEL`, only steel marks and texts are upside down

- `TIMBER`, only timber marks and texts are upside down

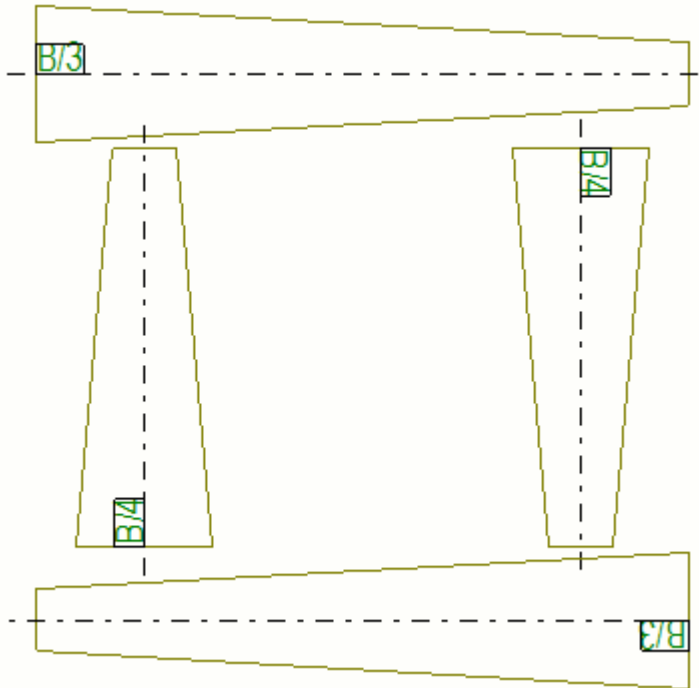
You can also use combinations of values separated by a comma, for example, `CONCRETE, STEEL`.

---

**NOTE** You need to use uppercase in the value, because writing `'true'` only affects free texts, whereas writing `'TRUE'` affects both free texts and part marks.

---

Example of the mark orientation when the advanced option is set to `TRUE`.



This advanced option is role specific. When the type **SYSTEM(ROLE)** is in use, the default value is used. When the type **MODEL(ROLE)** or **DRAWING(ROLE)** is in use, you can change the value, which is then the same for all users in the current model.

## 22.12 XS\_USABSOLUTE\_TO\_RELATIVE\_LIMIT

Category in [Advanced options dialog \(page 29\)](#): **Dimensioning - general**

Use this advanced option to control the distance within which the first and last US Absolute dimension lines appear as relative. By default, this advanced option is not set to any value.

### Example

```
XS_USABSOLUTE_TO_RELATIVE_LIMIT=1000
```

In this example, Tekla Structures will change first and last dimension lines shorter than 1000 mm to relative. Dimension lines greater or equal to 1000 mm will remain US Absolute.

This advanced option is model specific and the setting is saved in the options database.

## 22.13 XS\_USABSOLUTE2\_TO\_RELATIVE\_LENGTH\_FACTOR

**Category in [Advanced options dialog \(page 29\)](#): Dimensioning - general**

Tekla Structures multiplies the space required by the **US Absolute 2** or **Absolute plus short relatives** dimension text by the value you type. If the result is larger than the actual dimension, Tekla Structures changes the dimension type to relative. The default value is 1.5.

This advanced option is model specific and the setting is saved in the options database.

## 22.14 XS\_USE\_ANTI\_ALIASING\_IN\_DX

**Category in [Advanced options dialog \(page 29\)](#): Model views**

Use this advanced option to control whether antialiasing is used in the DirectX rendered model views. Antialiasing makes the edge lines smoother but with low resolution screens it can make the lines look thicker.

By default, this advanced option is set to `TRUE`.

### See also

[XS\\_SHOW\\_SHADOW\\_FOR\\_PERSPECTIVE\\_IN\\_DX \(page 459\)](#)

[XS\\_SHOW\\_SHADOW\\_FOR\\_ORTHO\\_IN\\_DX \(page 458\)](#)

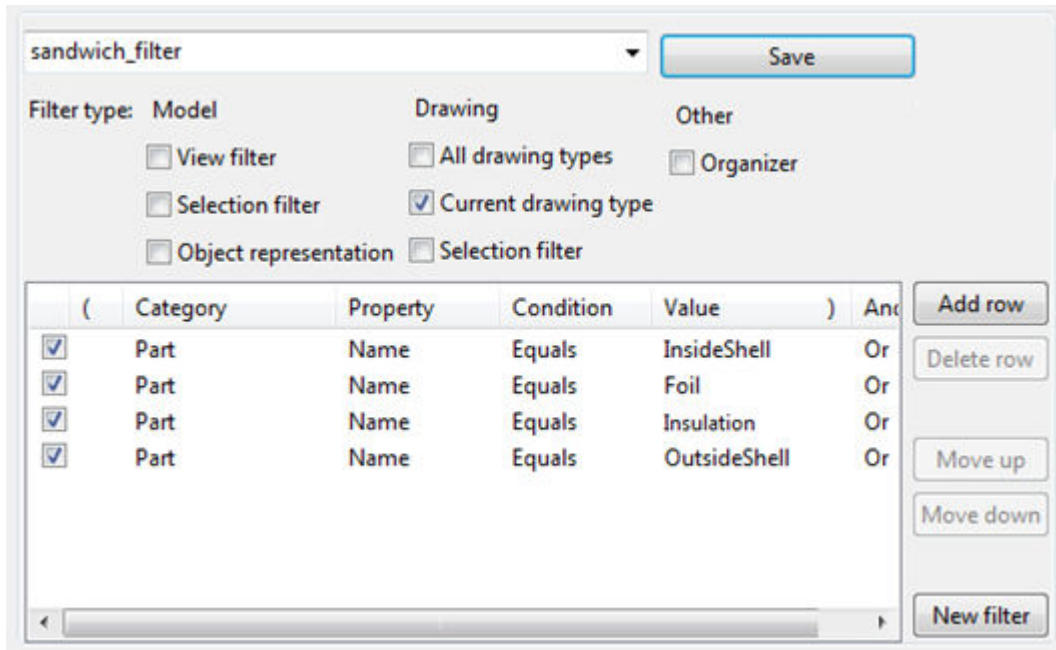
## 22.15 XS\_USE\_ASSEMBLY\_EXTREMA\_IN\_MARK\_PLACING

**Category in [Advanced options dialog \(page 29\)](#): Marking - general**

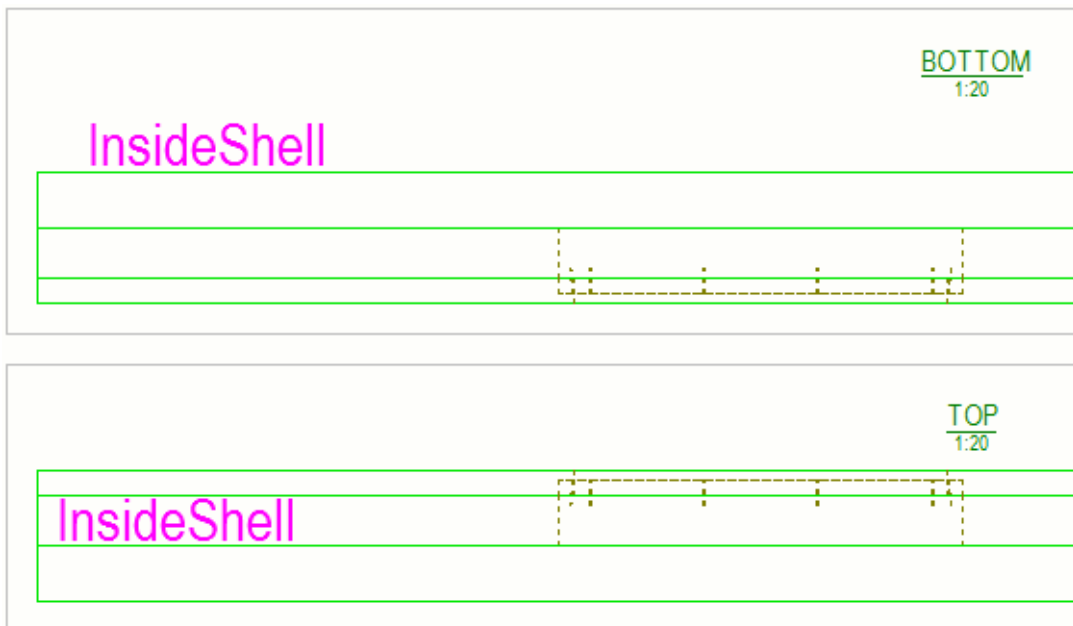
Use this advanced option to place part marks on top of the assembly instead of on top of the main part.

First create a drawing view filter that fetches a specific part or group of parts and give it a unique name, and then enter the name of the drawing view filter as a value for the advanced option. Note that filter names are case sensitive in some systems.

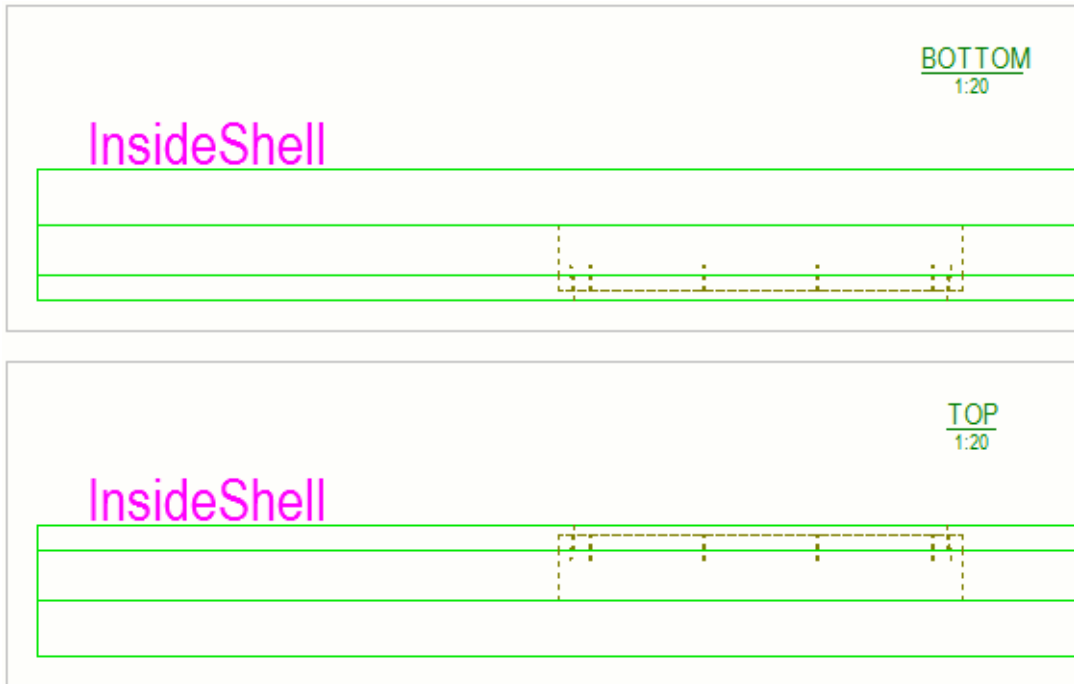
The example below uses part names as the filtering criteria.



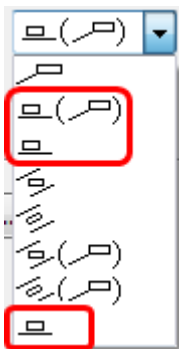
When you (re)create the drawing, the mark place changes from this:



To this:



The supported mark placing types are shown below.



## 22.16 XS\_USE\_ASSEMBLY\_NUMBER\_FOR

**Category in [Advanced options dialog \(page 29\)](#): Numbering**

Use this advanced option if you want the assembly/cast unit number to be also the main part number for the corresponding assembly/cast unit. Use one of the following options:

- Leave this option blank for each part in the assembly to get a part number, regardless of whether the assembly contains only one main part or several parts. Click the link to see an example of [one part only](#) or of [multiple parts](#).
- Set to `MAIN_PART` to always assign the assembly or cast unit number to the main part of an assembly or cast unit. All other parts, if any, will use part

number. Click the link to see an example of [one part only](#) or of [multiple parts](#).

- Set to `LOOSE_PART` to assign the assembly or cast unit number to the main part of an assembly or cast unit that has no other parts. If the assembly or cast unit has several parts, the main part will receive a part number. Click the link to see an example of [one part only](#) or of [multiple parts](#).

The assembly prefix replaces the part prefix.

---

**NOTE** Do not use the same or overlapping numbering series (prefix and start number) for parts and assemblies.

---

This advanced option is role specific. When the type **SYSTEM(ROLE)** is in use, the default value is used. When the type **MODEL(ROLE)** or **DRAWING(ROLE)** is in use, you can change the value, which is then the same for all users in the current model.

## 22.17 XS\_USE\_BOLT\_DISTANCE\_IN\_NOTCH\_CALCULATIONS

**This advanced option must be set in an initialization (.ini) file.**

Set this advanced option to `TRUE` to use automatic notch height calculation according to bolt distance. This affects connections 129 and 184.

## 22.18 XS\_USE\_COLOR\_DRAWINGS

**Category in [Advanced options dialog \(page 29\)](#): Drawing views**

Use this advanced option to change the default color mode in drawings when Tekla Structures is started.

- If you set this advanced option to `FALSE` or leave the value out, drawings are black and white.
- To have grayscale drawings, set it to `GRAY`.
- To use colors in drawings, set it to any other value, for example, `COLOR`, `TRUE`, or `1`. `TRUE` is the default value.

This advanced option is user specific and the setting is saved in `options.bin` under the user folder, for example, in `C:\Users\<user>\AppData\Local\Trimble\Tekla Structures\<version>\UserSettings`. Restart Tekla Structures to activate the new value.

## 22.19 XS\_USE\_CONCEPTUAL\_COMPONENTS\_FOR\_GRAPHITE

**This advanced option must be set in an initialization (.ini) file.**

This advanced option controls whether detailing components or conceptual components are created in the **Tekla Structures Graphite** configuration. The default value of the advanced option is `FALSE`, which means that detailing components are created. If set to `TRUE`, only conceptual components can be created.

This advanced option is system specific and is read from `teklastructures.ini`. Generally, there is no need to modify system-specific settings. Do not modify them if you are not an administrator.

Administrators are recommended to specify the option in the `options.ini` file in `XS_FIRM` for all users.

## 22.20 XS\_USE\_CONVEX\_PROTECT\_AREA

**This advanced option must be set in an initialization (.ini) file.**

Set this advanced option to `TRUE` to automatically calculate the protection area more accurately along the faces of parts, so that part marks can be placed inside the profile also for curved hollow sections. To protect the area of the object covers, enter `FALSE`. The default value is `TRUE`.

This advanced option is model specific and the setting is saved in the options database.







## 22.21 XS\_USE\_CROSS\_FOR\_OPENING\_SYMBOL

**Category in [Advanced options dialog \(page 29\)](#): Drawing properties**

Use `XS_USE_CROSS_FOR_OPENING_SYMBOL` to select how the openings/recesses are shown and the symbols to be used.

The default value is `TRUE`, which means that a cross is used as the opening/recess symbol.

This advanced option is model specific and the setting is saved in the options database.

| Value                                   | Description  |
|---|--|
| <p>TRUE</p> <p>This is the default.</p> | <p>Crosses are used as symbols for openings as follows:</p>  <p>If the recess is on the front face of the part, recess symbol and bounding lines are shown as unbroken lines as follows:</p>  <p>If the recess is on the back face of the part, recess symbol and bounding lines are shown as dashed lines as follows:</p>                                  |
| <p>FALSE</p>                            | <p>Shadows are used as symbols for openings as follows:</p>  <p>If the recess is on the front face of the part, there is no recess symbol, and bounding lines are shown as unbroken lines as follows:</p>  <p>If the recess is on the back face of the part, there is no recess symbol, and bounding lines are shown as dashed lines as follows:</p>  |

## 22.22 XS\_USE\_DRAWING\_NAME\_AS\_PLOT\_FILE\_NAME

**This advanced option must be set in an initialization (.ini) file.**

Set this advanced option to `TRUE` to prevent Tekla Structures from converting the dot in the drawing name to an underscore in the plot file name when printing, for example B.1 to B\_1. The default value is `FALSE`.

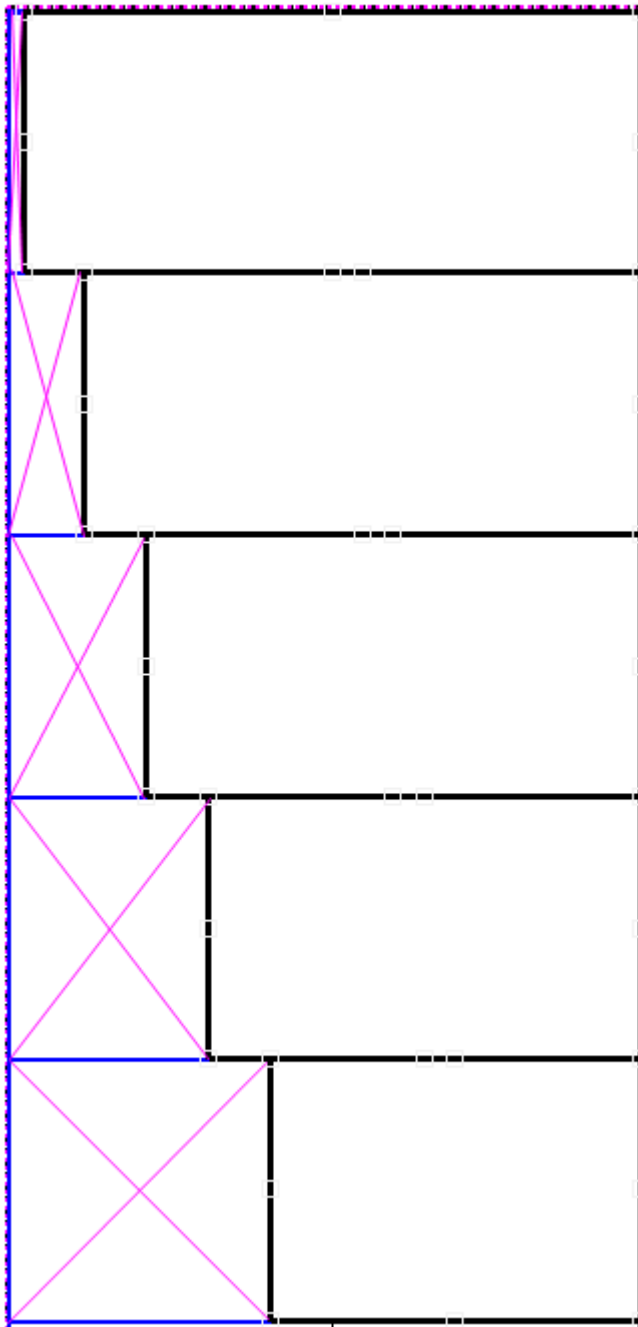
## 22.23 XS\_USE\_DYNAMIC\_ROW\_WIDTH\_IN\_TEMPLATES

**This advanced option must be set in an initialization (.ini) file.**

This advanced option only works in drawing templates, not in report templates. This functionality is not available in drawing part mark templates.

Set this advanced option to `TRUE` to fit the template row width dynamically according to the content, for example, drawing frames according to the different drawing sizes. The content must always be located on the right. If you set this advanced option to `FALSE`, automating fitting of the templates rows is not in use.

The default value is `FALSE`.



## 22.24 XS\_USE\_DRAWING\_NAME\_AS\_PLOT\_TITLE

Category in [Advanced options dialog \(page 29\)](#): Printing

Set this advanced option to `TRUE` to use the drawing name as the print title, for example, when printing to a `.pdf` file or to a Windows printer. To use

the general Tekla Structures print title, such as "Tekla Structures drawing - A [T.100]", set it to `FALSE`. The default value is `TRUE`.

As a result, the Windows printer dialog and the PDF file name will contain the drawing print file name you define with the advanced options listed below.

This advanced option is user specific and the setting is saved in `options.bin` under the user folder, for example, in `C:\Users\\AppData\Local\Trimble\Tekla Structures\\UserSettings`. Restart Tekla Structures to activate the new value.

## 22.25 XS\_USE\_EIGHT\_COLORS\_IN\_MODELING\_VIEWS

Set this advanced option in the `user.ini` file located in `..\Users\\AppData\Local\Trimble\Tekla Structures\\UserSettings`.

Set to `TRUE` to disable additional colors in model views. The default value is `FALSE`.

## 22.26 XS\_USE\_EXACT\_SOLID\_FOR\_CLASH\_CHECK

Category in [Advanced options dialog \(page 29\)](#): Speed and accuracy

If you set this advanced option to `FALSE` (default), normal solid accuracy is used in clash checking. If you need to use high solid accuracy in clash checking, set this advanced option to `TRUE`. This advanced option is model specific.

---

**WARNING** Using high accuracy, that is, setting this advanced option to `TRUE`, slows down the clash checking process, and there is a higher risk of solid errors.

---

## 22.27 XS\_USE\_EXISTING\_SINGLE\_PART\_DRAWINGS\_IN\_ASSEMBLY\_DRAWINGS

Category in [Advanced options dialog \(page 29\)](#): Single-part views in assembly drawings

You can specify whether to create new views or to use views from existing single part drawings in assembly drawings. When this advanced option is set to `TRUE`, existing single part drawing views will be used in assembly drawings.

When set to `FALSE`, or if there is no existing single part drawing for a given part, a new view will be created according to the **Single-part attributes** setting ( **Assembly drawing properties** --> **Layout** --> **Other** ). The default value is `FALSE`.

---

**NOTE** This setting only works with assembly drawings, not with multidrawings.

---

This advanced option is model specific and the setting is saved in the options database.

## 22.28 XS\_USE\_EXISTING\_SINGLE\_PART\_DRAWINGS\_SCALE

Category in [Advanced options dialog \(page 29\)](#): **Single-part views in assembly drawings**

If you do not want to keep the scale of the existing single part drawing that you include in an assembly drawing, set the advanced option `XS_USE_EXISTING_SINGLE_PART_DRAWINGS_SCALE` to `FALSE`. When you do this, the scale of the included single part drawing will follow the scale of the assembly drawing, or advanced option `XS_SINGLE_SCALE` ([page 467](#)) if it is set.

Tekla Structures maintains the original scale in a single part drawing in an assembly drawing when you set the layout to include single part drawings, and set the advanced option `XS_USE_EXISTING_SINGLE_PART_DRAWINGS_IN_ASSEMBLY_DRAWINGS` ([page 513](#)) to `TRUE`.

This advanced option is model specific and the setting is saved in the options database.

## 22.29 XS\_USE\_FLAT\_DESIGNATION

Category in [Advanced options dialog \(page 29\)](#): **Plate work**

Set this advanced option to `TRUE` to use flat bar designation, which means that Tekla Structures shows plates as the equivalent flat bars for manufacturing. The default value is `FALSE`.

Indicate the prefix you want to use for flat bars using the advanced option `XS_FLAT_PREFIX` ([page 268](#)).

This advanced option is model specific and the setting is saved in the options database.

## 22.30 XS\_USE\_INTEGRATED\_BUILDING\_HIERARCHIES

Category in [Advanced options dialog \(page 29\)](#): **Modeling properties**

To define a building hierarchy structure in the **Building hierarchy** side pane, set this advanced option to `TRUE`. The default value is `TRUE`.

The building hierarchy structure is also shown in **Organizer**, and it is used in IFC export.

If you want to use **Organizer** or user-defined attributes to define the hierarchy, set the advanced option to `FALSE`, save the model and reopen it to apply the change. When the advanced option is set to `FALSE`, IFC export uses the hierarchy defined in **Organizer** or with user-defined attributes.

This advanced option is model specific and the setting is saved in the options database.

Reopen the model after changing the value to activate the new setting.

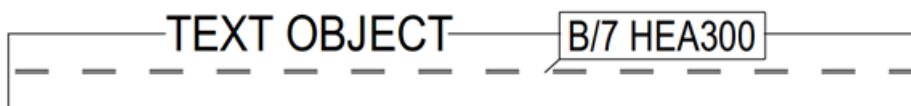
## 22.31 XS\_USE\_LINECLIP

Category in [Advanced options dialog \(page 29\)](#): **Printing**

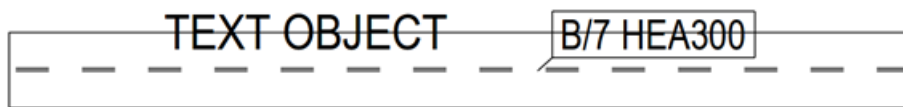
Note that this setting only affects drawings printed using the old printing functionality (`XS_USE_OLD_PLOT_DIALOG=TRUE`), and it does not completely match what you see in drawings in Tekla Structures. If [XS\\_USE\\_OLD\\_PLOT\\_DIALOG \(page 522\)](#) is set to `FALSE` (default), then `XS_USE_LINECLIP` has currently no effect, and the lines are clipped in the same way in drawings and in printouts. With the current printing feature you can define either a transparent or opaque background for texts, notes, and marks as a substitute for this advanced option.

Set this advanced option to `TRUE` to clip continuous lines at objects in drawing printouts (paper or `.pdf`). Set to `FALSE` to display continuous lines, for example, to run the line through text or drawing marks. The default value is `TRUE`.

`XS_USE_LINECLIP` is set to `TRUE`:



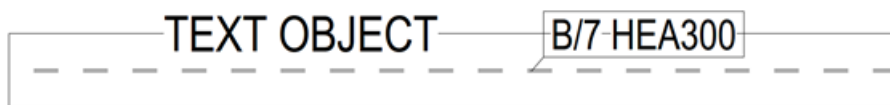
`XS_USE_LINECLIP` is set to `FALSE`:



This is how the line clipping is displayed in drawings currently:



This is how it is printed:



This advanced option is role specific. When the type **SYSTEM(ROLE)** is in use, the default value is used. When the type **MODEL(ROLE)** or **DRAWING(ROLE)** is in use, you can change the value, which is then the same for all users in the current model.

## 22.32 XS\_USE\_LONG\_POINTS\_IN\_DIMENSIONING

Category in [Advanced options dialog \(page 29\)](#): Dimensioning - parts

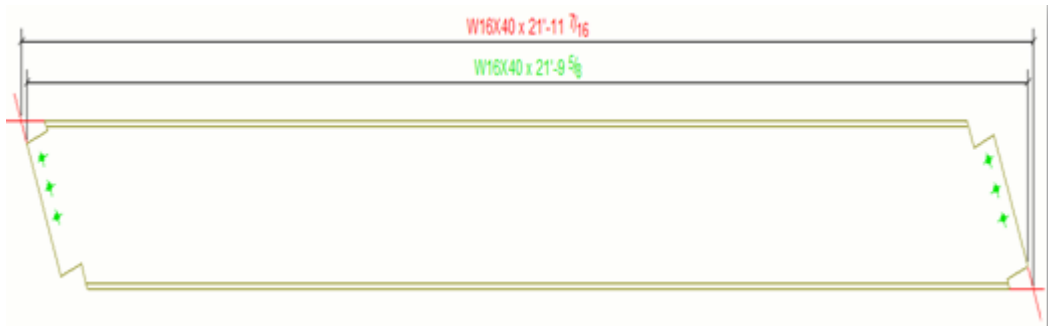
Sometimes there may be a need to dimension the parts in assembly or single-part drawings so that copes or notches are not taken into account, for example, to estimate the space needed for transportation.

If you set this advanced option to `TRUE`, the overall dimensions are calculated to long points. If you set it to `FALSE`, the overall dimensions are calculated to cope points. `FALSE` is the default.

This advanced option is role specific. When the type **SYSTEM(ROLE)** is in use, the default value is used. When the type **MODEL(ROLE)** or **DRAWING(ROLE)** is in use, you can change the value, which is then the same for all users in the current model.

### Example

In the example below, the upper dimension (the red one) shows the result when this advanced option is set to `TRUE`, and the lower dimension (the green one) when it is set to `FALSE`.



---

**WARNING** Using this advanced option will not affect the length of the part in the BOM, reports, or CNC.

---

## 22.33 XS\_USE\_MODEL\_PREFIX\_IN\_MULTI\_NUMBERS\_FOR

Category in [Advanced options dialog \(page 29\)](#): Numbering

Use this advanced option to allow the prefixes used in part and assembly numbering to be used in multidrawing numbers. Enter any of the following options: NONE, ASSEMBLIES, PARTS, and ASSEMBLIES\_AND\_PARTS. The default value is ASSEMBLIES\_AND\_PARTS.

This advanced option is model specific and the setting is saved in the options database.

### Example

If you set this advanced option to PARTS, the multinumbers for parts appear as 101Pa.

### See also

[XS\\_USE\\_MULTI\\_NUMBERING\\_FOR \(page 517\)](#)

[XS\\_MODEL\\_PREFIX\\_INFLUENCES\\_MULTI\\_NUMBERING\\_FOR \(page 338\)](#)

## 22.34 XS\_USE\_MULTI\_NUMBERING\_FOR

Category in [Advanced options dialog \(page 29\)](#): Numbering

Use this advanced option to define if multinumbers affects assemblies, parts, or both. Part and assembly numbering must be based on drawing numbers to use multinumbers.

The options are:

- **NONE:** No assemblies or parts will get multi-numbered, even if linked to multidrawings.
- **ASSEMBLIES:** Assemblies will get multinumbered, but parts will not. This is the default US Imperial Steel setting.
- **PARTS:** Only parts will get multinumbered. Common if you are creating drawings for assemblies one per sheet, and handling parts on large collection sheets grouped by plates, or angles, for example.
- **ASSEMBLIES\_AND\_PARTS:** Both assemblies and parts will get multinumbering, but how is determined by workflow and other settings.

The default value is `ASSEMBLIES_AND_PARTS`.

---

**WARNING** Do not change the value during a project.

---

This advanced option is model specific and the setting is saved in the options database.

### See also

[XS\\_MULTI\\_NUMBERING\\_INCLUDE\\_ASSEMBLY\\_PARTS](#) (page 340)

[XS\\_USE\\_MULTI\\_NUMBERING\\_WHEN\\_COPYING\\_DRAWING\\_VIEWS](#) (page 518)

[XS\\_USE\\_NUMERIC\\_MULTI\\_NUMBERS\\_FOR](#) (page 521)

[XS\\_MODEL\\_PREFIX\\_INFLUENCES\\_MULTI\\_NUMBERING\\_FOR](#) (page 338)

[XS\\_USE\\_MODEL\\_PREFIX\\_IN\\_MULTI\\_NUMBERS\\_FOR](#) (page 517)

[XS\\_SWITCH\\_MULTI\\_NUMBERS\\_FOR](#) (page 488)

[XS\\_PART\\_MULTI\\_NUMBER\\_FORMAT\\_STRING](#) (page 358)

[XS\\_ASSEMBLY\\_MULTI\\_NUMBER\\_FORMAT\\_STRING](#) (page 57)

[XS\\_CAST\\_UNIT\\_MULTI\\_NUMBER\\_FORMAT\\_STRING](#) (page 83)

[XS\\_VALID\\_CHARS\\_FOR\\_PART\\_MULTI\\_NUMBERS](#) (page 539)

[XS\\_VALID\\_CHARS\\_FOR\\_ASSEMBLY\\_MULTI\\_NUMBERS](#) (page 539)

[XS\\_MIN\\_NUMBER\\_OF\\_PART\\_MULTI\\_CHARACTERS](#) (page 335)

[XS\\_MIN\\_NUMBER\\_OF\\_ASSEMBLY\\_MULTI\\_CHARACTERS](#) (page 334)

## 22.35 XS\_USE\_MULTI\_NUMBERING\_WHEN\_COPYING\_DRAWING\_VIEWS

Category in [Advanced options dialog \(page 29\)](#): **Numbering**

Set this advanced option to `TRUE` to use multinumbring when copying drawing views. If you do not want to use multinumbring, set it to `FALSE`. The default value is `FALSE`.

This advanced option is user specific and the setting is saved in `options.bin` under the user folder, for example, in `C:\Users\\AppData\Local\Trimble\Tekla Structures\\UserSettings`. Restart Tekla Structures to activate the new value.

**See also**

[XS\\_USE\\_MULTI\\_NUMBERING\\_FOR \(page 517\)](#)

## 22.36 XS\_USE\_NEW\_PLATE\_DESIGNATION

Category in [Advanced options dialog \(page 29\)](#): **Plate work**

Use this advanced option to control whether the width and length are switched in parts if the width is greater than the length. The options are:

- Option is not used: set value to blank or `FALSE`.
- Option is used only for steel parts: set value to `FOR_STEEL_PARTS_ONLY`.
- Option is used for all parts: set value to `TRUE`. This option is also used if value is set to anything else that does not match the other options above.

This advanced option is role specific. When the type **SYSTEM(ROLE)** is in use, the default value is used. When the type **MODEL(ROLE)** or **DRAWING(ROLE)** is in use, you can change the value, which is then the same for all users in the current model.

### Example

A beam has the profile BL15\*240 and the distance between beam endpoints is changed to 215 mm:

- If `XS_USE_NEW_PLATE_DESIGNATION` is used, the length of the beam is fixed at 240, and the beam profile changes to BL15\*215.
- If `XS_USE_NEW_PLATE_DESIGNATION` is not used, the length of the beam is 215 and the profile remains BL15\*240.

## 22.37 XS\_USE\_NEW\_WELD\_PLACING

Category in [Advanced options dialog \(page 29\)](#): Welds

If you have set welds visible in the drawing, this advanced option affects in which drawing view (front, back, top, or bottom) Tekla Structures draws the welds.

- When the advanced option is set to `TRUE`, Tekla Structures draws welds in the view that has the best visibility to the **secondary part** (default).
- When the advanced option is set to `FALSE`, Tekla Structures selects the view according to the **main part**.

This advanced option is model specific and the setting is saved in the options database.

## 22.38 XS\_USE\_NEW\_USNOTCH

Category in [Advanced options dialog \(page 29\)](#): Components

Use this advanced option to indicate whether to locate the horizontal cut of a notch above or below the flange of the main beam. The default value is `TRUE`. If you do not want to use the US style notch, set this advanced options to `FALSE`.

Used with the following notching options:



This advanced option is model specific and the setting is saved in the options database.

## 22.39 XS\_USE\_NUMBER\_SELECTED\_FOR\_DRAWING\_CREATION\_AND\_UPDATE

Category in [Advanced options dialog \(page 29\)](#): Numbering

If the numbering is not up to date when you create a drawing, Tekla Structures asks you to number the model.

Set this advanced option to `TRUE` to number only the assemblies and parts that have the same numbering series as the selected part (or the main part of the selected drawing).

When set to `TRUE`, this advanced option does the same as if you clicked **Drawings & reports --> Number series of selected objects** . `TRUE` is the default value.

If you set this advanced option to `FALSE`, Tekla Structures numbers the whole model, which is the same as clicking **Drawings & reports --> Numbering --> Number modified objects** .

This advanced option is model specific and the setting is saved in the options database.

## 22.40 XS\_USE\_NUMERIC\_MULTI\_NUMBERS\_FOR

Category in [Advanced options dialog \(page 29\)](#): **Numbering**

Use this advanced option to define which objects have numeric multi-numbers. The options are:

- `ASSEMBLIES`
- `PARTS`
- `ASSEMBLIES_AND_PARTS`
- `NONE`

This advanced option is model specific and the setting is saved in the options database.

### Example

If you set this advanced option to `PARTS`, Tekla Structures displays the part multinumber as e.g. 101/1, instead of 101/a.

### See also

[XS\\_USE\\_MULTI\\_NUMBERING\\_FOR \(page 517\)](#)

## 22.41 XS\_USE\_OLD\_DRAWING\_CREATION\_SETTINGS

**This advanced option must be set in an initialization (.ini) file.**

Set the advanced option `XS_USE_OLD_DRAWING_CREATION_SETTINGS` to `TRUE` to use old drawing functionality and old drawing view property dialogs and subdialogs. In this old approach, drawing object properties can be defined on both drawing and view level, not individually for each view, like in the new view-level approach. View-level dimensioning rules are not supported.

By default, this advanced option is not in use.

Where to change the value depends on your company or project size, and on which level you need to unify certain enterprise-level settings. You can set this advanced option to `TRUE` in the `options.ini` file under the current model folder, in company's own `company.ini` file, your company's own `role.ini` file, or the `options.ini` file in firm or project folders, for example.

Note that Trimble no longer maintains the old functionality and dialogs. In practice, this means that new features, like custom presentations or automatic view-level properties will not be available in the old dialogs.

## 22.42 XS\_USE\_OLD\_DRAWING\_EXPORT

**This advanced option must be set in an initialization (.ini) file.**

If you want to use the old DWG/DXF export, set the advanced option `XS_USE_OLD_DRAWING_EXPORT` to `TRUE` in an `.ini` file. This advanced option is by default set to `FALSE`.

## 22.43 XS\_USE\_OLD\_DRAWING\_LIST\_DIALOG

**Category in [Advanced options dialog \(page 29\)](#): Drawing properties**

If you want to enable the old **Drawing list** instead of **Document manager**, set this advanced option to `TRUE`. If you do this, **Document manager** will be disabled.

By default, **Document manager** is enabled. All commands and buttons that would have launched **Drawing list** in Tekla Structures version 2018 and earlier versions will from version 2018i onwards launch **Document manager**.

This advanced option is user specific and the setting is saved in `options.bin` under the user folder, for example, in `C:\Users\<user>\AppData\Local\Trimble\Tekla Structures\<version>\UserSettings`.

## 22.44 XS\_USE\_OLD\_PLOT\_DIALOG

**Category in [Advanced options dialog \(page 29\)](#): Printing**

Set this advanced option to `TRUE` to use **Printer Catalog** and Tekla Structures own printer instances in printing.

The default value is `FALSE`, in which case the newer printing functionality is used.

This advanced option is user specific and the setting is saved in `options.bin` under the user folder, for example, in `C:\Users\\AppData\Local\Trimble\Tekla Structures\\UserSettings`. Restart Tekla Structures to activate the new value.

## 22.45 XS\_USE\_OLD\_POLYBEAM\_LENGTH\_CALCULATION

Category in [Advanced options dialog \(page 29\)](#): Dimensioning - unfolding

Set this advanced option to `TRUE` to calculate polybeam length using the legacy method where lengths of straight parts are added together, without taking the unfolding into account. If you set it to `FALSE` (default) and use the new method, the polybeam length is defined by unfolding the polybeam first and then calculating the length. This way of calculating gives a more accurate value for the polybeam length.

This advanced option is model specific and the setting is saved in the options database.

---

**NOTE** Using this advanced option is not recommended, because the length may not be reported correctly in all cases, especially for polybeams with curved chamfers.

---

**NOTE** When you switch on this advanced option, other ways to calculate polybeam length are not used by Tekla Structures, for example, [XS\\_CALCULATE\\_POLYBEAM\\_LENGTH\\_ALONG\\_REFERENCE\\_LINE \(page 81\)](#), [XS\\_UNFOLDING\\_DONT\\_USE\\_NEUTRAL\\_AXIS\\_FOR\\_RADIUS \(page 500\)](#), or the unfold parameter settings in file `unfold_corner_ratios.inp`.

---

## 22.46 XS\_USE\_ONLY\_INCHES\_IN\_SHEET\_SIZES

Category in [Advanced options dialog \(page 29\)](#): Imperial units

Set this advanced option to `TRUE` to use inches in sheet sizes in layouts and **Document manager**. To have the sheet sizes in feet and inches, set it to `FALSE` (default).

In order for this advanced option to work, set the advanced options [XS\\_IMPERIAL \(page 292\)](#) and [XS\\_IMPERIAL\\_INPUT \(page 293\)](#) to `TRUE`.

This advanced option is model specific and the setting is saved in the options database.

## 22.47 XS\_USE\_ONLY\_INCHES\_IN\_WELD\_LENGTH

**Category in [Advanced options dialog \(page 29\)](#): Imperial units**

Set this advanced option to `TRUE` to only display inches in weld length symbols. If you do not want to do this, set this advanced option to `FALSE`. This advanced option only works when the imperial units are in use. The default value is `TRUE`.

When you only display inches means that instead of showing 1ft 2inch it shows 14inch, for example.

This advanced option is user specific and the setting is saved in `options.bin` under the user folder, for example, in `C:\Users\<user>\AppData\Local\Trimble\Tekla Structures\<version>\UserSettings`. Restart Tekla Structures to activate the new value.

## 22.48 XS\_USE\_ONLY\_NOMINAL\_REBAR\_DIAMETER

**Category in [Advanced options dialog \(page 29\)](#): Concrete detailing**

*Nominal* diameter is the diameter used for calculating the cross section area of the reinforcing bar. *Actual* diameter takes into account the ribs, and tells the smallest hole diameter where the bar fits.

Values used for nominal and actual diameter are defined in `rebar_database.inp`, which is located in the environment folders in `\<environment>\profil`.

Set this advanced option to `TRUE` to use nominal diameter. To use the actual diameter, set this advanced option to `FALSE`. The default value is `FALSE`.

When the advanced option is set to `FALSE`, and you open a model created earlier than Tekla Structures version 18, the center line of the reinforcing bars stays in place and the concrete cover is reduced. All bending dimensions of the reinforcing bar increase. To solve this problem, either set this advanced option to `TRUE` or modify the concrete covers of all reinforcing bars to the correct value.

When reinforcing bars are exported to Unitech, you can select to export either nominal or actual diameters. For other exports (for example, BVBS), the

nominal diameter is always used in the exported definitions regardless of this advanced option.

---

**WARNING** Do not change this option during a project.

Changing the advanced option also changes the modeled reinforcing bars. This means that if the actual diameter will be used, the reinforcing bar looks thicker in the model. To accommodate for the thicker reinforcing bar, Tekla Structures will automatically change also concrete cover thickness. When you change the option, Tekla Structures changes the concrete cover values after next restart.

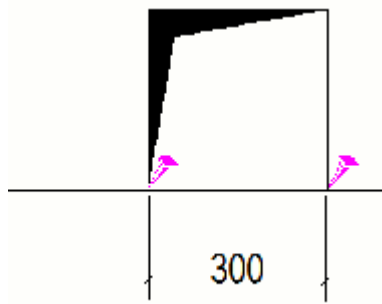
---

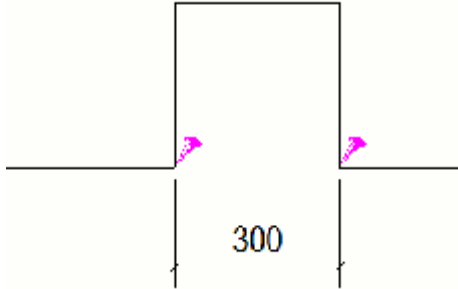
This advanced option is role specific. When the type **SYSTEM(ROLE)** is in use, the default value is used. When the type **MODEL(ROLE)** or **DRAWING(ROLE)** is in use, you can change the value, which is then the same for all users in the current model.

## 22.49 XS\_USE\_OPENING\_SYMBOL\_IN\_BORDER\_HOLES

Category in [Advanced options dialog \(page 29\)](#): Drawing properties

Use `XS_USE_OPENING_SYMBOL_IN_BORDER_HOLES` to select whether to use an opening symbol in openings located at part borders.

| Value | Description  |
|-------|--|
| TRUE  | <p>Opening symbol is used in the openings located at the border of the part. The symbol used depends on the setting of the advanced option <code>XS_USE_CROSS_FOR_OPENING_SYMBOL</code></p>  <p>The diagram illustrates a square opening in a part. A black shadow is cast from the top-left corner of the opening. Below the opening, a horizontal dimension line is shown with the value '300' in the center. Two vertical lines extend from the ends of the dimension line to the bottom edge of the opening. Two pink arrows point to the bottom corners of the opening.</p> |

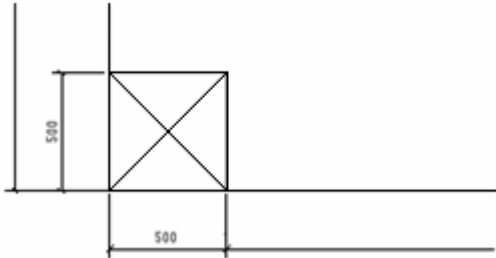
| Value                         | Description   |
|-------------------------------|---|
| FALSE<br>This is the default. | No opening symbol is used for openings at the border of the part.<br> |

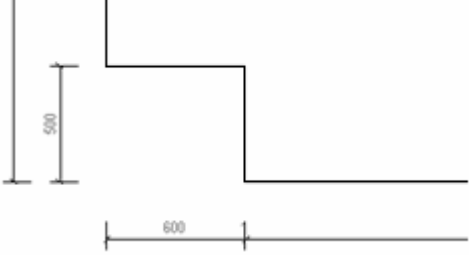
This advanced option is model specific and the setting is saved in the options database.

## 22.50 XS\_USE\_OPENING\_SYMBOL\_IN\_CORNER\_HOLES

Category in [Advanced options dialog \(page 29\)](#): Drawing properties

Use XS\_USE\_OPENING\_SYMBOL\_IN\_CORNER\_HOLES to select whether to use the opening symbol in openings located in part corners.

| Value | Description  |
|-------|--|
| TRUE  | Opening symbol is used in the openings located in the corner of the part. The symbol used depends on the setting of the advanced option XS_USE_CROSS_FOR_OPENING_SYMBOL.<br> |

| Value                                    | Description   |
|--|---|
| <p>FALSE</p> <p>This is the default.</p> | <p>No opening symbol is used for openings in the corner of the part.</p>  |

This advanced option is model specific and the setting is saved in the options database.

## 22.51 XS\_USE\_PLATE\_SIDE\_POSITIONING

Category in [Advanced options dialog \(page 29\)](#): **Dimensioning - parts**

Set this advanced option to `TRUE` to make the position dimension of plates dependent on the position of the plates in the model. When a plate is positioned underneath the work plane, Tekla Structures will place the position dimension on the top face of the plate. The default value is `FALSE`.

This advanced option is model specific and the setting is saved in the options database.

## 22.52 XS\_USE\_POINT\_AS\_SEPARATOR\_IN\_PROFILE\_NAME

Category in [Advanced options dialog \(page 29\)](#): **Profiles**

Set this advanced option to `TRUE` to use a period (.) as the separator in parametric profile names, instead of using it as a decimal separator. This increases the number of separators available in the US imperial environment. The default value is `FALSE`.

This advanced option is model specific and the setting is saved in the options database.

## 22.53 XS\_USE\_PROJECT\_LOCATION\_IN\_IFC2X3\_IMPORT

Category in [Advanced options dialog \(page 29\)](#): Import

Set this advanced option to `TRUE` to enable the project location when inserting an IFC2x3 reference model that has a project location available. When this advanced option is set to `TRUE`, the project location is applied and the reference model is inserted away from the Tekla Structures model origin. The default value is `FALSE`.

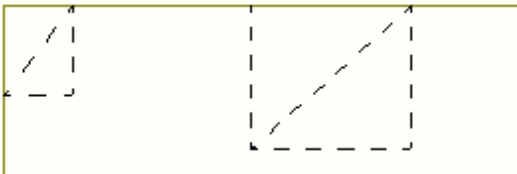
This advanced option is model specific and the setting is saved in the options database.


## 22.54 XS\_USE\_RECESS\_SYMBOL\_FOR\_BORDER\_AND\_CORNER\_RECESSES

Category in [Advanced options dialog \(page 29\)](#): Drawing properties

Use `XS_USE_RECESS_SYMBOL_FOR_BORDER_AND_CORNER_RECESSES` to select whether to use the recess symbol in corner and border recesses. `TRUE` is the default value.

This advanced option is model specific and the setting is saved in the options database.

| Value | Description   |
|-------|---|
| TRUE  | <p>Recess symbol is used in the recesses located at the border or in the corner of the part. The symbol used depends on the setting of the advanced option <code>XS_USE_CROSS_FOR_OPENING_SYMBOL</code>.</p>  |

| Value | Description   |
|-------|---|
| FALSE | <p>No recess symbol is used for recesses at the borders or in the corners of the part.</p>  |

### See also

[XS\\_USE\\_CROSS\\_FOR\\_OPENING\\_SYMBOL](#) (page 509)

[XS\\_USE\\_OPENING\\_SYMBOL\\_IN\\_BORDER\\_HOLES](#) (page 525)

[XS\\_USE\\_OPENING\\_SYMBOL\\_IN\\_CORNER\\_HOLES](#) (page 526)

## 22.55 XS\_USE\_REPAIR\_NUMBERING\_INSTEAD\_OF\_NUMBERING

Category in [Advanced options dialog \(page 29\)](#): **Numbering**

If you set this advanced option to `TRUE`, Tekla Structures automatically repairs numbering instead of only running the numbering.

When this advanced option is set to `TRUE`:

- Using the **Number modified objects** command does the same as using the **Diagnose and repair numbering: all** command .
- Using the **Number series of selected objects** command does the same as using the **Diagnose and repair numbering: series of selected objects** command.

The default value is `FALSE`.

This advanced option is model specific and the setting is saved in the options database.

## 22.56 XS\_USE\_ROUND\_MAIN\_PART\_COORDINATES\_FOR\_SECONDARY\_PART\_ANGLE

Category in [Advanced options dialog \(page 29\)](#): Dimensioning - parts

Set this advanced option to `TRUE` to have the secondary part skewed dimensions and angle dimension use one of the main part directions if the main part profile is round or round tube. The default value is `TRUE`.

This advanced option is model specific and the setting is saved in the options database.

## 22.57 XS\_USE\_SCREW\_POINT\_ELEVATION\_DIM

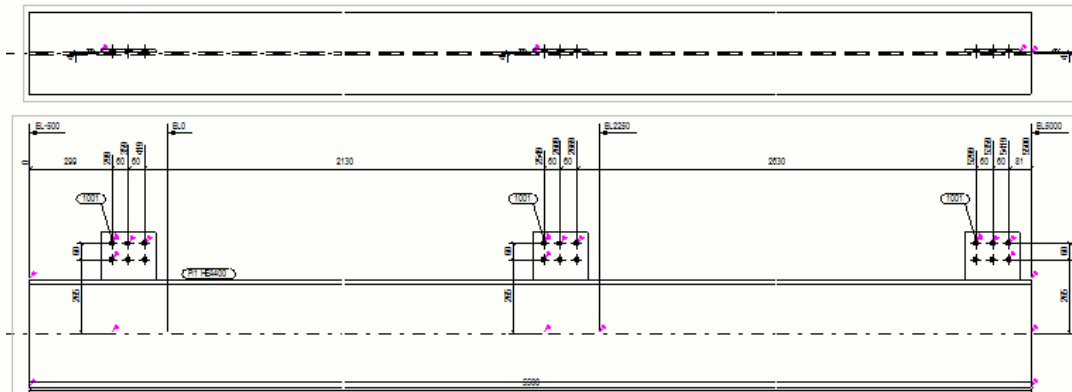
Category in [Advanced options dialog \(page 29\)](#): Dimensioning - bolts

Set this advanced option to `TRUE` to display the elevation dimensions of a column to the working points of a neighboring part. If you set it to `FALSE`, the elevation dimensions are displayed at the ends of the column. The default value is `FALSE`.

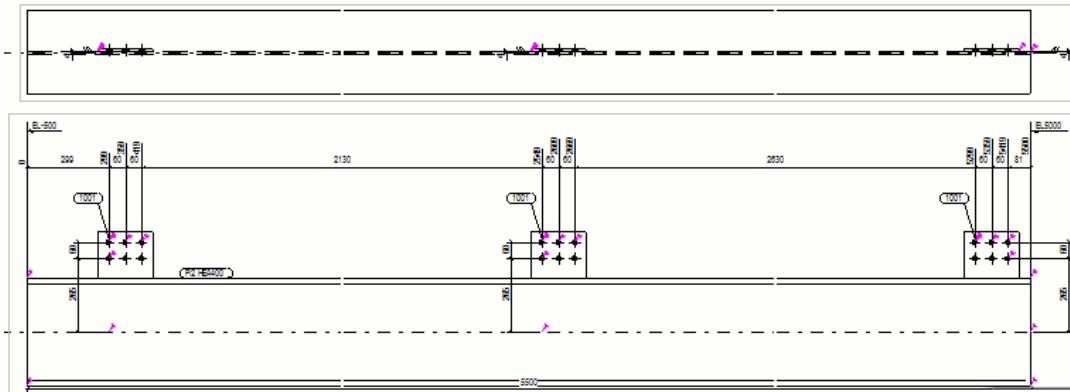
This advanced option is model specific and the setting is saved in the options database.

### Example

An example, where the value is `TRUE`:



An example, where the value is `FALSE`:



## 22.58 XS\_USE\_SMALLER\_GUSSET\_PLATE

**Category in [Advanced options dialog \(page 29\)](#): Components**

Set this advanced option to `TRUE` to minimize the size of the rectangular gusset plates created by gusset connections. You can create smaller gusset plates by using a single bracing and secondary bolts dimensioned to the middle of the secondary part. Tekla Structures generates a triangular gusset plate when the main part is located between diagonals. The default value is `FALSE`.

This advanced option is model specific and the setting is saved in the options database.

## 22.59 XS\_USE\_SMART\_PAN

**Category in [Advanced options dialog \(page 29\)](#): Drawing views**

Set this advanced option to `TRUE` to enable optimized zooming and panning in drawings. When you pan or zoom a heavy drawing with lots of graphics, and the smart pan is enabled, the whole screen is not drawn, and there is empty space on the edges, and zooming and panning is faster.

The whole screen is drawn again when you stop panning or zooming.

This advanced option is by default set to `FALSE`, because using optimization sometimes results in unwanted checkerboard effect.

This advanced option is user specific and the setting is saved in `options.bin` under the user folder, for example, in `C:\Users\\AppData\Local\Trimble\Tekla`

Structures\`<version>`\UserSettings. Restart Tekla Structures to activate the new value.

Restart Tekla Structures after changing the value to activate the new setting.

## 22.60 XS\_USE\_SMOOTH\_LINES

**Category in [Advanced options dialog \(page 29\)](#): Model views**

Set this advanced option to `TRUE` to use anti-aliasing to minimize jagged edges in model views. Before using this advanced option, check that your display adapter supports anti-aliasing. This advanced option is supported only for OpenGL rendering.

The default value is `FALSE`.

This advanced option is user specific and the setting is saved in `options.bin` under the user folder, for example, in `C:\Users\<user>\AppData\Local\Trimble\Tekla Structures\<version>\UserSettings. Restart Tekla Structures to activate the new value.`

## 22.61 XS\_USE\_SOFTWARE\_RENDERING

**Category in [Advanced options dialog \(page 29\)](#): Model views**

Set this advanced option to `TRUE` to bypass your graphic adapter in model views. Use this advanced option if you have problems with your display (for example, lines are not drawn correctly). The default value is `FALSE`.

This advanced option is user specific and the setting is saved in `options.bin` under the user folder, for example, in `C:\Users\<user>\AppData\Local\Trimble\Tekla Structures\<version>\UserSettings. Restart Tekla Structures to activate the new value.`

## 22.62 XS\_USE\_SPECIAL\_FILLER\_PLATE\_THICKNESS

Category in [Advanced options dialog \(page 29\)](#): Profiles

Set this advanced option to `TRUE` to have shim plate thicknesses comply with Japanese standards. The default value is `FALSE`.

This advanced option is model specific and the setting is saved in the options database.

## 22.63 XS\_USE\_TUBE\_INNER\_LENGTH\_IN\_DIMENSIONING

Category in [Advanced options dialog \(page 29\)](#): Dimensioning - parts

Set to `TRUE` to dimension the overall length of tube profiles along the inner surface instead of outer surface. The default value is `FALSE`.

---

**NOTE** This advanced option works for single part (W) drawings, but does not work for assembly drawings (A).

---

This advanced option is model specific and the setting is saved in the options database.

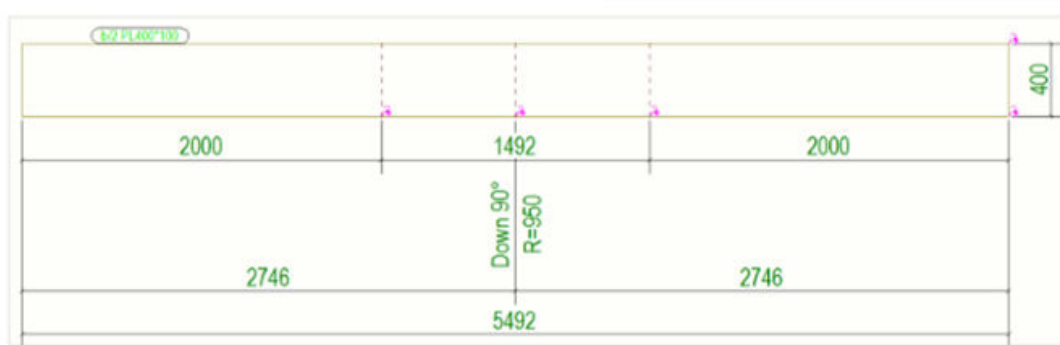
## 22.64 XS\_USE\_UP\_DOWN\_SIGN\_INDICATOR\_FOR\_ANGLE\_IN\_UNFOLDING

Category in [Advanced options dialog \(page 29\)](#): Dimensioning - unfolding

Set this advanced option to `TRUE` to show Up and Down text instead of positive and negative angle values in unfolded single-part drawings for angle dimensions. `FALSE` is the default value.

Setting this advanced option to `TRUE` will omit the text specified for the advanced option

`XS_ANGLE_TEXT_IN_UNFOLDING_BENDING_LINE_DIMENSIONING`.



This advanced option is model specific and the setting is saved in the options database.

**See also**

[XS\\_DRAW\\_BENDING\\_END\\_LINE\\_DIMENSIONS\\_IN\\_UNFOLDING \(page 160\)](#)

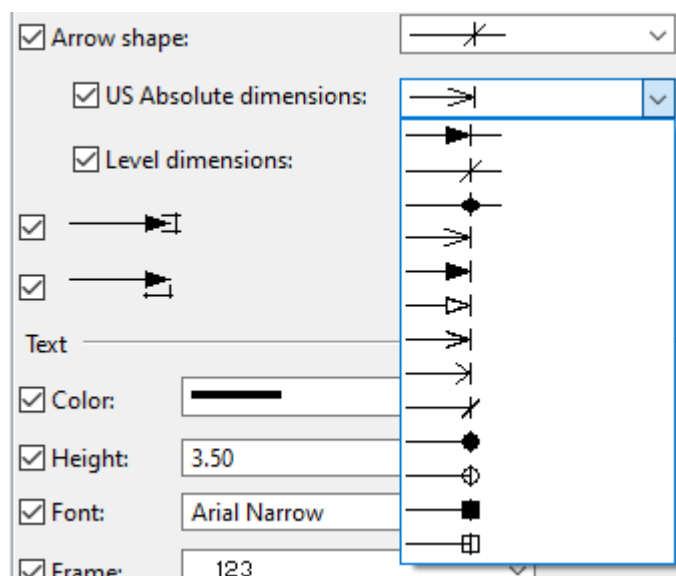
[XS\\_DRAW\\_BENDING\\_END\\_LINES\\_IN\\_UNFOLDING \(page 160\)](#)

## 22.65 XS\_USE\_USABSOLUTE\_ARROW\_TYPE\_FOR\_ABSOLUTE\_DIMENSIONS

Category in [Advanced options dialog \(page 29\)](#): **Dimensioning - general**

Set this advanced option to `TRUE` to use the arrow shape US Absolute also for normal absolute dimensions. `FALSE` is the default value.

You can select the arrow shape from the **US Absolute dimensions** list on the **Appearance** tab in the dimension properties dialog.



Note that this advanced option only applies to GA drawing dimensions, and old dimensioning ([XS\\_USE\\_OLD\\_DRAWING\\_CREATION\\_SETTINGS \(page 521\)](#)) is set to `TRUE`).

This advanced option is model specific and the setting is saved in the options database.

## 22.66 XS\_USE\_USER\_DEFINED\_REBAR\_LENGTH\_AND\_WEIGHT

Category in [Advanced options dialog \(page 29\)](#): Concrete detailing

Set this advanced option to `TRUE` to calculate the length and weight of the reinforcing bars in **Rebar shape manager** using formulas in the fields `L` and `WEIGHT`.

If you set this advanced option to `FALSE`, the length and the weight are automatically calculated according to the center line of the reinforcing bars. The default value is `FALSE`.

To read the length and weight from **Rebar shape manager**, you also have to set `XS_USE_USER_DEFINED_REBARSHAPERULES` to `TRUE`.

---

**NOTE** This setting only affects reports. If you set this advanced option to `TRUE` and you have not defined the formulas for length and weight in **Rebar shape manager**, the values in the reports show zero (0).

---

This advanced option is model specific and the setting is saved in the options database.

### See also

[XS\\_USE\\_USER\\_DEFINED\\_REBARSHAPERULES \(page 535\)](#)

## 22.67 XS\_USE\_USER\_DEFINED\_REBARSHAPERULES

Category in [Advanced options dialog \(page 29\)](#): Concrete detailing

Use this advanced option to define whether reinforcing bar bending shapes are recognized according to the bending shape definitions created with **Rebar shape manager** and saved in the `RebarShapeRules.xml` file.

This advanced option is set to `TRUE` by default, meaning that the bending shape recognition uses the reinforcing bar shapes saved in the `RebarShapeRules.xml` file.

If you set this advanced option to `FALSE`, the **Rebar shape manager** definitions are not used, and the definitions in

`rebar_schedule_config.inp` are used instead. We recommend that you set this advanced option to `TRUE` and use **Rebar shape manager**.

This advanced option is model specific and the setting is saved in the options database.

## 22.68 XS\_USE\_VERTICAL\_PLACING\_FOR\_COLUMNS\_IN

Category in [Advanced options dialog \(page 29\)](#): Drawing properties

Use this advanced option to place columns vertically in single-part, assembly and cast unit drawings. Use the following options to specify the types of drawings where the columns should be placed vertically:

- `ASSEMBLY_DRAWINGS` - in assembly drawings and cast unit drawings only
- `SINGLE_PART_DRAWINGS` - in single part drawings only
- `ASSEMBLY_AND_SINGLE_PART_DRAWINGS` - in single part, assembly and cast unit drawings

This advanced option is model specific and the setting is saved in the options database.

## 22.69 XSUSERDATADIR

**This advanced option must be set in an initialization (.ini) file.**

This advanced option is system specific and is read from `teklastructures.ini`. Generally, there is no need to modify system-specific settings. Do not modify them if you are not an administrator.

### Example

```
set XSUSERDATADIR=%LOCALAPPDATA%\Tekla Structures\<version number>.
```

For example, `C:\Users\<user>\AppData\Local\Trimble\Tekla Structures\<version>\UserSettings`.

## 22.70 XS\_USER\_DEFINED\_BOLT\_SYMBOL\_TABLE

Category in [Advanced options dialog \(page 29\)](#): Marking - bolts

This advanced option defines the file name of the user-defined bolt symbol table file. For example, enter `bolt_symbol_table.txt`.

You can optionally enter a full path to the bolt definition file if you want to use it from a specific fixed location. Without the path, Tekla Structures searches for the file in the model, firm, project, and system directories.

This advanced option is model specific and the setting is saved in the options database.

## 22.71 XS\_USER\_DEFINED\_PARAMETRIC\_PROFILE\_SEPARATORS

Category in [Advanced options dialog \(page 29\)](#): Profiles

Use this advanced option to define additional separators to separate dimensions in the names of parametric profiles. The separators can consist of multiple characters.

Separate the values with commas, for example `GA, ABC`.

---

**WARNING** Follow these rules in naming:

- Use uppercase letters in separator names.
- Do not enter digits, commas, or special characters in separator names.
- Do not start separator names with a dash (-) or full stop (.).
- Do not start separator names with an inch separator (" , ' /) when using imperial units.

---

In addition to these characters, Tekla Structures always recognizes the standard separator characters `X`, `*`, `-`, and `/`, and also the character defined by the advanced option [XS\\_PARAMETRIC\\_PROFILE\\_SEPARATOR \(page 356\)](#).

## 22.72 XS\_USER\_SETTINGS\_DIRECTORY

**This advanced option must be set in an initialization (.ini) file.** It is system-specific.

This advanced option is set as a Windows environment variable in the Windows system properties.

Use this advanced option to define the path to the folder that contains the `user.ini` file and the `options.bin` file.

The default value is `%XSUSERDATADIR%\UserSettings\`

# 23 Advanced options - V

## 23.1 XS\_VALID\_CHARS\_FOR\_ASSEMBLY\_FAMILY\_POSITION\_NUMBERS

Category in [Advanced options dialog \(page 29\)](#): Numbering

Use this advanced option to specify valid letters for assembly family position numbers. You must specify all the valid letters in this advanced option. By default, the letters A- Z are valid.

For example, you might not want to use D, because it is easy to mix up with O and 0. In this case, you would enter letters A - Z but leave out D.

This advanced option is model specific and the setting is saved in the options database.

## 23.2 XS\_VALID\_CHARS\_FOR\_ASSEMBLY\_FAMILY\_QUALIFIER

Category in [Advanced options dialog \(page 29\)](#): Numbering

Specifies valid letters for the assembly family number qualifier. You must specify all the valid letters in this advanced option. By default, the letters A - Z are valid.

For example, you might not want to use D, because it is easy to mix it up with O and 0. In this case you would enter letters A - Z but leave out D.

This advanced option is model specific and the setting is saved in the options database.

### Example

```
XS_VALID_CHARS_FOR_ASSEMBLY_FAMILY_QUALIFIER=GHJKL
```

## 23.3 XS\_VALID\_CHARS\_FOR\_ASSEMBLY\_MULTI\_NUMBERS

Category in [Advanced options dialog \(page 29\)](#): **Numbering**

Use to specify the valid letters for assembly multinumbers. You must specify all the valid letters in this advanced option. By default, letters A - Z are valid.

This advanced option is model specific and the setting is saved in the options database.

### Example

```
XS_VALID_CHARS_FOR_ASSEMBLY_MULTI_NUMBERS=ABEG
```

### See also

[XS\\_USE\\_MULTI\\_NUMBERING\\_FOR \(page 517\)](#)

[XS\\_ASSEMBLY\\_MULTI\\_NUMBER\\_FORMAT\\_STRING \(page 57\)](#)

[XS\\_MIN\\_NUMBER\\_OF\\_ASSEMBLY\\_MULTI\\_CHARACTERS \(page 334\)](#)

[XS\\_VALID\\_CHARS\\_FOR\\_PART\\_MULTI\\_NUMBERS \(page 539\)](#)

## 23.4 XS\_VALID\_CHARS\_FOR\_ASSEMBLY\_POSITION\_NUMBERS

Category in [Advanced options dialog \(page 29\)](#): **Numbering**

Specifies valid characters for assembly position numbers. Enter all the valid letters, for example, ABEG. By default, letters A - Z are valid.

This advanced option is model specific and the setting is saved in the options database.

## 23.5 XS\_VALID\_CHARS\_FOR\_PART\_MULTI\_NUMBERS

Category in [Advanced options dialog \(page 29\)](#): **Numbering**

Use to specify the valid letters for part multinumbers. You must specify all the valid letters in this advanced option. By default, letters a - z are valid.

This advanced option is model specific and the setting is saved in the options database.

### Example

```
XS_VALID_CHARS_FOR_PART_MULTI_NUMBERS=abeg
```

### See also

[XS\\_USE\\_MULTI\\_NUMBERING\\_FOR](#) (page 517)

[XS\\_PART\\_MULTI\\_NUMBER\\_FORMAT\\_STRING](#) (page 358)

[XS\\_MIN\\_NUMBER\\_OF\\_PART\\_MULTI\\_CHARACTERS](#) (page 335)

[XS\\_VALID\\_CHARS\\_FOR\\_ASSEMBLY\\_MULTI\\_NUMBERS](#) (page 539)

## 23.6 XS\_VALID\_CHARS\_FOR\_PART\_POSITION\_NUMBERS

Category in [Advanced options dialog \(page 29\)](#): **Numbering**

Use to specify the valid characters for part position numbers. Enter all the valid letters. For example, ABEG. By default letters A - Z are valid.

This advanced option is model specific and the setting is saved in the options database.

## 23.7 XS\_VALID\_CHARS\_FOR\_REBAR\_SUB\_ID\_WITH\_LETTERS

Category in [Advanced options dialog \(page 29\)](#): **Numbering**

Use this advanced option to specify the valid letters for the reinforcing bar identifiers when they are shown by SUB\_ID\_WITH\_LETTERS. Enter all the valid letters, for example, ABEG. By default, letters A-Z are valid.

This advanced option is model specific and the setting is saved in the options database.

### See also

[XS\\_REBARSET\\_TAPERED\\_REBAR\\_POSITION\\_NUMBER\\_FORMAT\\_STRING](#) (page 407)

## 23.8 XS\_VIEW\_DIM\_LINE\_COLOR

Category in [Advanced options dialog \(page 29\)](#): **Model views**

Use this advanced option to control the dimension line color for columns, beams, reinforcing bar groups, and rebar sets in model views.

Define the color by specifying RGB values in the following way:

<value for red> <value for green> <value for blue>.

Separate the values with spaces. Define the values on a scale from 0.0 to 1.0. The default value is 1.0 0.0 1.0.

Note that when the direct modification is switched on, the dimension lines and dimension texts are always hidden. Only the direct modification dimensions are shown.

This advanced option is user specific and the setting is saved in `options.bin` under the user folder, for example, in `C:\Users\\AppData\Local\Trimble\Tekla Structures\\UserSettings`. Restart Tekla Structures to activate the new value.

### Example

| RGB value   | Color  |
|-------------|--------|
| 0.0 0.0 0.0 | Black  |
| 1.0 1.0 1.0 | White  |
| 1.0 0.0 0.0 | Red    |
| 0.0 1.0 0.0 | Green  |
| 0.0 0.0 1.0 | Blue   |
| 1.0 1.0 0.0 | Yellow |

### See also

[XS\\_VIEW\\_DIM\\_TEXT\\_COLOR \(page 541\)](#)

[Color picker for Tekla Structures](#)

## 23.9 XS\_VIEW\_DIM\_TEXT\_COLOR

Category in [Advanced options dialog \(page 29\)](#): **Model views**

Use this advanced option to control the dimension text color for columns, beams, reinforcing bar groups, and rebar sets in model views.

Define the color by specifying RGB values in the following way:

`<value for red> <value for green> <value for blue>`.

Separate the values with spaces. Define the values on a scale from 0.0 to 1.0. The default color is black 0.0 0.0 0.0.

Note that when the direct modification is switched on, the dimension lines and dimension texts are always hidden. Only the direct modification dimensions are shown.

This advanced option is user specific and the setting is saved in `options.bin` under the user folder,

for example, in C:\Users\\AppData\Local\Trimble\Tekla Structures\\UserSettings. Restart Tekla Structures to activate the new value.

### Example

| RGB value   | Color  |
|-------------|--------|
| 0.0 0.0 0.0 | Black  |
| 1.0 1.0 1.0 | White  |
| 1.0 0.0 0.0 | Red    |
| 0.0 1.0 0.0 | Green  |
| 0.0 0.0 1.0 | Blue   |
| 1.0 1.0 0.0 | Yellow |

### See also

[XS\\_VIEW\\_DIM\\_LINE\\_COLOR \(page 540\)](#)

[Color picker for Tekla Structures](#)

## 23.10 XS\_VIEW\_FAST\_BOLT\_COLOR

Category in [Advanced options dialog \(page 29\)](#): **Model views**

Use this advanced option to control the color of bolts in model views when you are using the representation option **Fast**.

Define the color by specifying RGB values in the following way:

<value for red> <value for green> <value for blue>.

Separate the values with spaces. Define the values on a scale from 0.0 to 1.0. The default color is white 1.0 1.0 1.0.

This advanced option is user specific and the setting is saved in `options.bin` under the user folder, for example, in C:\Users\\AppData\Local\Trimble\Tekla Structures\\UserSettings. Restart Tekla Structures to activate the new value.

### Example

To change the color to black, enter 0.0 0.0 0.0.

## 23.11 XS\_VIEW\_FRAMES\_VISIBLE

Category in [Advanced options dialog \(page 29\)](#): **Drawing views**

Set this advanced option to `FALSE` to hide drawing view frames until you move the mouse pointer over the view. This is the default value.

When you set this advanced option to `TRUE`, drawing view frames are visible all the time.

This advanced option is user specific and the setting is saved in `options.bin` under the user folder, for example, in `C:\Users\\AppData\Local\Trimble\Tekla Structures\\UserSettings`. Restart Tekla Structures to activate the new value.

## 23.12 XS\_VIEW\_FREE\_MEASURE\_PLANE

Category in [Advanced options dialog \(page 29\)](#): **Model views**

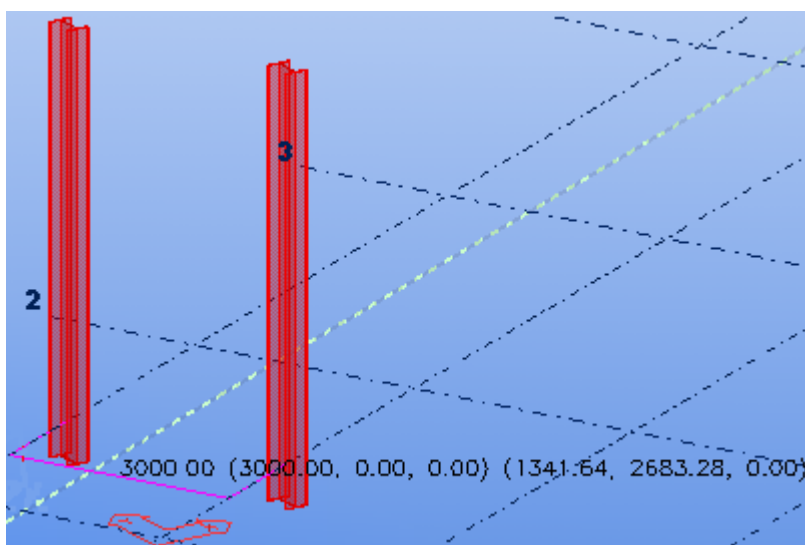
Use this advanced option to define the plane where the distances are shown when you use the **Edit --> Measure --> Distance** command. You can have the distances displayed in the local and/or global coordinate system.

The possible values are `VIEW`, `WORK` and `BOTH`. The default value is `VIEW`.

If you set the advanced option to `BOTH`, only one set of coordinate values is shown if the values are identical.

### Example

In the following example, the advanced option has been set to `BOTH`:



## 23.13 XS\_VIEW\_HEIGHT

Set this advanced option in the `user.ini` file located in `..\Users\\AppData\Local\Trimble\Tekla Structures\\UserSettings`.

Use this advanced option to define the default height of model views. Enter the value in pixels.

### See also

[XS\\_VIEW\\_WIDTH \(page 545\)](#)

## 23.14 XS\_VIEW\_PART\_LABEL\_COLOR

Category in [Advanced options dialog \(page 29\)](#): **Model views**

Use this advanced option to control the color of part labels and rebar labels in model views. Define the color by specifying RGB values in the following way:

`<value for red> <value for green> <value for blue>`.

Separate the values with spaces. Define the values on a scale from 0 to 1. The default color is black `0.0 0.0 0.0`.

This advanced option is user specific and the setting is saved in `options.bin` under the user folder, for example, in `C:\Users\\AppData\Local\Trimble\Tekla Structures\\UserSettings`.

### Example

| RGB value   | Color  |
|-------------|--------|
| 0.0 0.0 0.0 | Black  |
| 1.0 1.0 1.0 | White  |
| 1.0 0.0 0.0 | Red    |
| 0.0 1.0 0.0 | Green  |
| 0.0 0.0 1.0 | Blue   |
| 1.0 1.0 0.0 | Yellow |

### See also

[Color picker for Tekla Structures](#)

## 23.15 XS\_VIEW\_POSITION\_X

**Category in [Advanced options dialog \(page 29\)](#): Model views**

Use this advanced option to define the default horizontal position of view windows. Origin is in the top left corner of the Tekla Structures or client window. Enter the position in pixels. The default value is 10.

This advanced option is user specific and the setting is saved in `options.bin` under the user folder, for example, in `C:\Users\\AppData\Local\Trimble\Tekla Structures\\UserSettings`. Restart Tekla Structures to activate the new value.

## 23.16 XS\_VIEW\_POSITION\_Y

**Category in [Advanced options dialog \(page 29\)](#): Model views**

Use this advanced option to define the default vertical position of view windows. Origin is in the top left corner of the Tekla Structures or client window. Enter the position in pixels. The default value is 10.

This advanced option is user specific and the setting is saved in `options.bin` under the user folder, for example, in `C:\Users\\AppData\Local\Trimble\Tekla Structures\\UserSettings`. Restart Tekla Structures to activate the new value.

## 23.17 XS\_VIEW\_TITLE\_FONT

**Category in [Advanced options dialog \(page 29\)](#): Drawing views**

This advanced option affects only old drawings created when Tekla Structures did not have font settings available in the object properties. This advanced option is used only for converting fonts when opening old drawings.

Use this advanced option to specify the font for view direction marks. The default value is Arial. If this advanced option is not set, Tekla Structures uses the font specified for `XS_DEFAULT_FONT`.

You can set the view direction marks visible in the drawing view properties.

---

**TIP** To change the view label font, open the drawing view properties.

---

## 23.18 XS\_VIEW\_WIDTH

Set this advanced option in the `user.ini` file located in `..\Users\\AppData\Local\Trimble\Tekla Structures\\UserSettings`.

Use this advanced option to define the default width of model views. Enter the value in pixels.

### See also

[XS\\_VIEW\\_HEIGHT \(page 544\)](#)

## 23.19 XS\_VISUALIZE\_VIEW\_IN\_ANOTHER\_VIEWS

**Category in [Advanced options dialog \(page 29\)](#): Drawing views**

Set this advanced option to `TRUE` to highlight the view boundary of the selected view in another view. If you do not want to highlight the view boundary in another view, set this advanced option to `FALSE`. The default value is `TRUE`.

This advanced option is user specific and the setting is saved in `options.bin` under the user folder, for example, in `C:\Users\\AppData\Local\Trimble\Tekla Structures\\UserSettings`. Restart Tekla Structures to activate the new value.

## 23.20 XS\_VISUALIZE\_VIEW\_IN\_FATHER\_VIEW\_ONLY

**Category in [Advanced options dialog \(page 29\)](#): Drawing views**

Set this advanced option to `TRUE` if you want to visualize the section view and detail view boundary boxes only in the view where the section mark or the detail mark is located. If you set this advanced option to `FALSE`, the view boundary boxes are visualized in all of the views where this is possible and where the boundary box fits inside the view to some extent. The default value is `TRUE`.

This advanced option is user specific and the setting is saved in `options.bin` under the user folder, for example, in `C:\Users\\AppData\Local\Trimble\Tekla Structures\\UserSettings`. Restart Tekla Structures to activate the new value.

## 23.21 XS\_VISUALIZE\_VIEW\_NEIGHBOUR\_PART\_EXTENSION

Category in [Advanced options dialog \(page 29\)](#): Drawing views

Set this advanced option to `TRUE` to show neighbor part extensions in drawing views. If you set this advanced option to `FALSE`, the neighbor part extensions are not shown. The default value is `TRUE`.

When you select a view, the view extension for neighbor parts for that view is also shown in other views.

---

**NOTE** If neighbor parts are hidden by setting **Neighbor parts** to **None** in the **Neighbor Part Properties** dialog box, neighbor part extensions are not displayed even if you set this advanced option to `TRUE`.

---

This advanced option is user specific and the setting is saved in `options.bin` under the user folder, for example, in `C:\Users\\AppData\Local\Trimble\Tekla Structures\\UserSettings`. Restart Tekla Structures to activate the new value.

# 24 Advanced options - W

## 24.1 XS\_WARP\_MAX\_ANGLE\_BETWEEN\_CS

Category in [Advanced options dialog \(page 29\)](#): **Concrete detailing**

Use this advanced option to define the maximum angle between adjacent polygonal parts of the warped shape.

Enter the value in degrees. You get best results if you use values in the range 0.5 - 10.0. The default value is 0.5.

This advanced option is model specific and the setting is saved in the options database.

## 24.2 XS\_WARP\_MAX\_DEVIATION

Category in [Advanced options dialog \(page 29\)](#): **Concrete detailing**

Use this advanced option to define the maximum difference between a real warped shape and a polygonal warped shape in the model.

Enter the value in millimeters. You get best results if you use values in the range 5.0 -100.0. The default value is 10.0.

This advanced option is model specific and the setting is saved in the options database.

## 24.3 XS\_WELD\_FILTER\_TYPE

Category in [Advanced options dialog \(page 29\)](#): Welds

Use this advanced option to define how Tekla Structures filters weld types.

- `EXACT`: Tekla Structures filters the welds equal to the default size in the weld properties.
- `MIN`: Tekla Structures filters all welds equal to or smaller than the default size in the weld properties. This is the default value.

This advanced option is model specific and the setting is saved in the options database.

## 24.4 XS\_WELD\_FONT

Category in [Advanced options dialog \(page 29\)](#): Drawing properties

This advanced option affects only old drawings created when Tekla Structures did not have font settings available in the object properties. This advanced option is used only for converting fonts when opening old drawings.

Use this advanced option to specify the font for the weld text. The default value is Arial. If this advanced option is not set, Tekla Structures uses the default font defined for `XS_DEFAULT_FONT`.

## 24.5 XS\_WELDING\_LENGTH\_TOLERANCE

Category in [Advanced options dialog \(page 29\)](#): Welds

Use this advanced option to specify the minimum edge length Tekla Structures should take into account when searching for a location for a weld. The default value is 30 mm.

This advanced option is model specific and the setting is saved in the options database.

## 24.6 XS\_WELDING\_TOUCH\_TOLERANCE

Category in [Advanced options dialog \(page 29\)](#): Welds

Use this advanced option to define the maximum possible gap between two parts welded together when copying secondary parts. The weld is copied

together with the part if the copied part is within the defined tolerance from the main part. Otherwise, the part is copied without the weld.

The default value is 30 mm.

This advanced option is model specific and the setting is saved in the options database.

## 24.7 XS\_WELD\_LENGTH\_CC\_SEPARATOR\_CHAR

**Category in [Advanced options dialog \(page 29\)](#): Welds**

Use this advanced option to set the separator character used in the weld mark between the weld length and the pitch (center-to-center spacing) of weld segments. Enter @ to define the separator character according to the AISC standard (3@12). Enter - to define the separator character according to the ISO standard (100-300). The default value is -.

This advanced option is model specific and the setting is saved in the options database.

## 24.8 XS\_WELD\_NUMBER\_FORMAT

**Category in [Advanced options dialog \(page 29\)](#): Marking - general**

Use this advanced option to define the weld number format.

This advanced option is model specific and the setting is saved in the options database.

### Example

In `XS_WELD_NUMBER_FORMAT=W%3.3d`:

- `w` is the prefix. The rest of the string defines the number format.
- The first number defines the minimum field width.
- The second number defines the minimum quantity of numbers to display.
- `%` and `d` (integer value) indicate the format.

## 24.9 XS\_WORKING\_POINTS\_VALID\_ALSO\_OUTSIDE\_PART

Category in [Advanced options dialog \(page 29\)](#): Dimensioning - parts

Set this advanced option to `TRUE` to also draw reference dimensions for points outside part end points. The default value is `FALSE`.

This advanced option is model specific and the setting is saved in the options database.

# 25 Advanced options - Z

## 25.1 XS\_ZERO\_POINT\_SYMBOL\_OLD\_WAY

**Category in [Advanced options dialog \(page 29\)](#): Dimensioning - general**

Set this advanced option to `TRUE` to use RD marks containing a circle rather than the text `RD` to indicate the zero point of dimensions when you use US Absolute dimension types. By default, RD marks contain the text `RD`. The default value is `FALSE`.

This advanced option is model specific and the setting is saved in the options database.

## 25.2 XS\_ZOOM\_STEP\_RATIO

**Category in [Advanced options dialog \(page 29\)](#): Model views**

Use this advanced option to set the zoom ratio for the **Zoom in** and **Zoom out** commands on the **View** tab. To zoom more with a single mouse click, increase the value. The default value is `0.25`.

This advanced option is user specific and the setting is saved in `options.bin` under the user folder, for example, in `C:\Users\\AppData\Local\Trimble\Tekla Structures\\UserSettings`. Restart Tekla Structures to activate the new value.

## 25.3 XS\_ZOOM\_STEP\_RATIO\_IN\_MOUSEWHEEL\_MODE

Category in [Advanced options dialog \(page 29\)](#): **Model views**

Use this advanced option to set the zoom ratio when you are zooming by scrolling the middle mouse button. Enter a decimal value. To zoom more with a single mouse scroll notch, increase the value. The default value is 0.05.

This advanced option is user specific and the setting is saved in `options.bin` under the user folder, for example, in `C:\Users\\AppData\Local\Trimble\Tekla Structures\\UserSettings`. Restart Tekla Structures to activate the new value.

## 25.4 XS\_ZOOM\_STEP\_RATIO\_IN\_SCROLL\_MODE

Category in [Advanced options dialog \(page 29\)](#): **Model views**

Use this advanced option to set the zoom ratio when you are zooming by scrolling and holding down the middle mouse button at the same time. Enter a decimal value. To zoom more with a single mouse scroll notch, increase the value. The default value is 0.01.

This advanced option is user specific and the setting is saved in `options.bin` under the user folder, for example, in `C:\Users\\AppData\Local\Trimble\Tekla Structures\\UserSettings`. Restart Tekla Structures to activate the new value.

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