AUG. 27-29

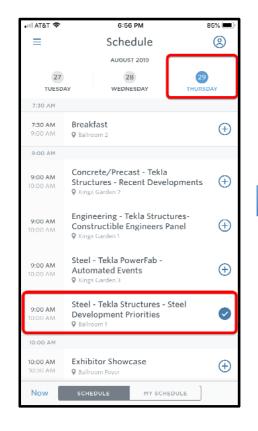
TEKLA BASECAMP

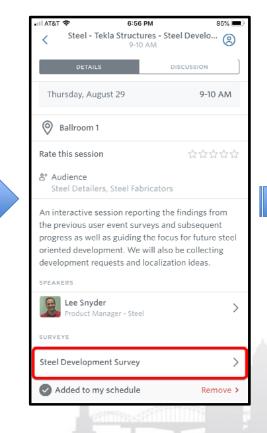
Recent Steel Development Lee Snyder – Product Manager





Feedback Survey









TEKLA VERSIONS & EVOLUTION



Tekla Version 2018 Main Features

Modeling

- Point Cloud Support
- Improvements to bent plate
- Spiral beam
- Welding
- Direct X Better support for rendering

User Interface

- User Interface renewed and improved. Added to modeling side a customizable property pane with possible to visualize custom properties
- Usability enhancements, including snapping improvements

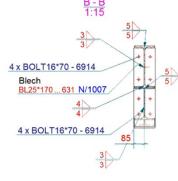
Drawings

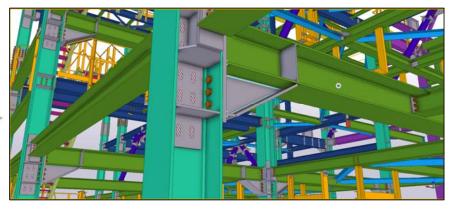
 Faster and easier to use drawings, including updated printing, new drawing content manager, new automatic and easier manual mark placement

standard 🔻 🛞 🔭 Outline planes 🔻

Current phase: 1, Phase 1

- Speed improvements
- Interoperability
- Export import
- Enhanced API









→

Tekla Version 2018i Main Points

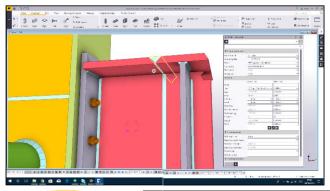
Model productivity

- Welding (Direct Modification)
- Complex plate work (new bend types)
- Cone from plates

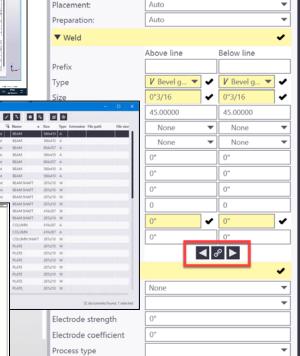
Documentation workflow

- New Document Manager
- Additional drawing improvements
- Curved sections
- Unfolding options
- Improved workflow with Trimble Connect

Enhanced document management and collaboration



[8.1] 24.04.2015 AssemblyDrawingDocument [M.1] 24.04.2015 SinglePartDrawingDocument [M.11] 24.04.2015 SinglePartDrawingDocument



✓ Edge

— Workshop

Continuous

Weld (1 selected)

▼ Common attributes

■ Bevel BS

Edge/Around

Workshop/Site

Shape Connect as



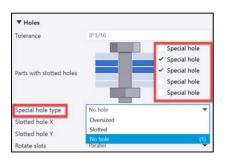
Tekla Version 2019 Main Features

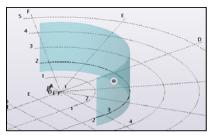
Modeling

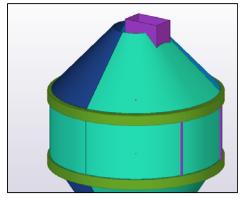
- Complex geometry:
- Stand alone bends for cones and pipes, boundary controls
- Construction objects: arcs, poly-curve, offset, real curved grids
- Bolts: "no hole" for pre-punched parts, as built conditions, screws, field holes
- Welding: length calculation corrected, cross-use of weld leg length and throat thickness with different standards, weld marks support special characters.

Drawings & Documents

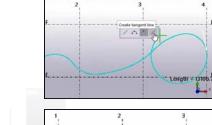
- Faster drawings clean-up with clone selected objects is introduced on GAs
- Complex plate work: associativity for unfolded
- Cont. cloning improvements: view alignment to center of gravity, etc
- Easier layout editing: drag&drop, automatic anchoring
- Easier clean-up and checking with customizable content Manager, incl. connections, zoom to selected
- Additional drawing improvements: Drag annotations with 1 click, align view label

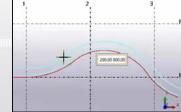


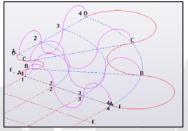














TEKLA STRUCTURES 2019i



TEKLA _____BASECAMP ___

Tekla Version 2019i Main Features

Model productivity and usability

- Updates to property pane
- Snapping improvements
- Search within model
- View Improvements
- Lofted Plate

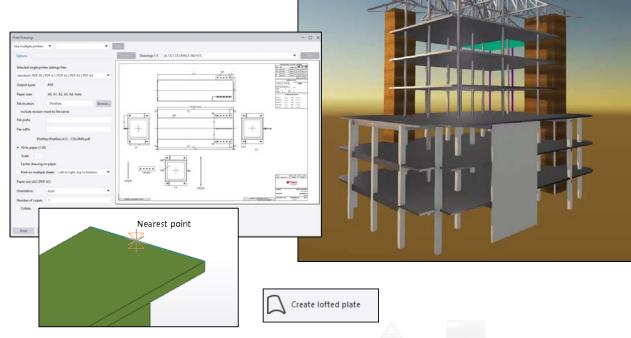
Collaboration

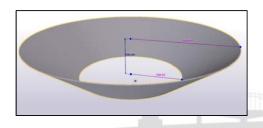
- New visualizer
- New DWG and DGN export options
- IFC conversion

Documentation workflow

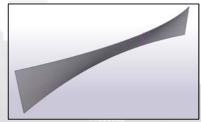
- Print to multiple Printers
- Drawing view frame hidden
- New section view settings

Over 1000 fixes











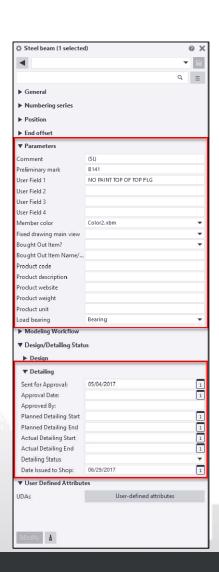
MODEL PRODUCTIVITY



Updates to the property pane

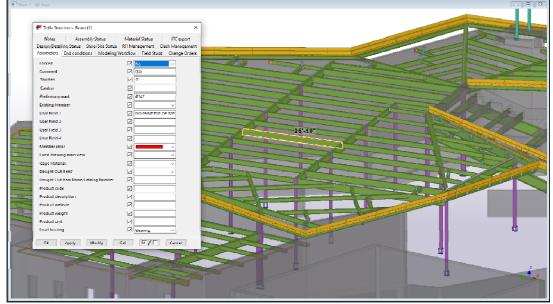
Updates to the property pane, UDAs, and to the Property pane editor

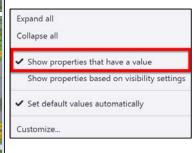
- Tekla Structures 2019i introduces improvements to the property pane control element
- Modifying and viewing of user-defined attributes (UDAs) is now simple and straightforward.

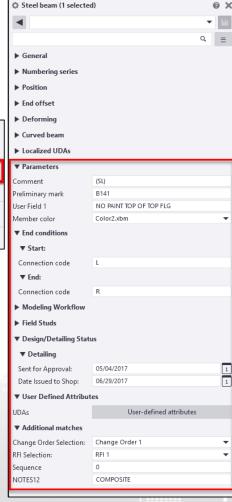




Updates to the property pane

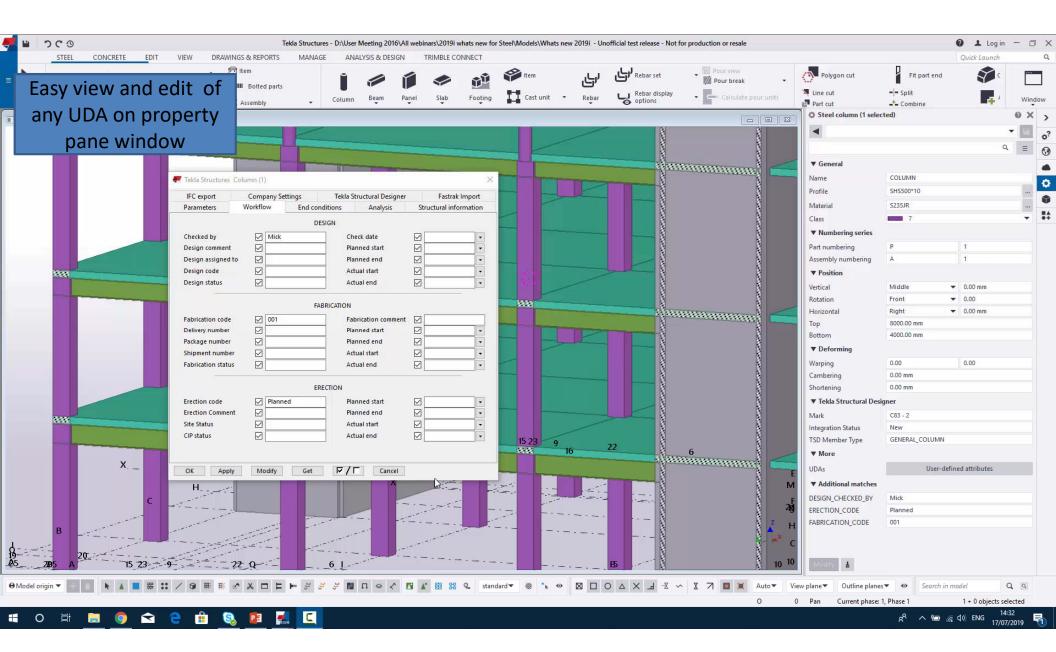






 Only populated UDA's will display for selected model object(s)





Updates to the property pane

Improved search in the property pane

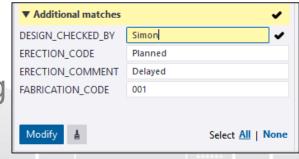
 Search in the property pane has been improved. Now the search finds all the properties and user-define attributes (UDAs) that are available for the object



Type in any field into search and display only specific results

Improvements in copying of properties

You can now press **Enter** to finish the copying of properties instead of clicking the Modify button.

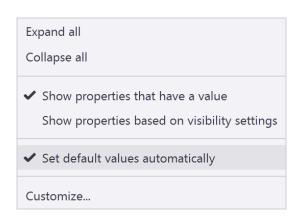


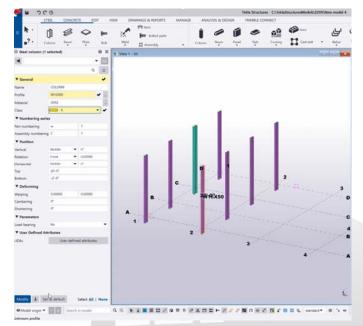
Press Enter same as modify

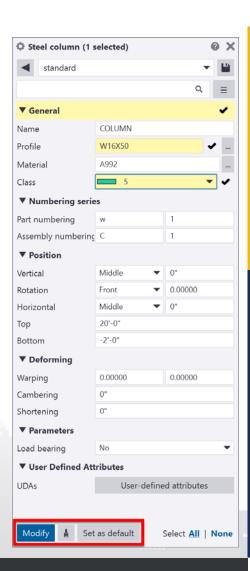


Set Default Values Automatically

Instead of "auto-apply" you can choose when to set the default values





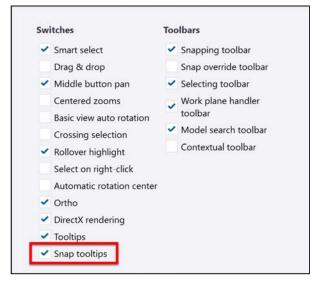


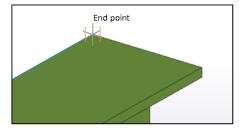


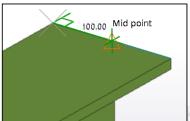
Snapping improvements

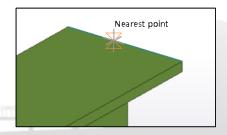
Snap tooltips for snap points

Now when you start a command that requires picking points and you move the mouse pointer over objects in the model, Tekla Structures displays a snap tooltip that shows the name of the snap point



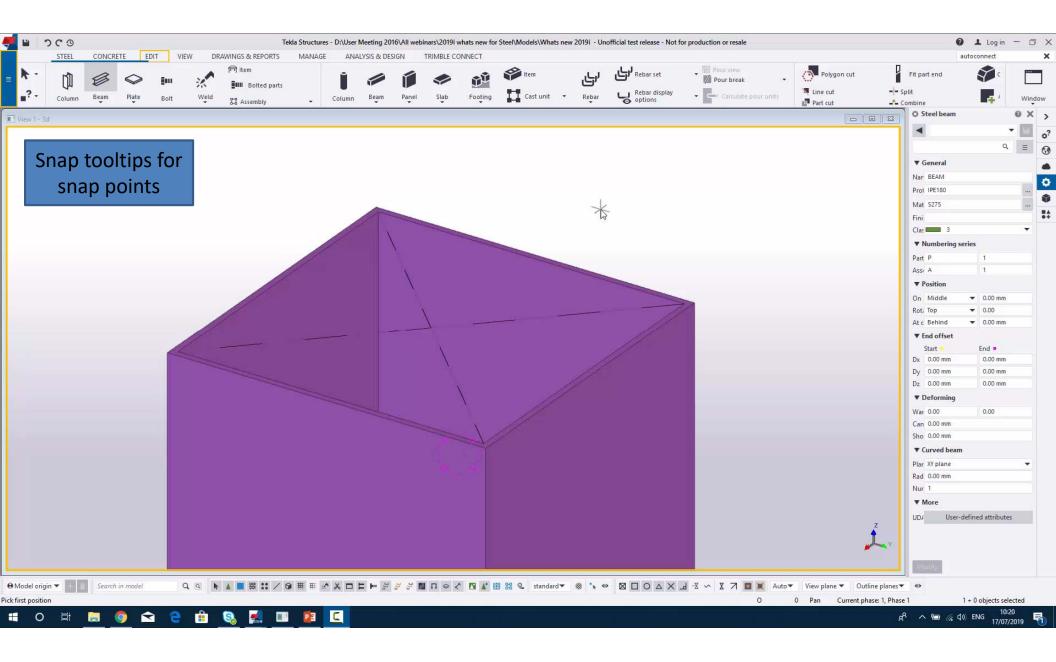




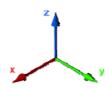


To show or hide these snap tooltips, click File > Settings and select the Snap tooltips check box.



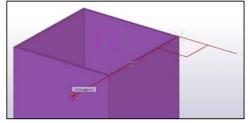


Snapping improvements

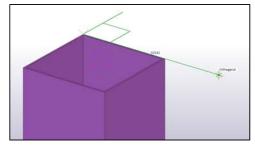


Snapping color changes

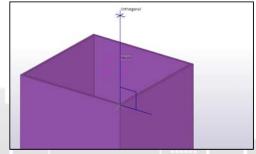
- . When snapping to Ortho the color of the snap and line now matches the axis
 - red for x-axis
 - green for y-axis
 - blue for z-axis.
- For any other direction the line between the last point picked and the snap point and the cursor is gray.



red indicates x-axis

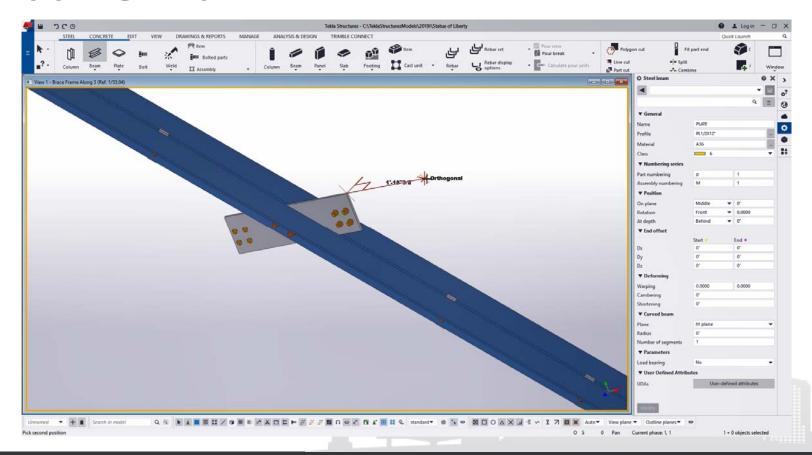


green indicates y-axis



blue indicates z-axis

Snapping Improvements

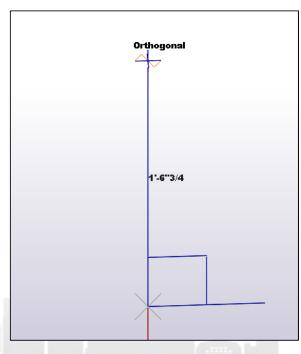




Snapping improvements

Orthogonal snapping now has lower priority among the snap points

- The behaviour of the Ortho tool has been changed. If Tekla Structures detects any other possible snap points other than an orthogonal point, Tekla Structures uses the found snap point
- If there are no other possible snap points found, then Tekla Structures uses the orthogonal snap point.



Search within the model

Search Toolbar

- Using the Model Search Toolbar you can now quickly search for objects:
 - in the entire model or
 - within the selected model objects
- Search for model objects using:
 - Name
 - Profile
 - Material
 - Reinforcment grade
 - Position number
 - Component running number
 - GUID

Search using name, profile, material, or position number of model objects. You can use wildcards "", *, [], or ?.

Search in model

Search for model objects using name, profile, material, reinforcement grade, position number,

match the search criteria and shows the object

component running number, or GUID.

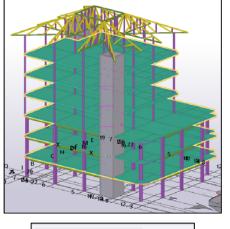
Enter a search term in the box on the left, and

then click this button or press **Enter**.

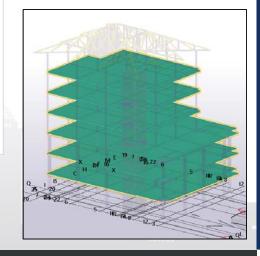
Tekla Structures selects the model objects that

properties in the property pane.

Press Ctrl+F1 for more help on this.





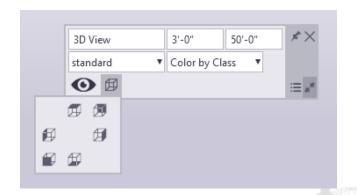


TEKLA _____BASECAMP ___

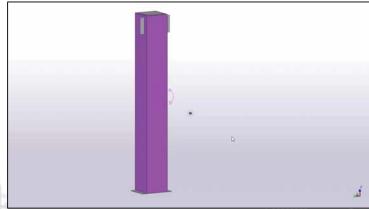
View improvements

View improvements

 Starting from Tekla Structures 2019i, you can now show model views, assemblies, and components at different pre-set view angles.

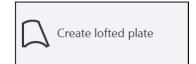




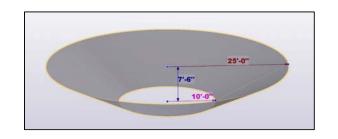


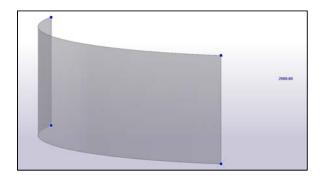


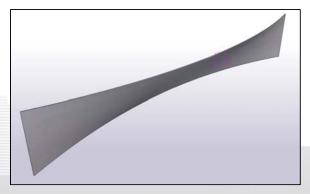
Lofted Plate

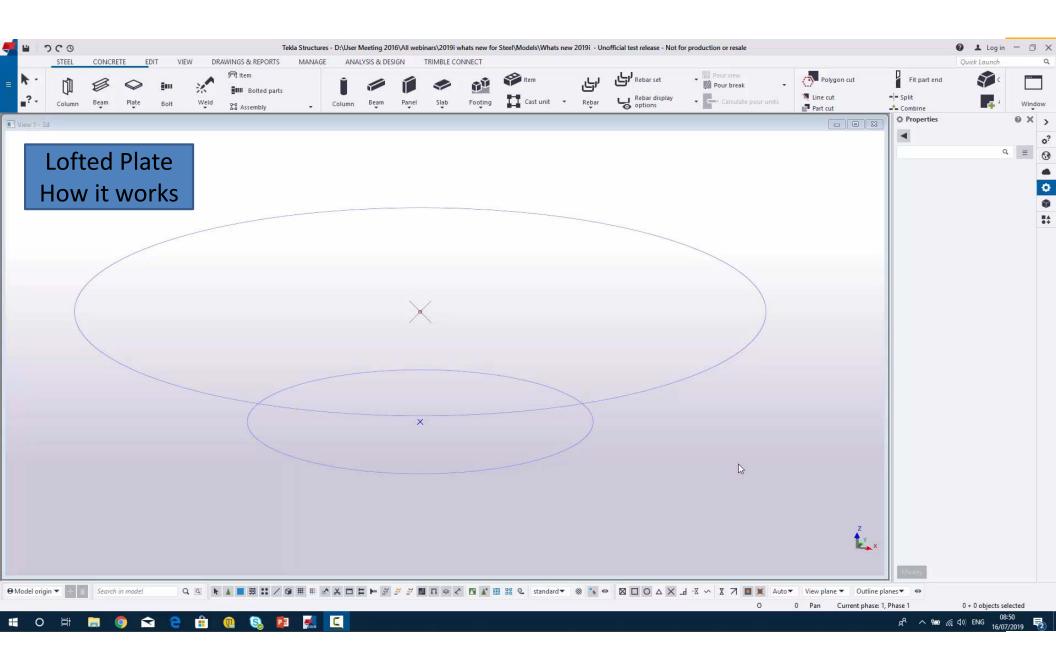


- Lofted Plate Tekla Structures 2019i introduces new plate part type for steel
- Use lofted plates to model transitions, rolled plates and plates with doublecurved form, warped plates for example.
- Create from construction object to construction object or Construction object to point









Lofted plate



Create the needed construction objects in the model.

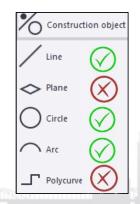
The shape of the lofted part is based on the construction object shape.

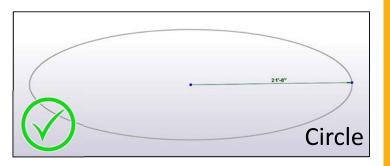
Supported

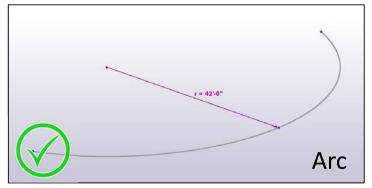
- Construction Circles
- Construction Arcs
- Construction Lines

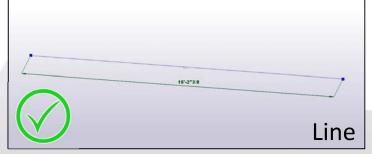
Not supported

- Construction Plane
- Construction Polycurve



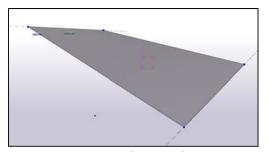




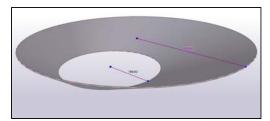




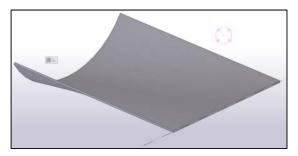
Lofted plate – Examples



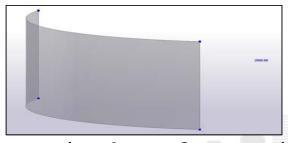
Construction Line to Construction Line for warped plates



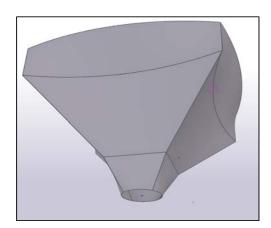
Construction Circle to Construction Circle for Transitions



Construction Arc to Construction Line for Chute's



Construction Arc to Construction Arc for curved plates





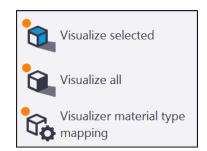
Visualizer

Visualizer is now available in Tekla Structures 2019i by default

Visualizer is a quick, easy shaded and rendered model viewer

- Save hi resolution images
- Set view points and play back as a fly through

Add a nice touch to your sales presentations and coordination meetings







Visualizer









DOCUMENTATION WORKFLOW

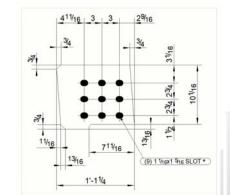


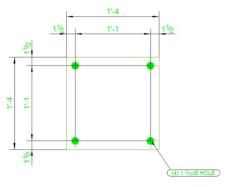
Improvements in drawings

Drawing view frames now hidden

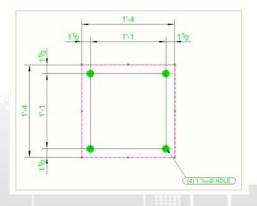
 View frames are now hidden until you move the cursor over the view. If you select a view, the drawing view frame remains solid

(4) 1 1/16x1 5/16 SLOT



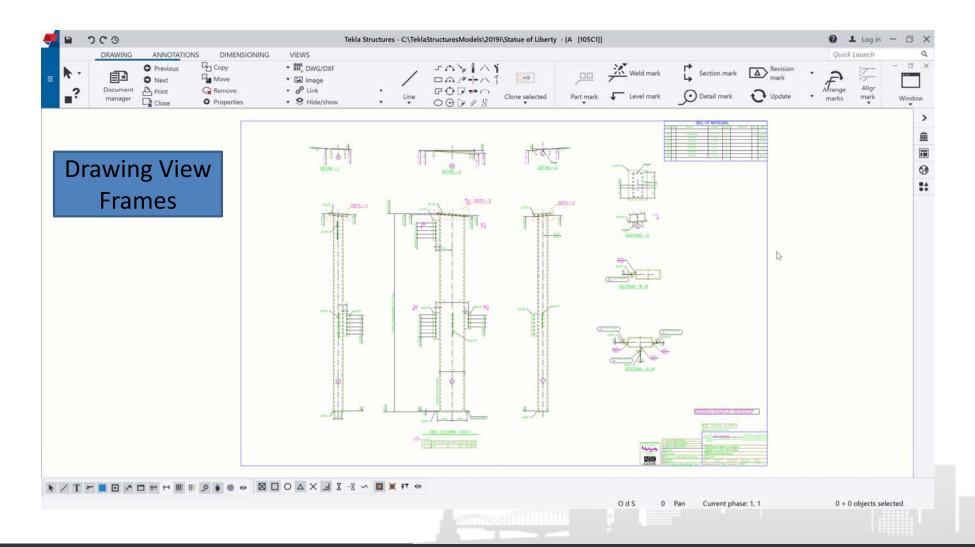


View frames are now hidden until you move the cursor over drawing view





2'-0

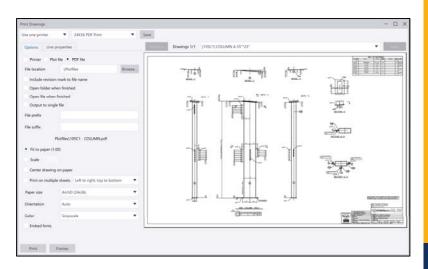


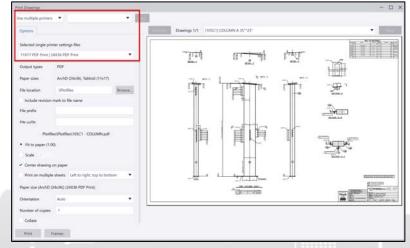


Printing

Print to multiple printers

- You can now print to more than one printer based on the paper size of each selected drawing.
- Tekla Structures automatically selects the appropriate printer for each drawing

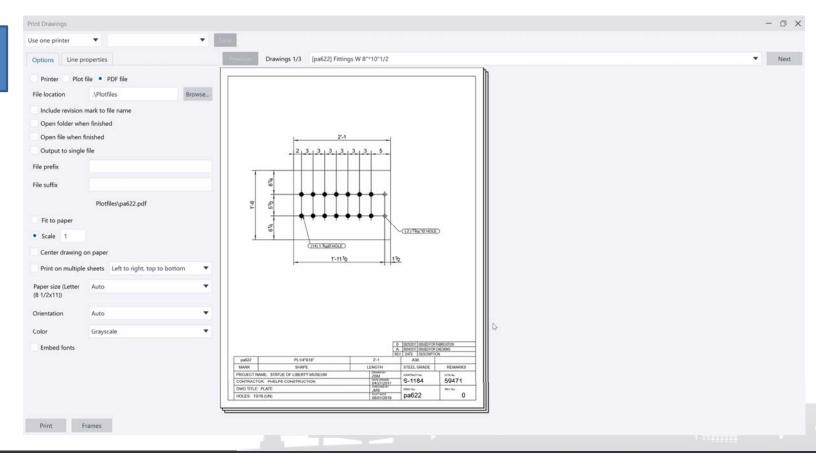






Print to multiple printers

New printing options





COLLABORATION

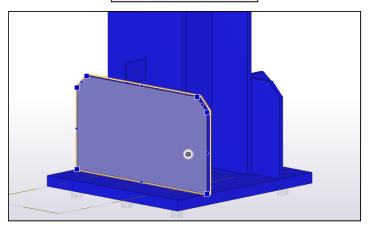


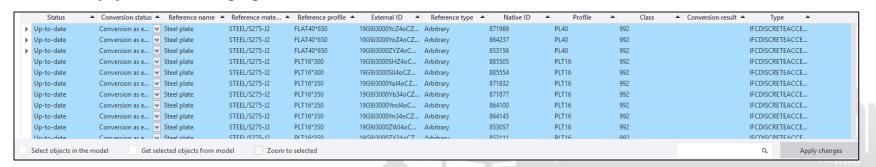
Interoperability improvements

Convert IFC objects

IFC object conversion

 Steel contour plates now uses the prefix defined for plates as the prefix for Tekla Structures native plates.
 You can use prefixes that are supported by your environment



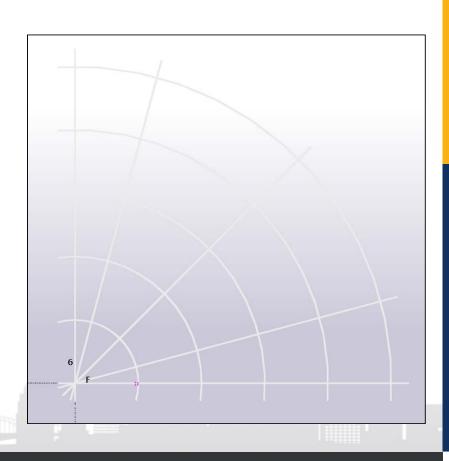




Interoperability Improvements

IFC2x3 export

- You can now also export radial grids in the IFC2x3 export.
- The edge chamfers are omitted from the exported IFC model.
 This is to enable better interoperability with plant design systems.

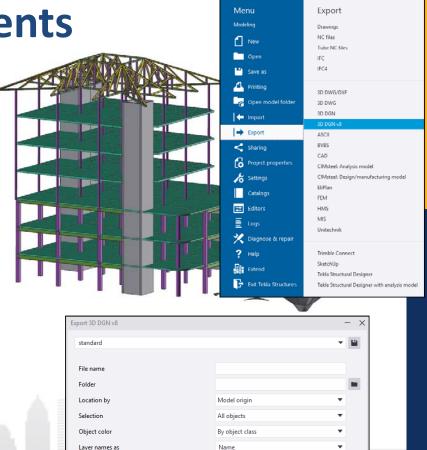




Interoperability improvements

New 3D DGN export v8 format

- The 3D DGN export has been renewed for TS2019i.
- The new 3D DGN export now has the requested v8 format
- The new 3D DGN v8 uses
 Teigha libraries and has some
 new features:



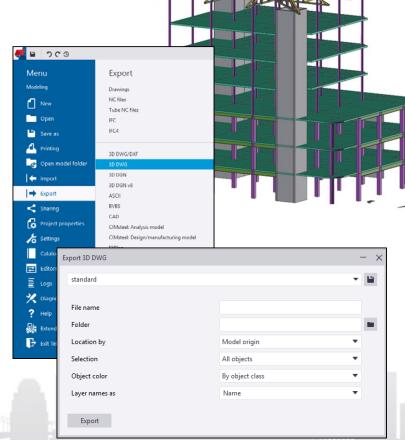
<u>■</u> >00



Interoperability improvements

3D DWG export

- The 3D DWG export has been renewed
- The new 3D DWG uses Teigha libraries and has new export features:





FIXES



Fixes

2019i fixes

- Over 1000 fixes, including:
 - Steel components
 - Import, export, interoperability
 - Templates and reports
 - Drawings
 - Tekla Model Sharing
 - Modelling
 - Tools and components
 - Numbering
 - User interface

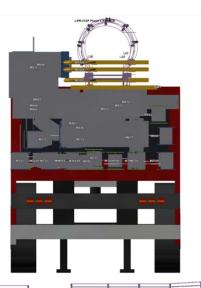
| Defect number | Development area | Description |
|------------------|-------------------------------------|---|
| TSAC- 2490 | Steel components | In Full depth S (185) , the gap between the tab <u>plate</u> and the <u>main part</u> flanges is now correctly applied when the main part is a C or U profile. |
| TSAC- 2467 | Steel components | In Tube gusset (20), the cut creation has been improved in cases when the gusset <u>plate</u> runs through the main part. |
| TSAC- 2367 | Steel components | In Full depth S (185) , the <u>secondary part</u> is now correctly set as the bolt <u>main part</u> . |
| TSAC- 2359 | Steel components | In U.S. Base plate (1047) , in some situations, two anchors were previously added to the same assembly. This has now been fixed. |
| TSAC- 2349 | Steel components | In Railings (S77) , top rail part cut creation has been improved. |
| TSAC- 2226 | Steel components | In Hollow brace wraparound gusset (59) , the seal plate was not previously created when the weld length was set to be smaller than zero. This has now been fixed. |
| TSAC-857 | Steel components | Seat type 5 (60) does not create an unwanted <u>fitting</u> anymore. |
| TSAC-846 | Steel components | In Rebar hole , holes are now created correctly for inclined reinforcing bars with part cuts in steel columns, beams, and contour plates. |
| TSAC-569 | Steel components | In Wall rails , when you set the bracket spacing to Maximum on the Brackets tab, the bracket spacing was not created correctly. This has now been fixed. |
| TSAC-311 | Steel components | In Tube splice (6) , the creation of welds between the splice plates and the input parts has been improved. |
| TSAC-303 | Steel components | In Stiffeners (1034) , the width and height of stiffeners is now correctly applied. |
| TSAC-270 | Steel components | In Haunch (40), weld 7 is now created correctly in situations where the haunch is created as a profile. |
| TTSD- 24752 | Organizer | In <u>Organizer</u> , the synchronization performance has been improved. |
| TTSD- 26897 | Import, export, interoperability | The bending radii of rebar hooks are now correctly exported to IFC4. Previously, the main rebar bending radii were applied to all bends including hook bends. |
| TTSD- 26273 | Import, export, interoperability | The data handling of reference models sometimes failed, and the Temp.tmp file remained in .\DataStorage\ref folder. As a result, saving of a multi user model froze Tekla Structures and it needed to be closed from Task Manager. Tekla Structures also froze in single user model. These have now been fixed. |



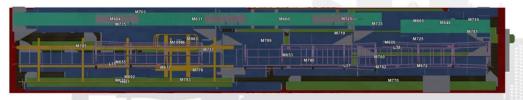


Managing Steel Delivery

STACKER









Stacker - Steel Delivery Tool

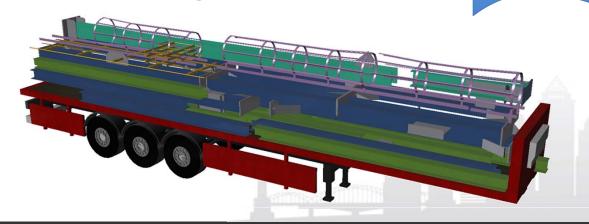
- Now available for the following configurations:
 - Full Detailing
 - Steel Detailing
 - Precast Concrete Detailing
 - Primary
 - Production Planner Concrete

Available in versions:

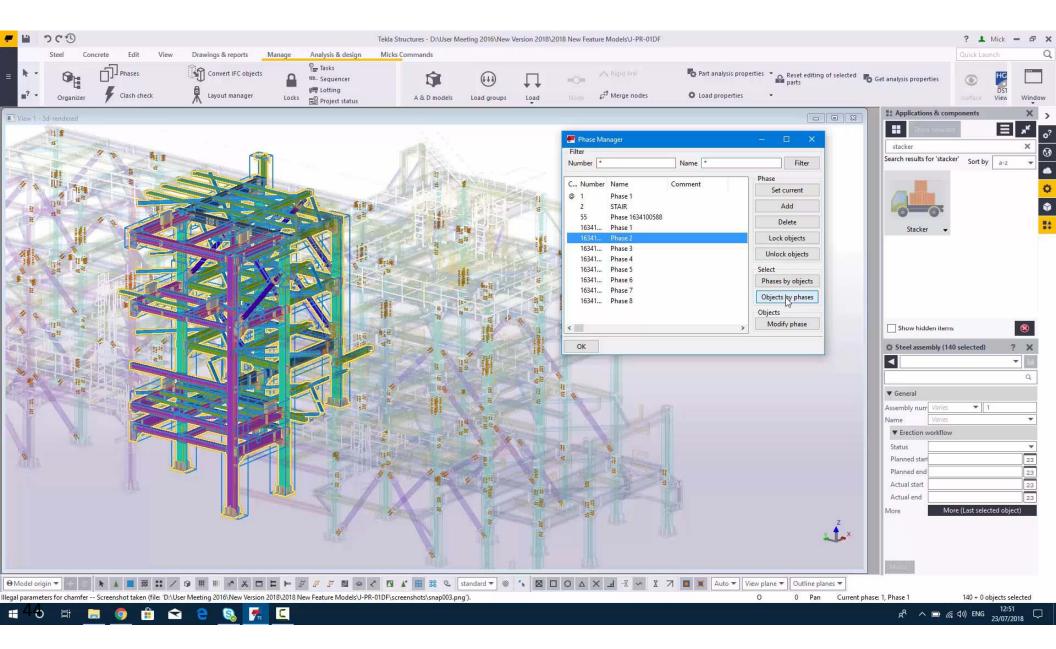
2018i

2019

2019i





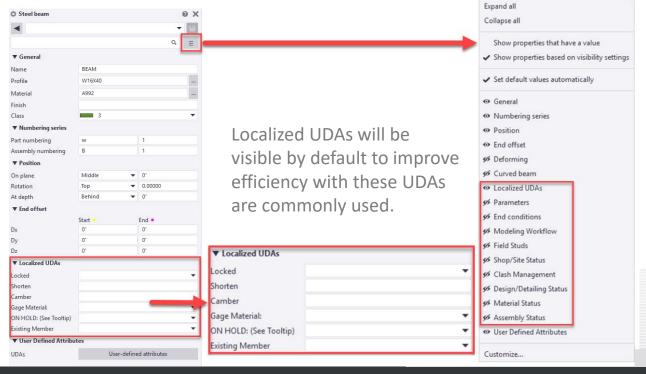


LOCALIZATION



2019i Localization Improvements

. New Property Pane UDAs now included out of the box

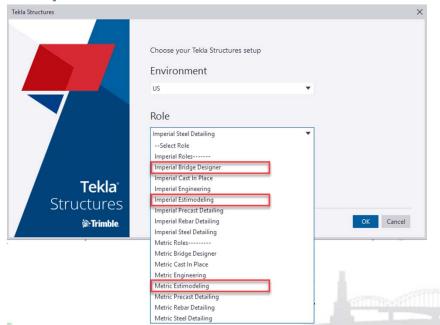


Other UDAs can be found via the options button. These are UDAs from the typical out of the box dialog and now can be easily accessed in the property pane. These are hidden by default but visible when you click the "eye".



2019i Localization Improvements

Esti-modeling Role and Bridge Designer Role for Imperial now included in 2019i!





Overview of Tekla Structures 2019i

Model productivity and usability

- Updates to property pane
- Snapping improvements
- Search within model
- View Improvements
- Lofted Plate

Increase your offering capabilities

Model productivity and usability

Stacker Tool for Steel

Collaboration

- New visualizer
- New DWG and DGN export options
- IFC conversion

Improved ways of working with other project members

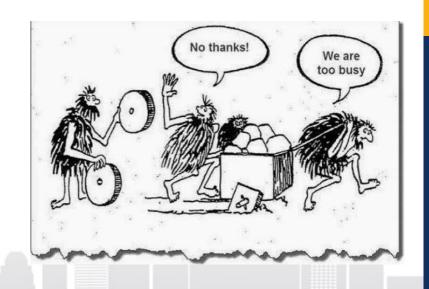
Documentation workflow

Drawing view frame hidden

Enhanced document editing, management and collaboration

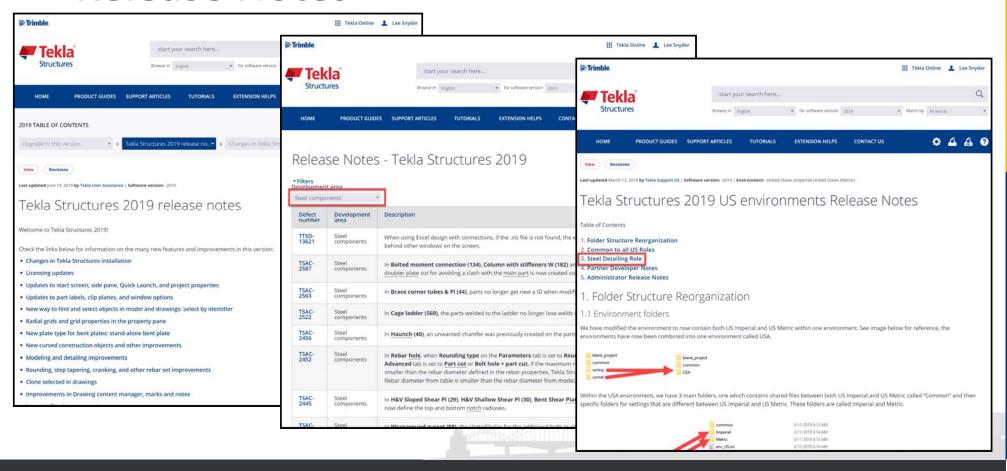


HOW TO STAY UP TO DATE





Release Notes





What's New Webinars — tekla.com/about/webinars

- Tekla software 2019i -Latest development for working with steel
 - September 4th

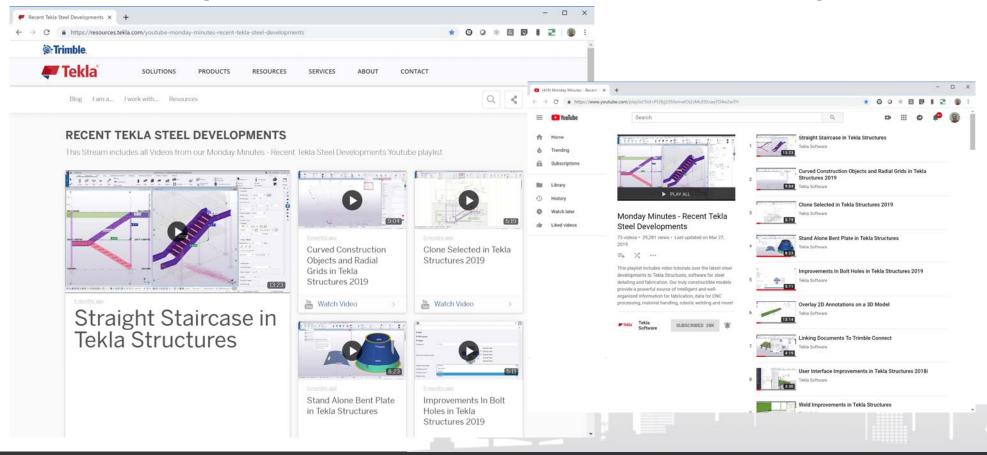
- Tekla software 2019i Latest development for working with concrete
 - September 5th





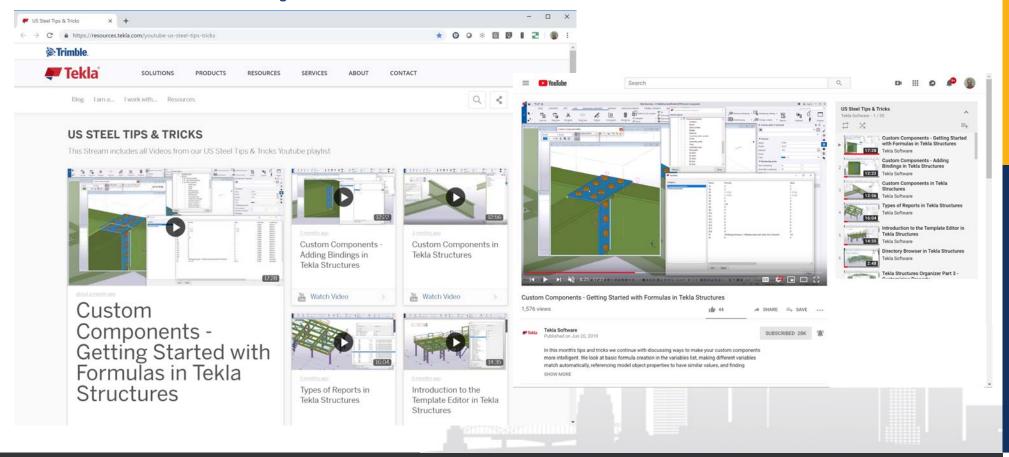


Monday Minutes - Recent Steel Developments





US Steel Tips and Tricks





Tekla Structures User Feedback Program

Tekla Structures User Feedback Program



Would you like to be the first to try our latest developments in Tekla Structures?



- Do you have great ideas on how Structural BIM software could change the industry?
- Do you want to test-drive software functionality and solutions inspired by industry leading customer needs, and offer your view on how this may also work within your business?

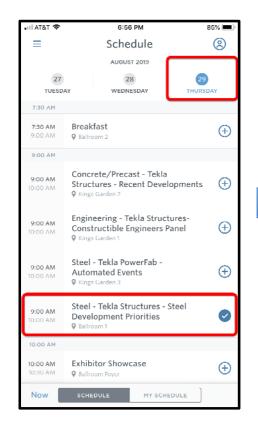
Shortly about User Feedback Program (UFP)

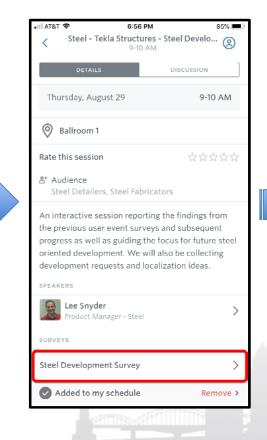
- UFP is a program during which the latest implementations and features in the software are presented to testers who have signed up and agreed to the terms and conditions of the Non-Disclosure Agreement (NDA).
- Testing is done using Tekla Structures Test Packages and Test Cases.
- This is a chance to be among the first ones who can test and provide early feedback on our latest developments in the software.

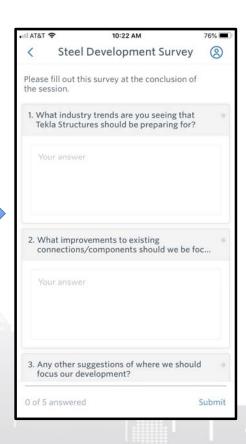
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| Lea | m more: https://teklastructures.support.tek/a.com/user-feedback.cooram |
| | see submit your contact information so that we can get in touch with you during the recruitment for the next UFP |
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Please Fill Out The Survey









Thank you!

QUESTIONS?

