# Construsoft Library Tools 2020

# Steel

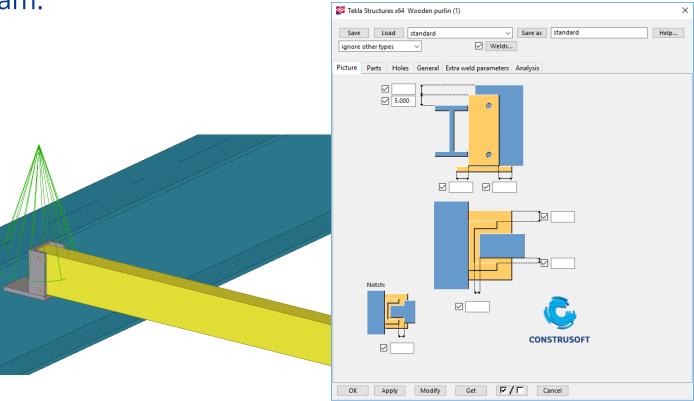




#### Wooden Purlin (1)

> Creates a connection between een steal and wooden

beam.

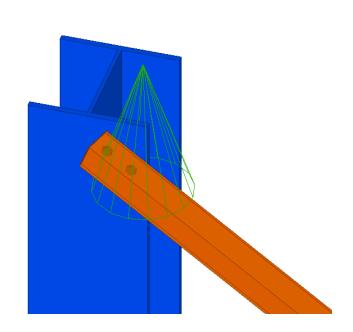


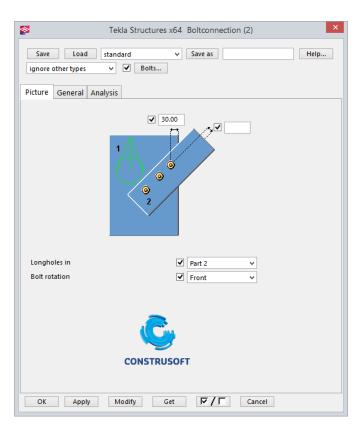




#### Bolt connection (2)

> Creates a bolt connection between 2 crossing profiles.



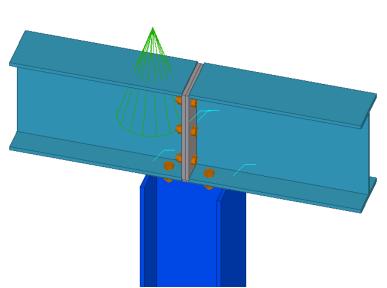


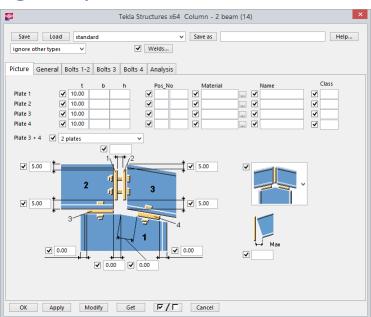




#### Column – 2 beams (3)

Creates a connection between a column and two beams, the end of the beams lay on the column. The beams could lie horizontally, but a angle is possible.



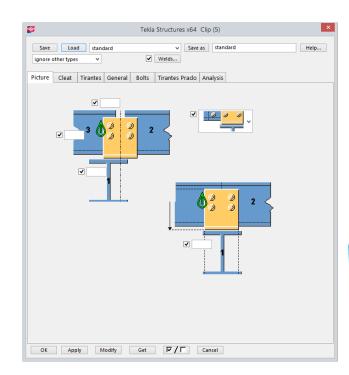






# Clip (5)

Creates a connection between a beam and two beams on top of it.

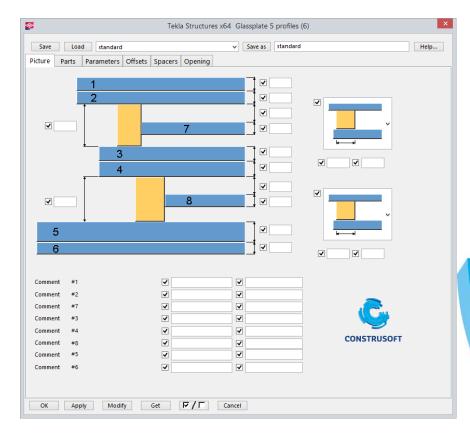






# Glassplate 5 profiles (6)

> Creates glassplates inside a window.

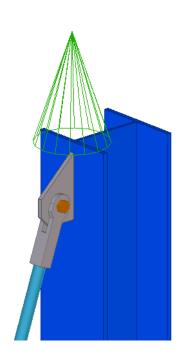


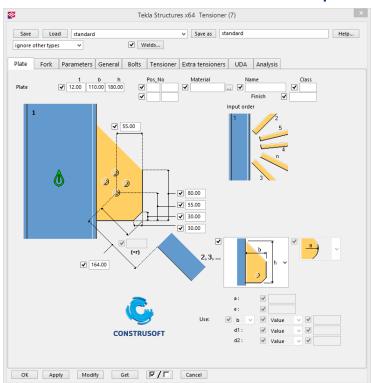




#### Tensioner (7)

> Creates a connection between a column or a beam with a windbrace. The connection in made with a fork or a plate.



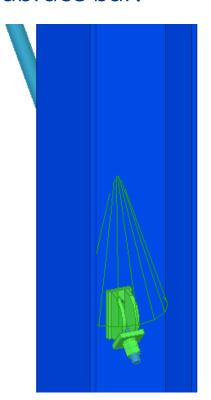


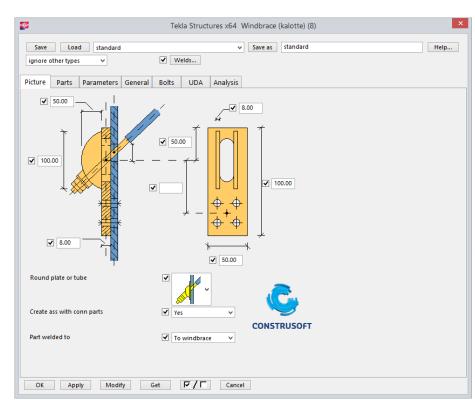




#### Windbrace (kalotte) (8)

Creates a connection between a column or a beam with a windbrace bar.



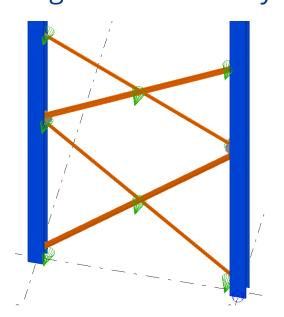


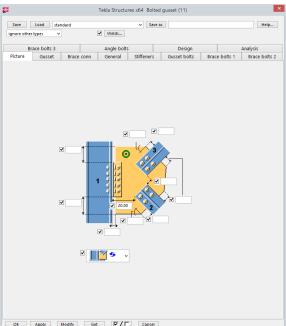




#### Tensioner brace (13)

> The component tensioner brace (13) can be used for modeling of one or two wind crosses connection between two profiles. In addition to the wind bracing profiles can also be generated directly to the terminals.



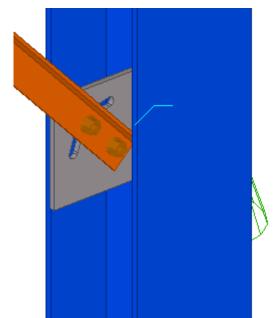


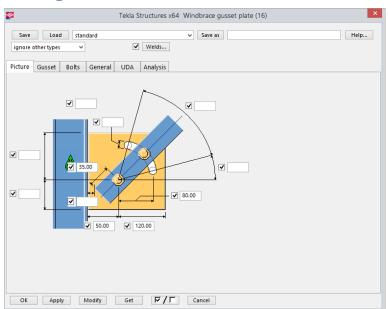




## Windbrace gusset plate (16)

> Creates a connection between a Gusset plate and a plateor L-profiel. These gusset plate has one round hole and one curved slot. The curved hole makes is possible to link the brace's with different angles.



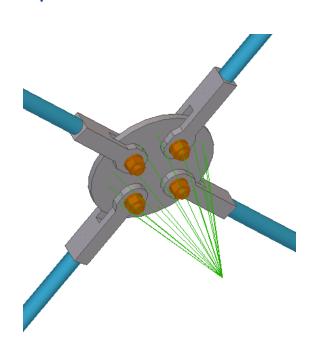


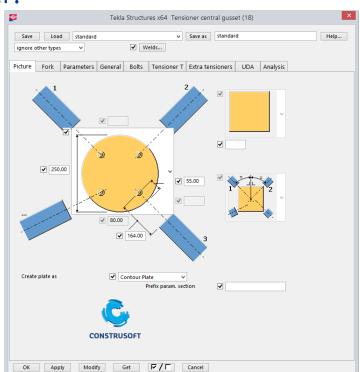




## Tensioner central gusset (18)

Creates a connection between four bracing rods. The component can be used in combination with the specifications of Willems Anker.

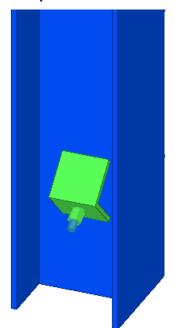


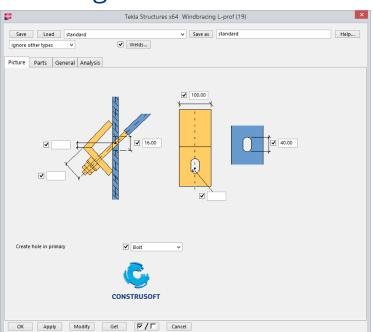




#### Windbracing L-profile (19)

Creates a connection between a main part and a windbracing rod with the aid of an L - profile so that the wire end protrudes which will be tightened with nuts.



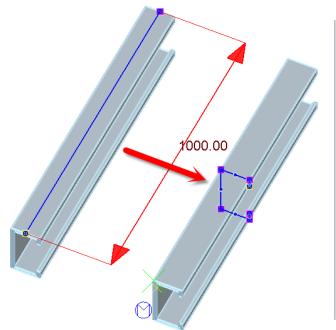


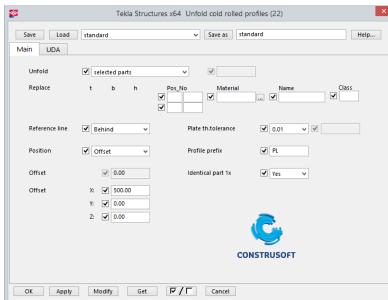




# Unfold colled rolled profiles (22)

> Creates a Poly-profile from a parametric profiles. The aim is to make a unfold drawing of the profile.

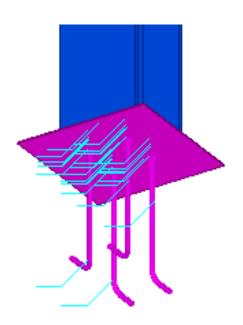


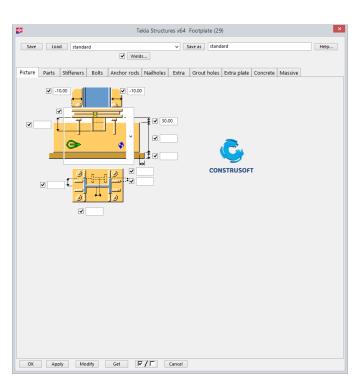




# Footplate (29)

> Creates a footplate at the end of the column.



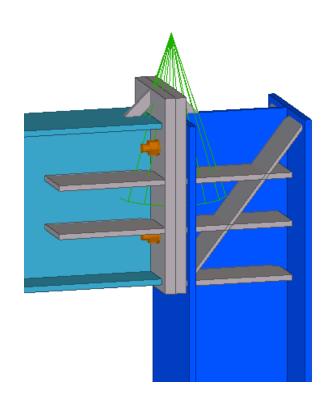


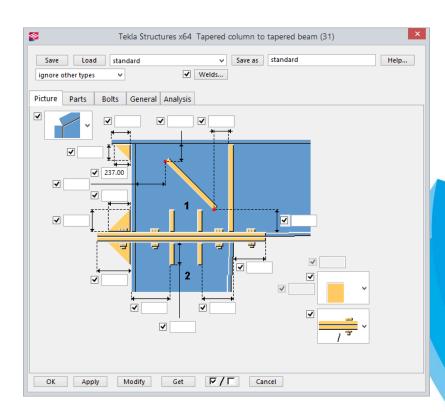




## Tapered column to tapered beam (31)

Creates a connection between a column and a beam.

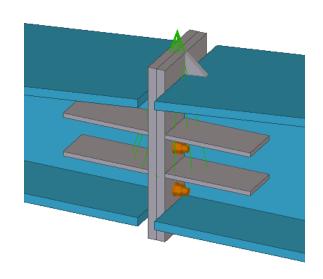


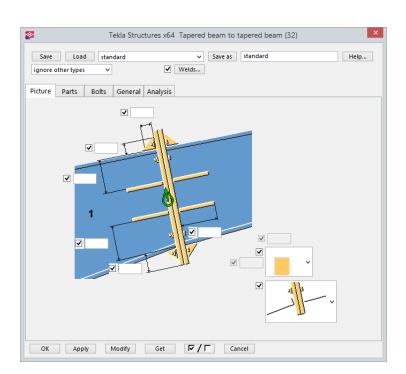




## Tapered beam to tapered beam (32)

> Creates a connection between two tapered beams.





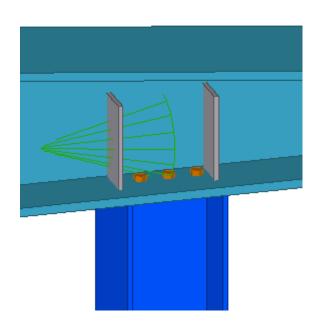


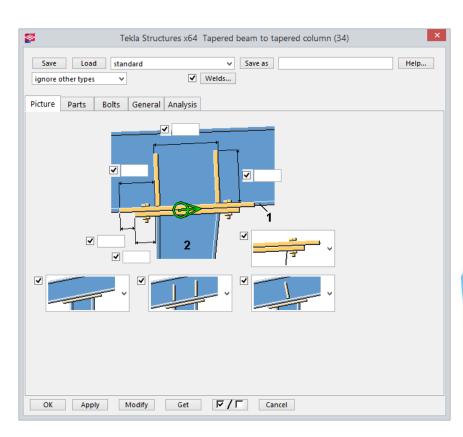


## Tapered beam to tapered column (34)

> Creates a connection between a column and a continues

tapered beam.

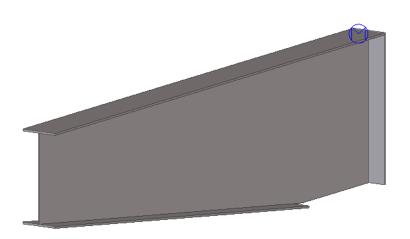


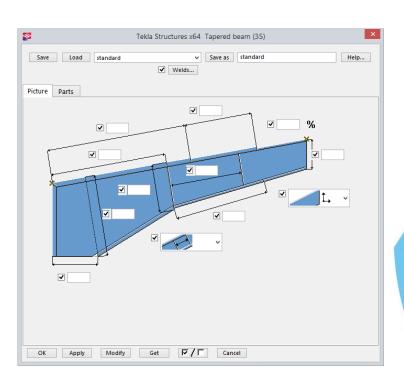






> Creates a tapered beam.





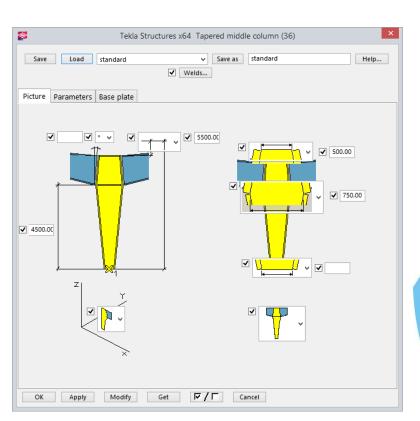




# Tapered middle column (36)

> Creates a tapered column.



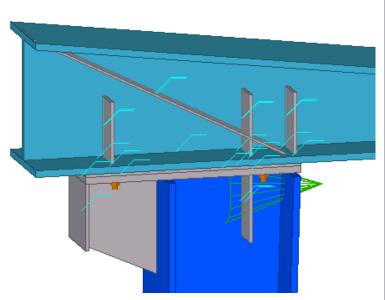


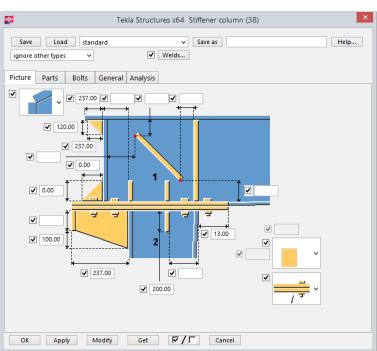




#### Tapered column to tapered beam (38)

Creates a connection between a tapered column and a tapered beam with plates.



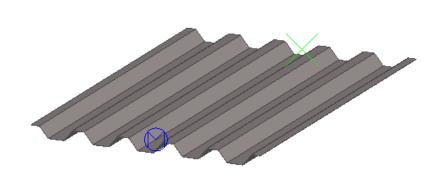


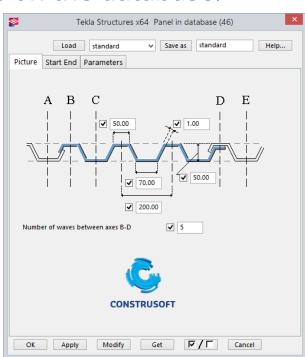




#### Panel in database (46)

> Is a used for the addition of a trapezoidal profile on the Structures of Tekla profile database. There is added to both a cross-section as a profile on the database.



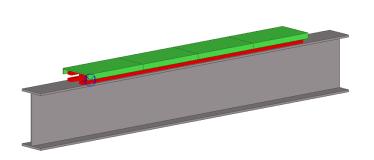


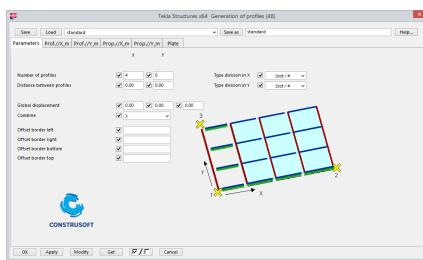




#### Generation of Profiles (48)

Creates a filling of a plane with multiple profiles. according to a pattern. In 3 directions (X, Y, Z) a plurality of profiles can be defined, in their own properties, position and rotation.



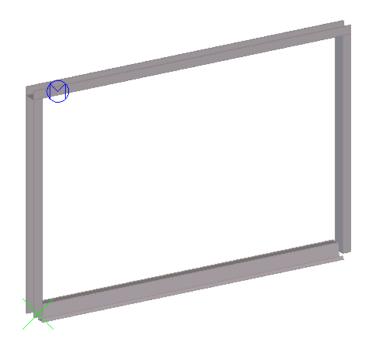


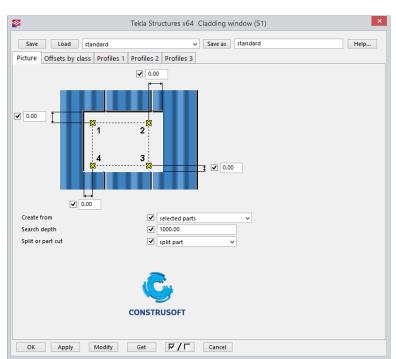




## Cladding window (51)

> Creates a recess in a wall of one or more profiles. The component can also generate direct frame profiles.



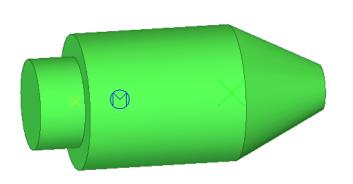


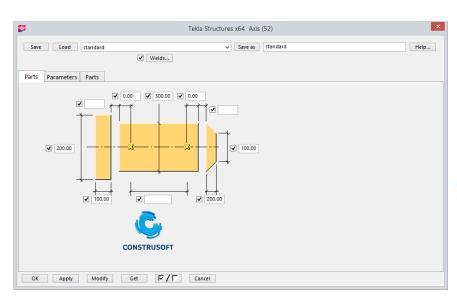




#### Axis (52)

> Can be used for making round sections with different diameters. Up to 3 different diameters can be specified.



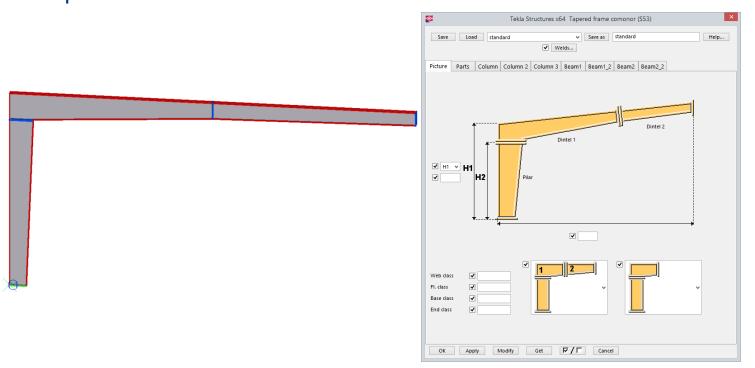






## Tapered frame (53)

> Creates a frame made up of tapered columns and tapered beams.

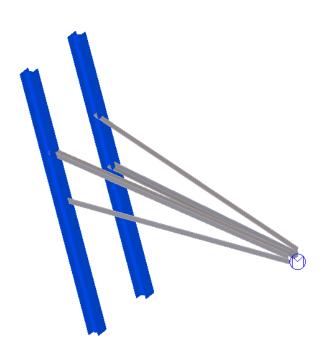


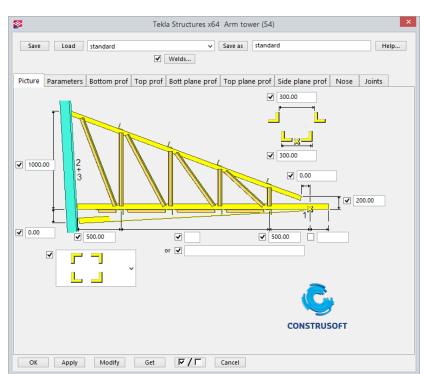




#### Arm Tower (54)

Creates a arm of a tower. The construction is based on the two columns and the end point.



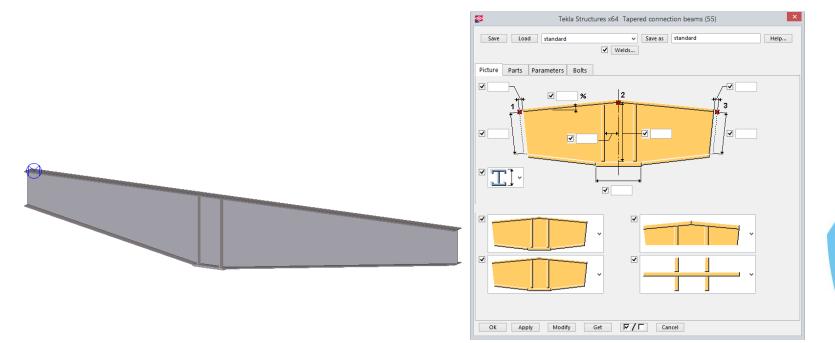






## Tapered connection beams (55)

Creates two tapered beams with a connection between them in the middle.

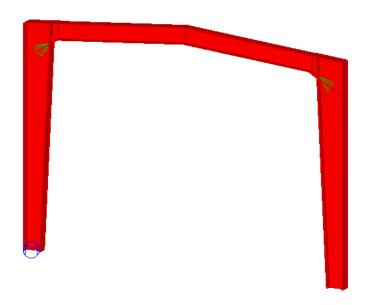


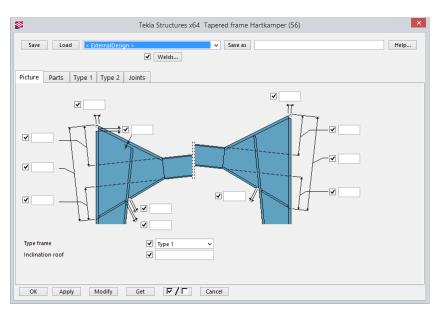




## Tapered frame Hartkamper (56)

> Creates a frame made up of tapered columns and tapered beams.



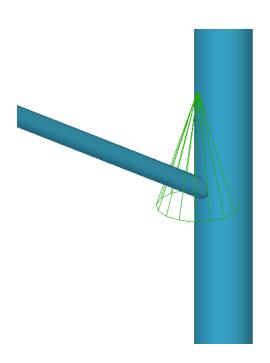


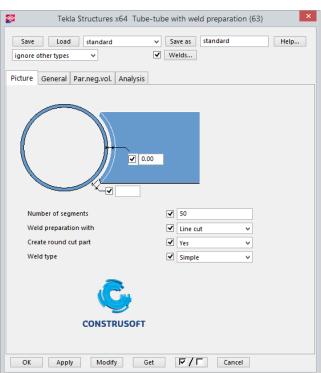




# Tube-tube with Weld prep (63)

Creates a connection between two tubes with a weld preparation.





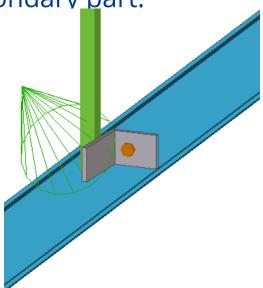


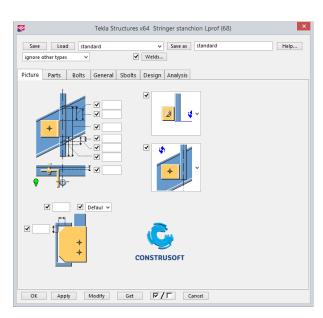


# Stringer – stanchion L-prof (68)

Creates a connection between an existing stringer and an existing stanchion. The connection contains a plate or Lprofile which is welded or bolted to the main and

secondary part.



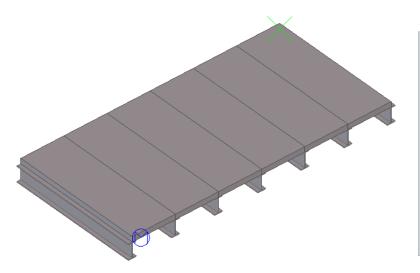


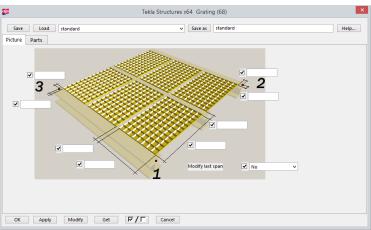




# Grating (68)

> Creates a distribution of beams with grating on top.

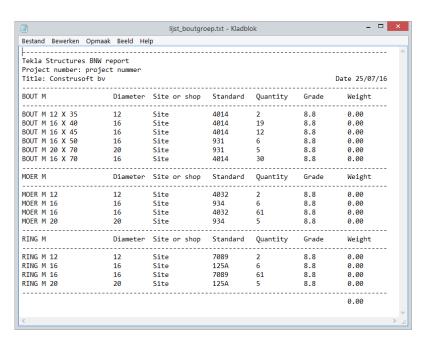


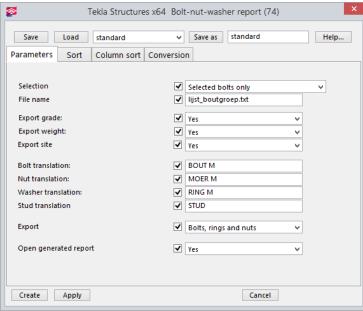




# Bolt-nut-washer report (74)

> Creates a bolt list ,including all the washers and nuts.



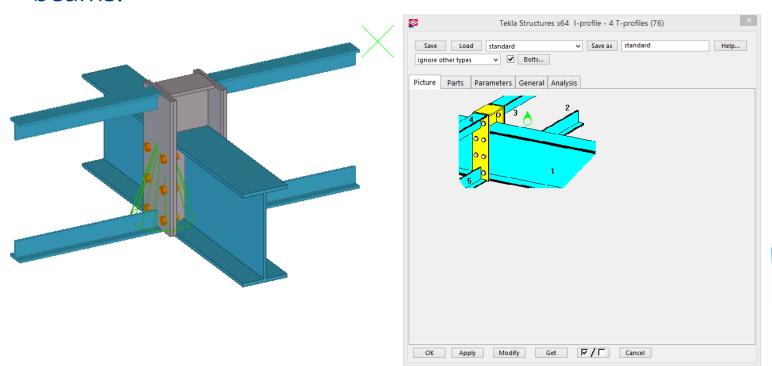






# I-profile - 4 T-profile (76)

Creates a connection between a I-beam and four Tbeams.

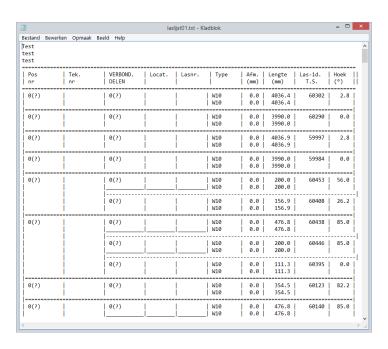


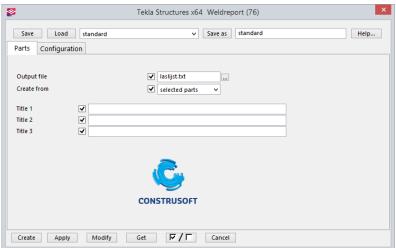




## Weld List (76)

> Creates a weld list.



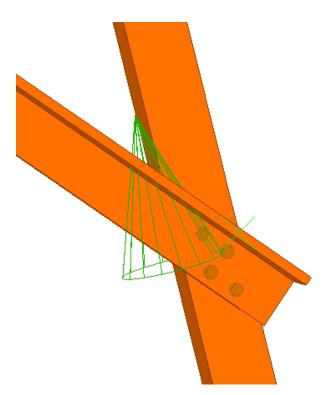


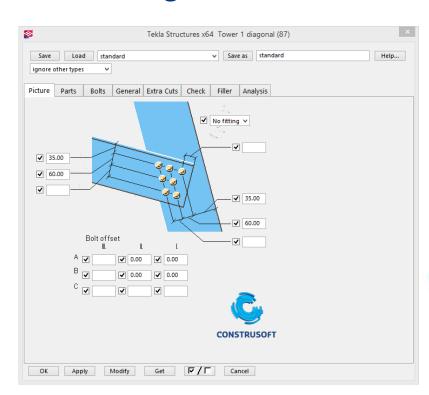




## Tower 1 diagonal (87)

> Creates a connection between two diagonal beams.



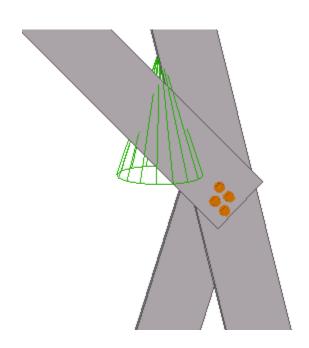


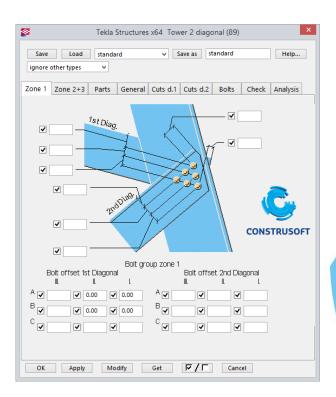




#### Tower 2 diagonals (89)

> Creates a connection between three diagonal beams.



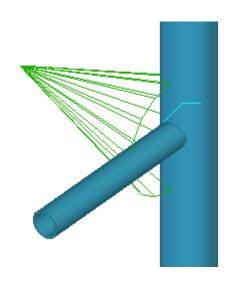






# Polyweld (92)

> Creates a connection between parts with a polyweld.



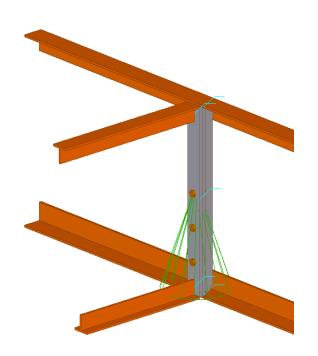


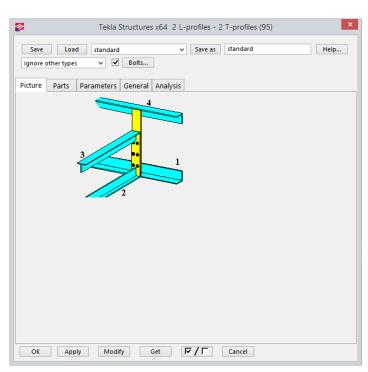




## 2 L-profiles – 2 T-profiles (95)

Creates a connection between two L-beams and two Tbeams.





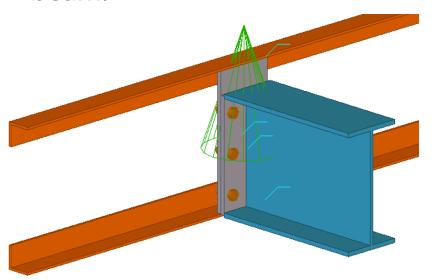


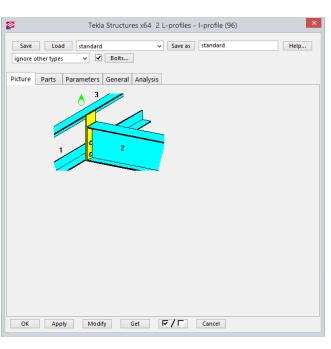


## 2 L-profiles – I-profile (96)

> Creates a connection between two L-beams with one I-

beam.

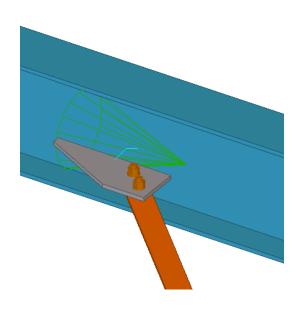


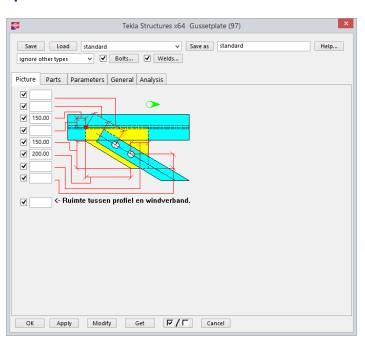




### Gussetplate (97)

> Creates a connection between a beam and a windbracing. The connection is made with a plate that is added.



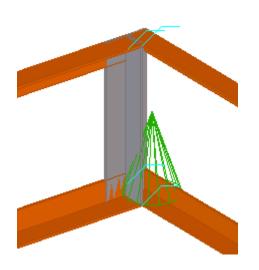


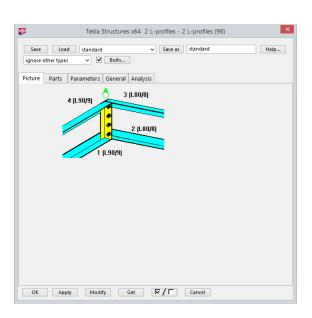




## 2 L-profiles - 2 L-profiles (98)

Creates a connection between two pairs of L-beams. They are connected with L-beams.



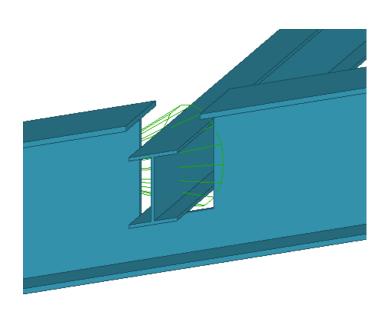


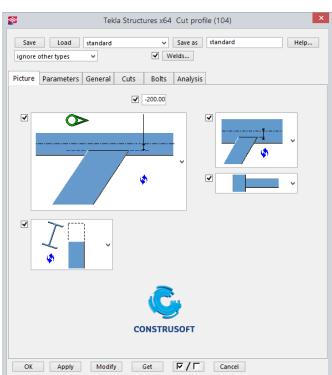




#### Cut profile (104)

> Creates a cut section on the main part for the secondary part to go through.



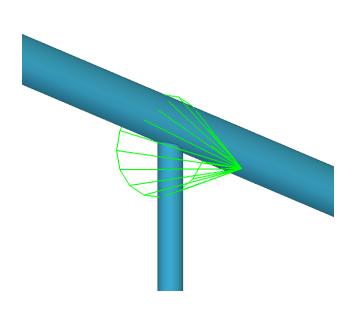


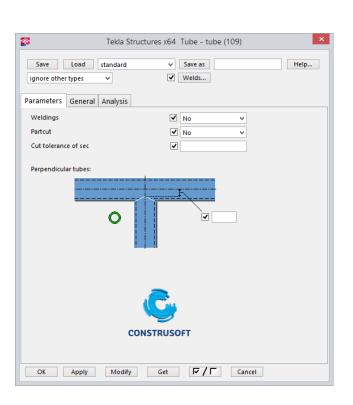




## Tube – tube (109)

> Creates a connection between two tubes.

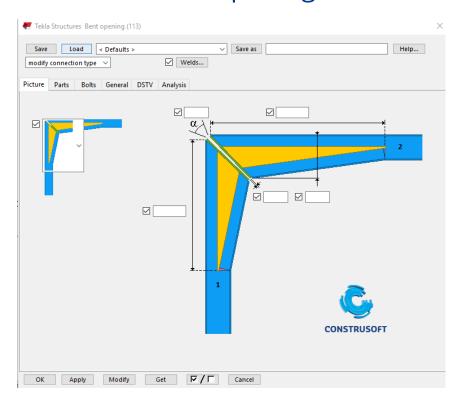








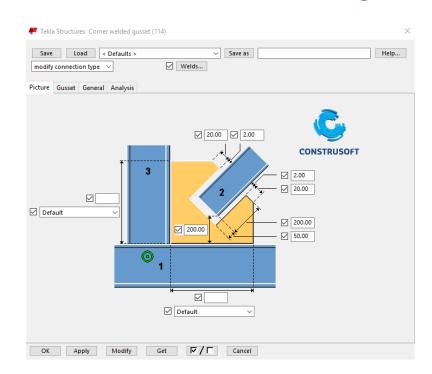
> Creates a bent opening with DSTV Export.







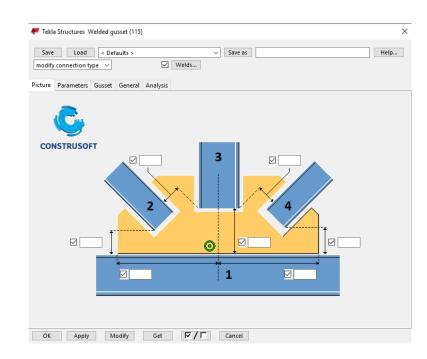
> Creates a Corner welded gusset with offsets.







> Creates a welded gusset with offsets.

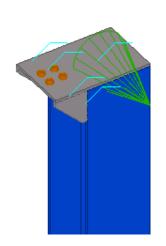


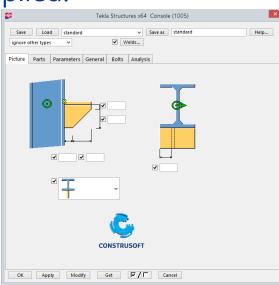




#### Console (1005)

Creates a bracket profile against a column. The console comprises a horizontal plate and one or two vertical stiffeners. All parts are welded to the main part. In the cover plate a hole pattern can be applied.





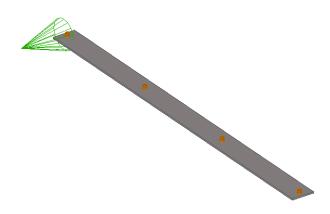


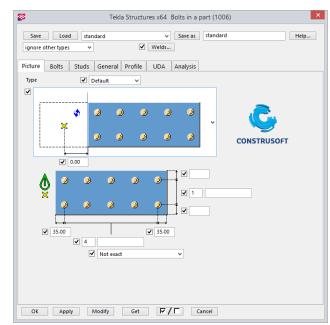


#### Bolts in a Part (1006)

Creates a bolt pattern in a profile. Instead of bolts, dowels profiles may also be placed. In the application of profiles the information can be filled from the component User

Attributes.



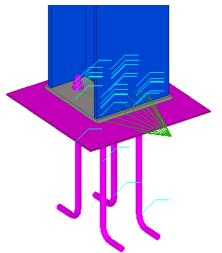


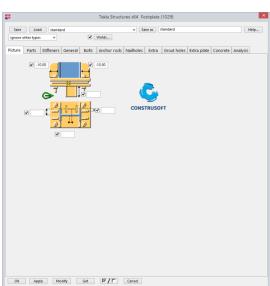




#### Footplate (1029)

Creates a footplate detail below a column. In addition to the base plate ,the following objects can be modeled: stiffeners, bolts, anchors, mold plate and cut-outs in the application of a concrete column.





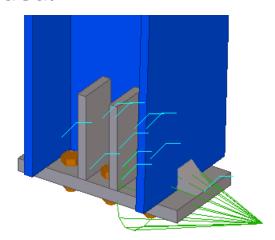


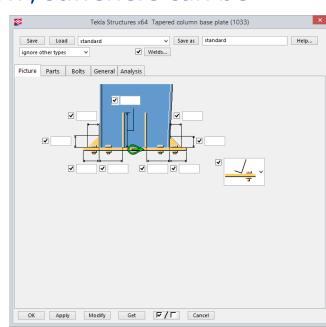


## Tapered column base plate (1033)

> Creates a baseplate under a plate column. The base plate may include a hole or bolt pattern, stiffeners can be

added.



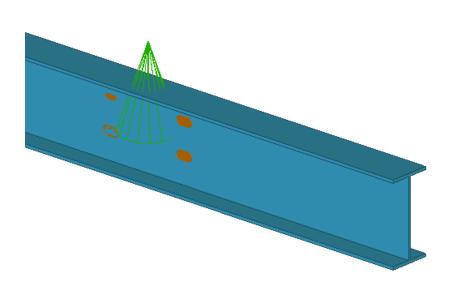


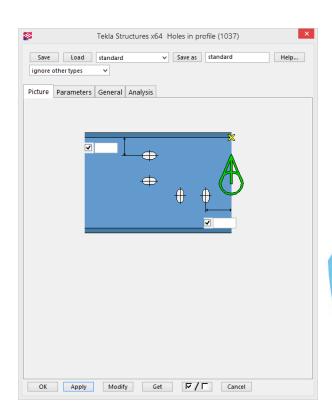




# Holes in a profile (1037)

> Creates a holes in selected profile.



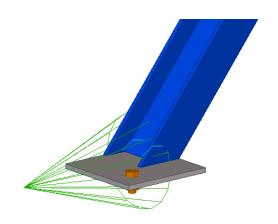


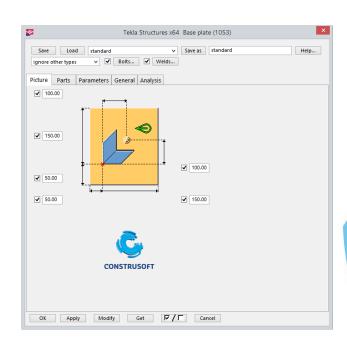




# Base plate (1053)

> Creates a base plate under a beam.

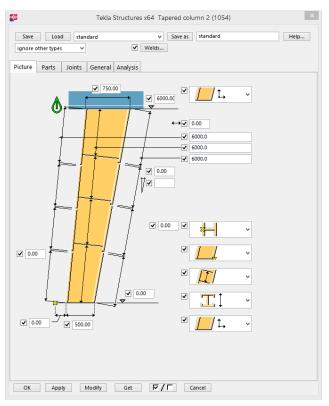








> Creates a tapered column under a beam.

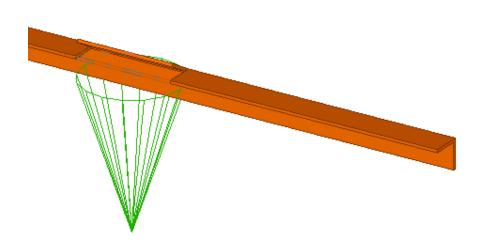


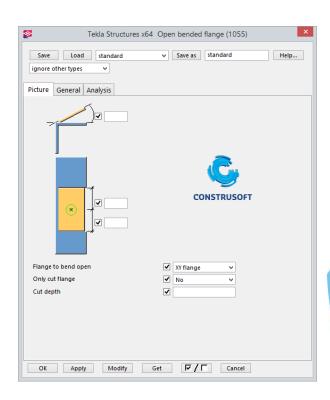




# Open bended flange (1055)

> Creates a open bended flange.









Creates a Poly-profile from a parametric profiles. The aim is to make a unfold drawing of the profile

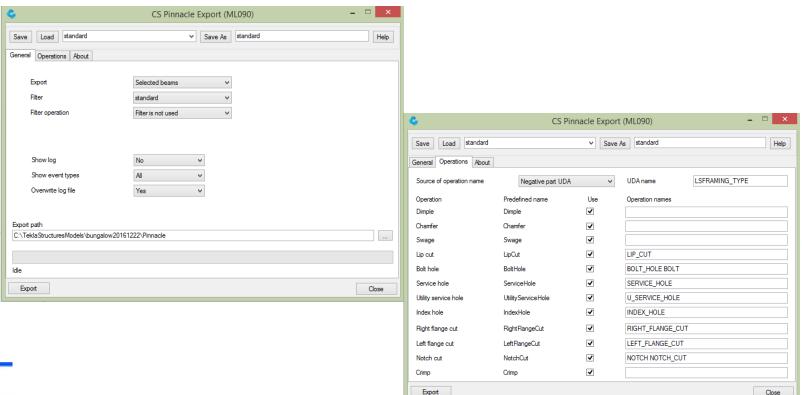






## ML090 – CS Pinnacle Export

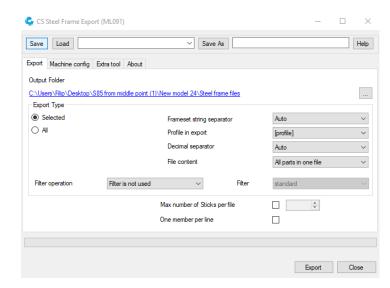
This tool can export beams for Pinnacle cold form punching machine







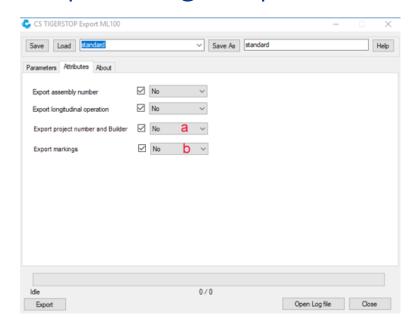
> Steel frame export all or all parts and machine config.





# ML100 – Tigerstop export

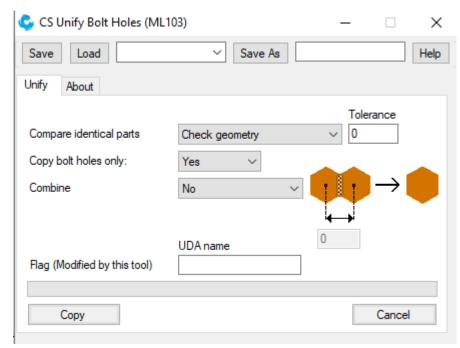
> Export to Tigerstop.







Unify bolts from one part to another or combine.

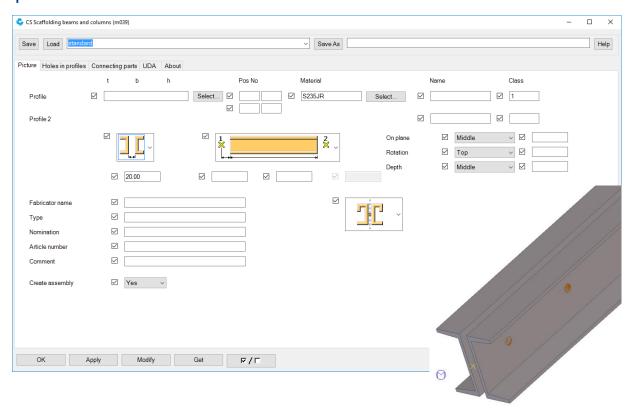






## Scaffolding beams and colums (m039)

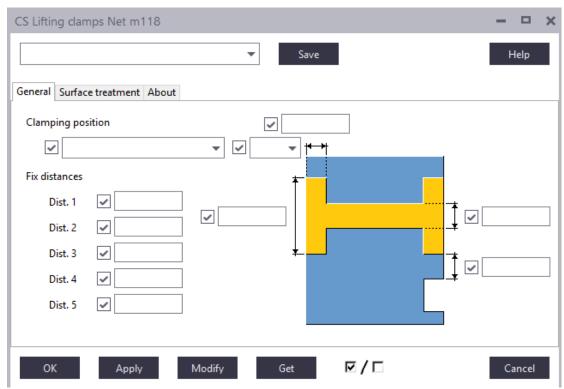
Models duplicate profiles which can be connected through a hole pattern.





## Lifting Clamps (m118)

> Lifting clamps by picking 2 points.

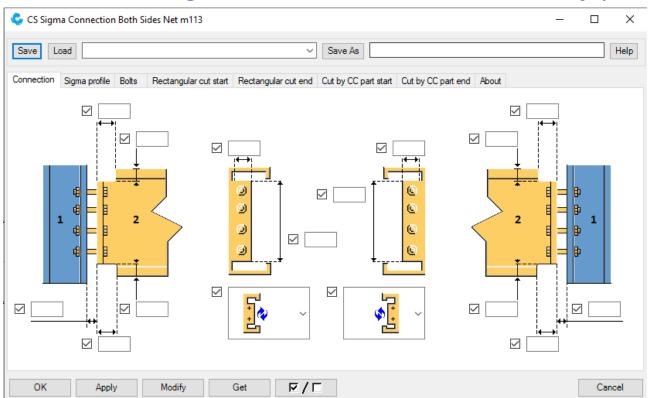






## Sigma Connection on Both sides (m113)

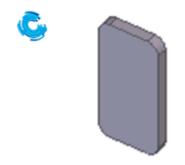
Creates a sigma connection on both sides by picking 2







> Places a chamfer on an object that can be modified with lots of options and features.

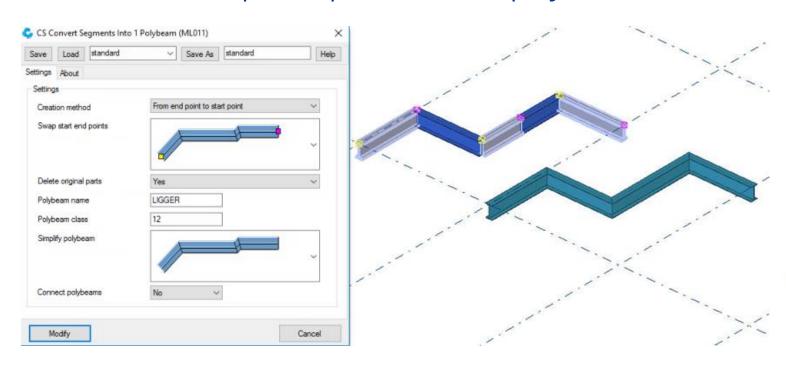






## ML011 – Convert Segments into 1 Polybeam

> Adds several separate parts into one polybeam.

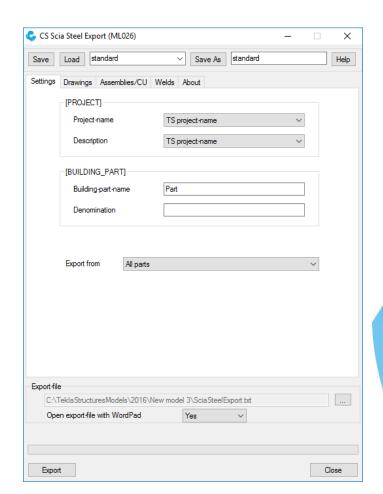






# ML026 – Scia Steel Export

Export to CIM steel

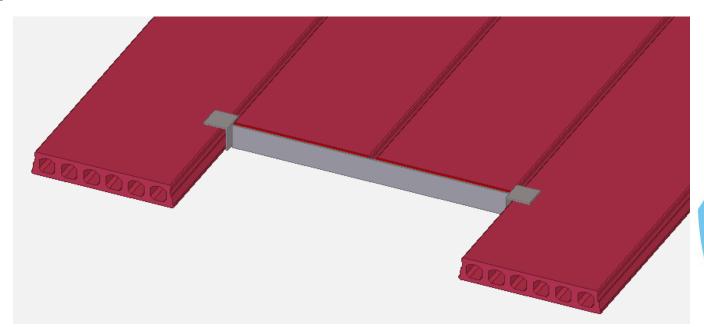






#### Trimming steel (m036)

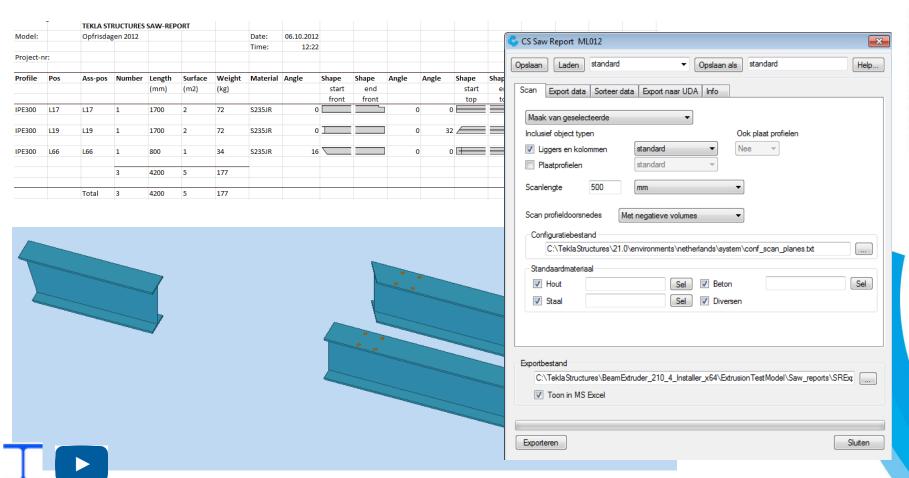
> Select the parts (at least 3), close with middle mouse button. Then click a point where the trimmer iron should be placed.







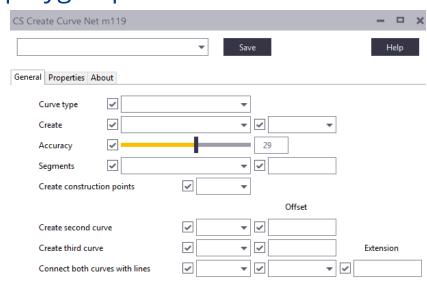
## ML012 – Saw Report





#### Create curve (m119)

Creates a polybeam or construction lines curve by picking polygon points.



Modify

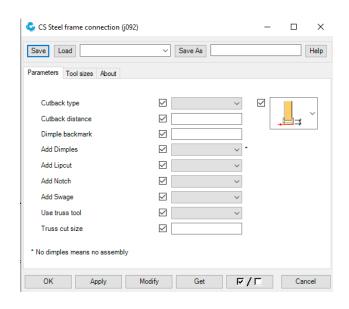
 $\square \setminus \square$ 

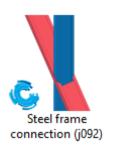
Cancel





Steel frame connection with lipcut, notch, swage and dimples.

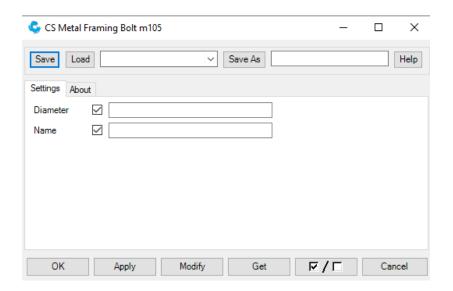






#### Steel Frame Bolt (m105)

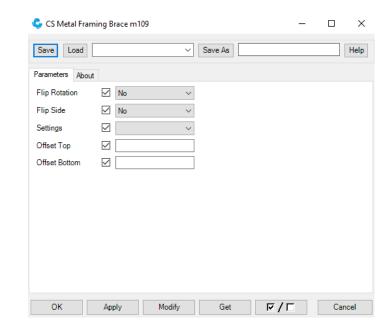
> Metal framing bolt.





### Steel Frame Brace (m109)

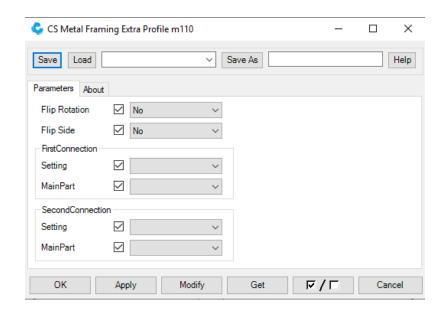
> Metal framing brace.





#### Steel Frame Extra profile (m110)

> Metal Framing Extra Profile.





#### Steel Frame Service Hole (m106)

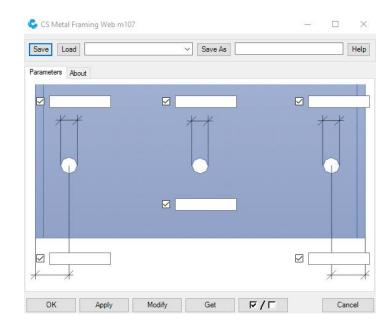
Metal Framing Service Hole.





#### Steel Frame Web (m107)

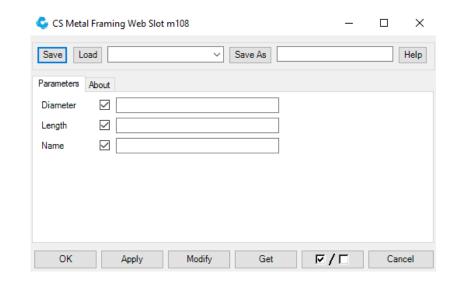
> Metal Framing web with offsets.





#### Steel Frame Web Slot (m108)

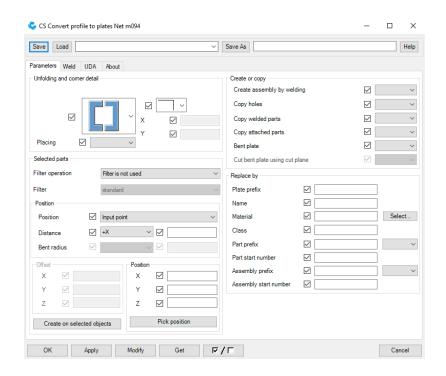
> Metal Frame Web Slot.







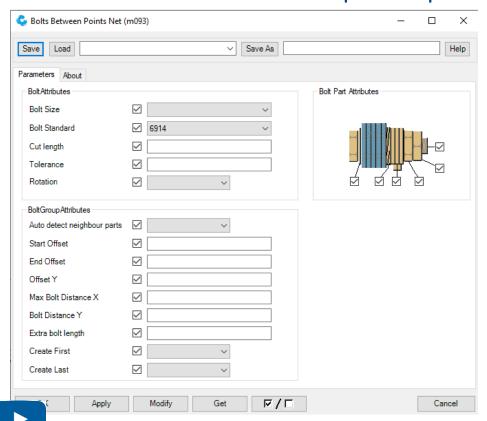
> Convert profile to plates.







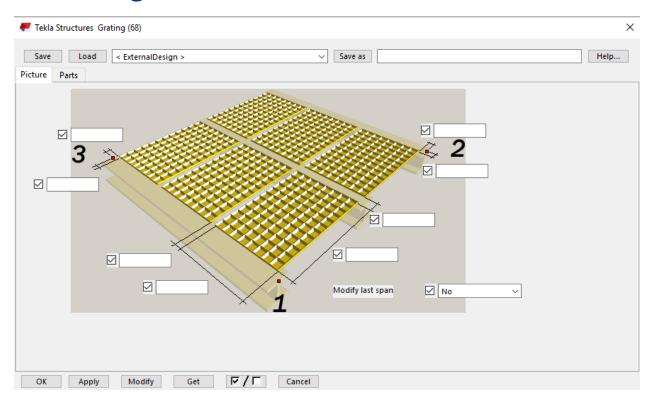
> Creates bolts between 2 points picked.





# Grating (m099)

#### > Grating







#### ML065 – CS Wiscon Export

Een tool to create a WISCON export.

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<HEAD NAME="Construsoft bv" JOB_NR="project number"/>
- <ASSEMBLY>
   - <PART NAME="BELKA STALOWA" ID="PA 000001" TYPE="LEADING PART" REPRESENTATION="REFERENCE">
      - <FRAME>
            <BASE Z="0" Y="0" X="0"/>
            <RX Z="0" Y="0" X="1"/>
            <RY Z="0" Y="1" X="0"/>
        </FRAME>
         <REFERENCE DATA TYPE="DSTV-NC" FILE NAME="MOSES-1.nc"/>
   - <PART NAME="" ID="PA_000002" TYPE="ATTACHED_PART" REPRESENTATION="REFERENCE">
      - <FRAME>
                                                                                                                                        _ D X
                                                                          CS WISCON Export (ML065)
            <BASE Z="300" Y="371" X="2995"/>
            <RX Z="0" Y="-1" X="0"/>
                                                                                       standard
                                                                                                            ▼ Save As
                                                                                                                       standard
                                                                                                                                               Help
            <RY Z="-1" Y="0" X="0"/>
                                                                           Save
                                                                                 Load
        </FRAME>
                                                                           Export properties NC file settings About
        <REFERENCE DATA_TYPE="DSTV-NC" FILE_NAME="-10.nc"/>
     </PART>
   - <PART NAME="" ID="PA 000003" TYPE="ATTACHED_PART" REPRESENT
                                                                            Head attributes
                                                                                                                       Used attributes
                                                                                          Available attributes
      - <FRAME>
                                                                                                                       Assembly position
                                                                                          Assembly position
            <BASE Z="240" Y="155" X="3200"/>
                                                                                                                       Part position
            <RX Z="0" Y="0" X="-1"/>
                                                                                                                                             Up
                                                                                                                Add
                                                                                          Material
            <RY Z="0" Y="1" X="0"/>
                                                                                          Name
        </FRAME>
                                                                                                               Remove
                                                                                                                                            Down
                                                                                          Class
        <REFERENCE DATA TYPE="DSTV-NC" FILE NAME="-11.nc"/>
                                                                                          Finish
     </PART>
                                                                                          Size
 </ASSEMBLY>
- <PROCESS>
                                                                            Export path
                                                                                                                                          Advanced
   - <WELDING>
       - <SEAM NAME="WELD" ID="S_000001" SEAM_TYPE="DHV" A="3">
                                                                            File name mask
                                                                                          AssemblyPosition_PartPosition_Counter.xml
          - <CONTOUR>
              - <POINT Z="300" Y="371" X="3005">
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                   <FACE REF Z="0" Y="0" X="1" PART ID="PA 000002"/>
               </POINT>
             - <POINT Z="185.5" Y="371" X="3005">
                                                                                                            Idle
                   <FACE_REF Z="0" Y="-1" X="0" PART_ID="PA_000001"/
                                                                              Export
                                                                                                                                            Cancel
                   <FACE REF Z="0" Y="0" X="1" PART ID="PA 000002"/:</pre>
```

