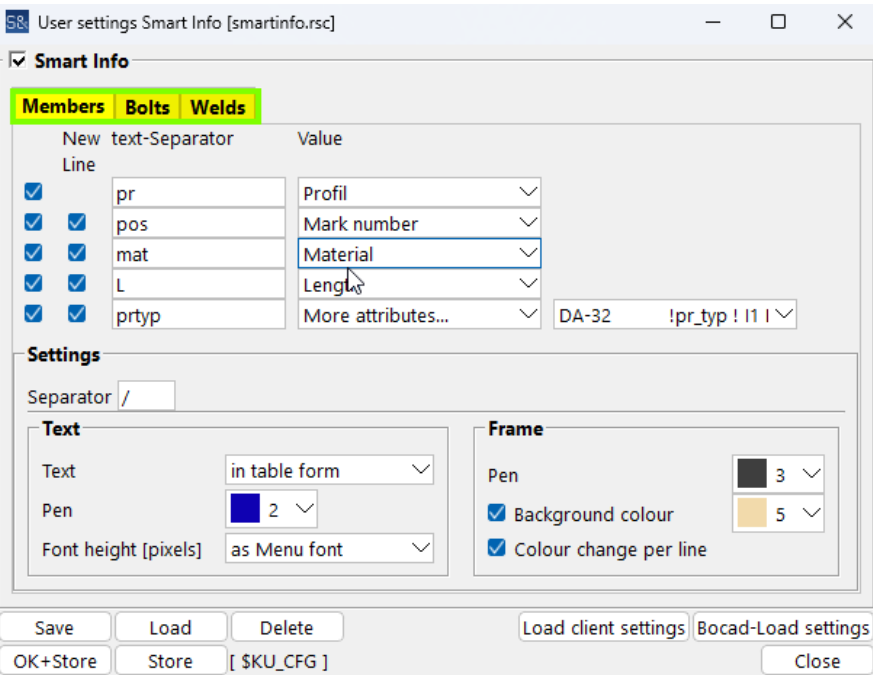
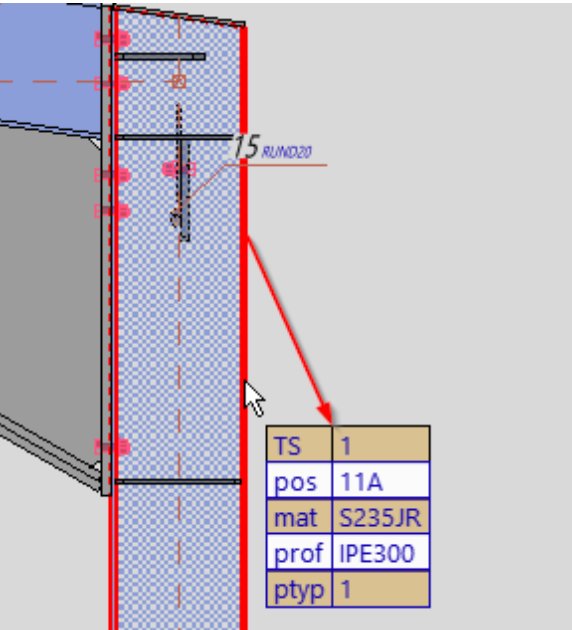
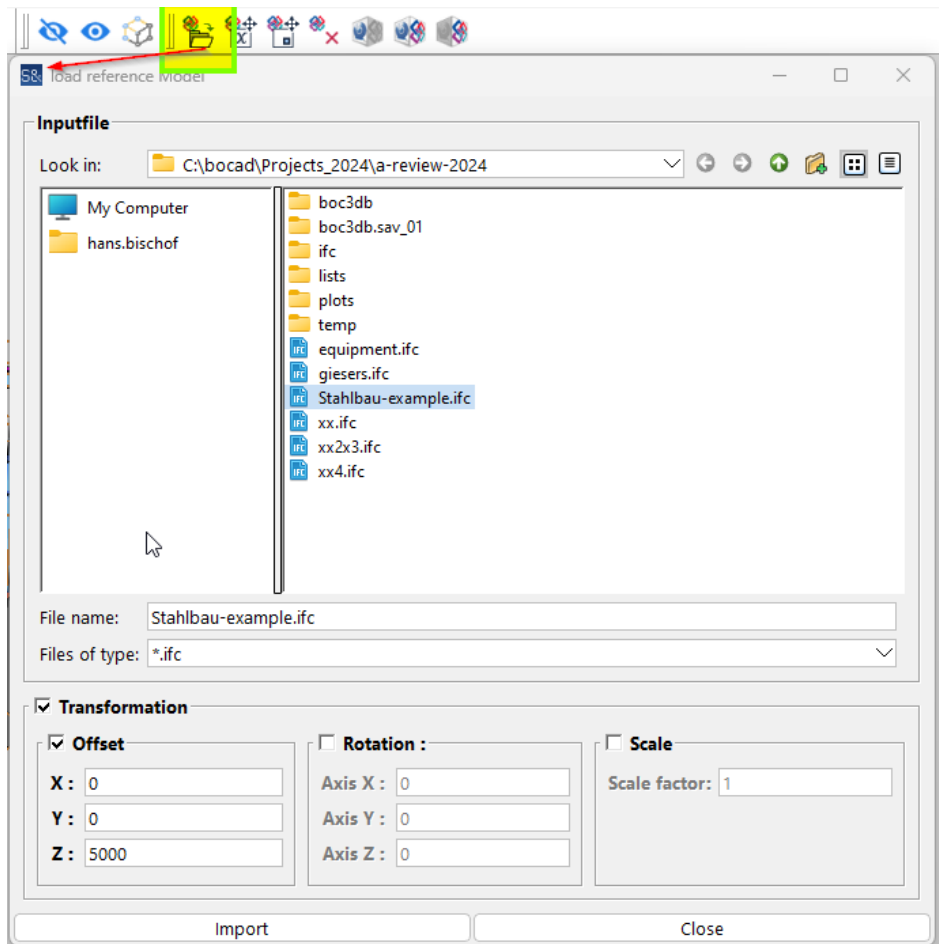


Enhancements in bocad 2024.1

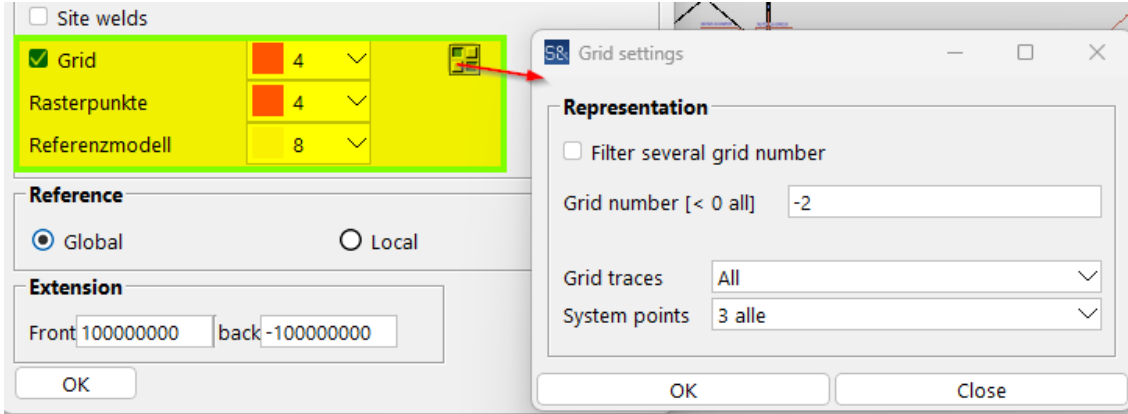
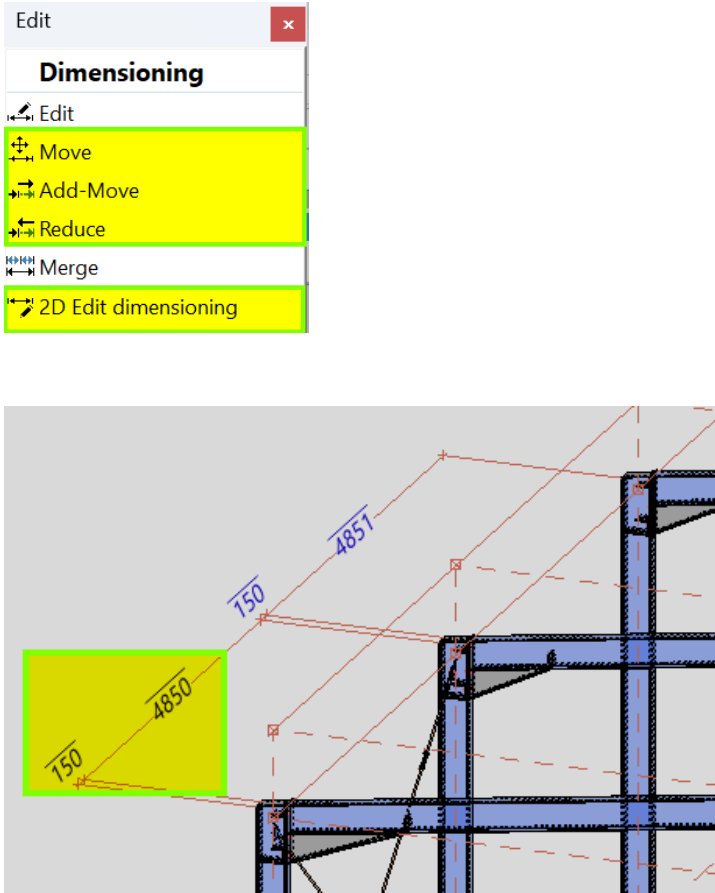
Area/ Zammad No	Description
<p>UI Smart-Info</p>	<p>While hovering over different elements (Members/Bolts/Welds) you can get a smart-Info (tool tip - shortcut F1 on/off) and the element can be highlighted in all views (shortcut F2 on/off) too. You have different possibilities to configure the shown smart-Info and the format in the dialogue.</p>  
<p>OpenGL</p>	<ul style="list-style-type: none"> <li>- 3D coordinates can be picked in the view now. So e.g. you can grab the distance of elements in this view or lengthen a member and pick the side to</li> </ul>

Area/  
Zammad No      Description

- lengthen in the OpenGL view. You can use all functions in the OpenGL view, where a coordinate needs to be picked.
- Dependent to the pick mode member or random - the next member-corner(member) or member-edge(random) is searched. You need to pick always inside of the member volume! (different to the 2D views)
- A reference model (.ifc, .obj, .inp, .xyz-files ) can be loaded into the OpenGL view. You can check the distance between the reference model and the bocad model. The loading is using an own background task (you can continue working). The reference model or bocad model can be unloaded or made invisible too. Loading that ref-model you can use an offset. Moving the ref-model after loading is possible too.

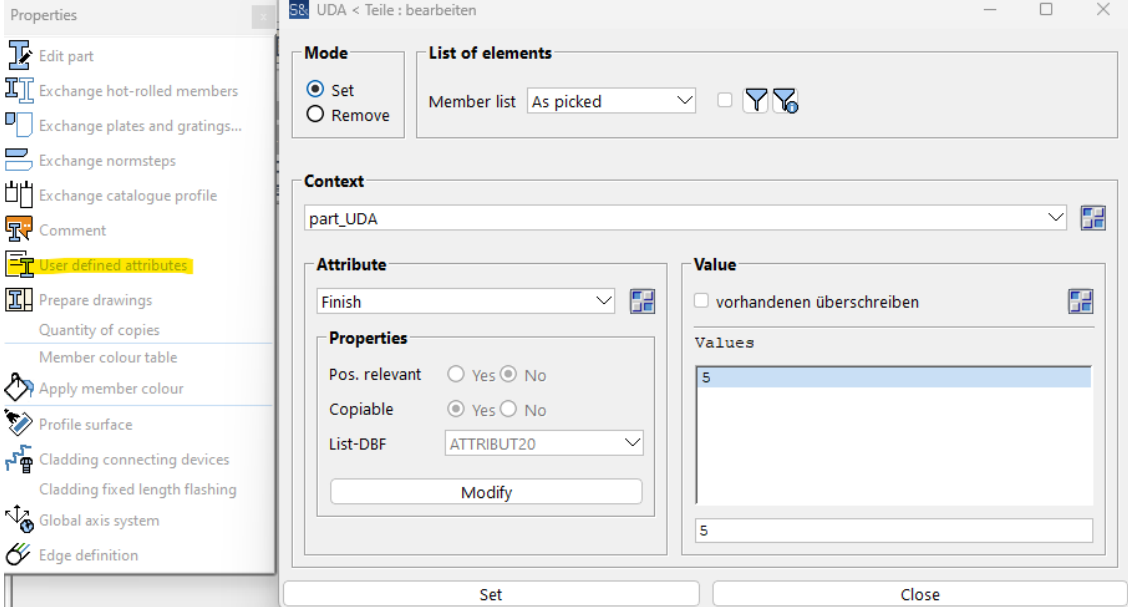
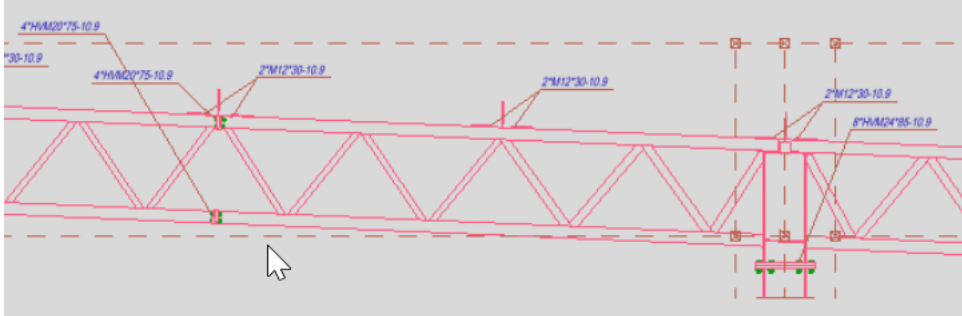


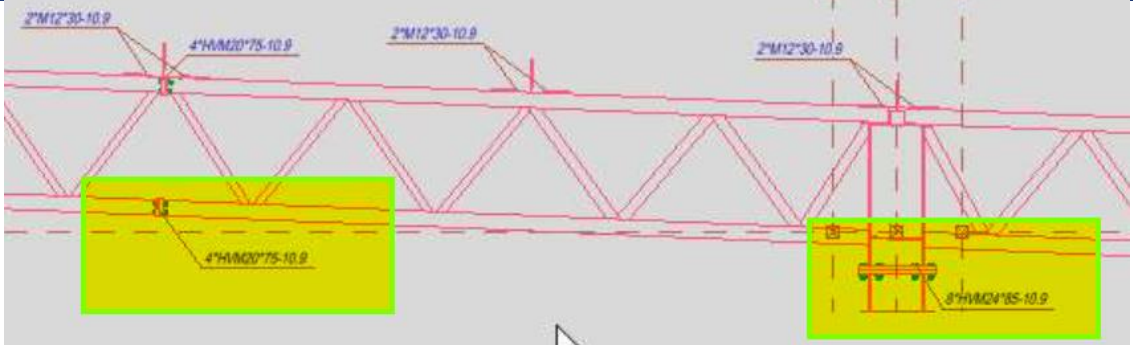
- Calculating the transparency has been reworked and works fine now.
- Hide and un-hide functionality for different elements inside the view
- The rendering has been optimized, elements which are far away and small are not shown, until you get closer.
- Elements can be selected via lasso now, using shift+left mouse. (deselect Alt+Left mouse)
- Grid and Grid-points can be displayed additional to the model and can be used to create members,... Different settings are possible like pen color.

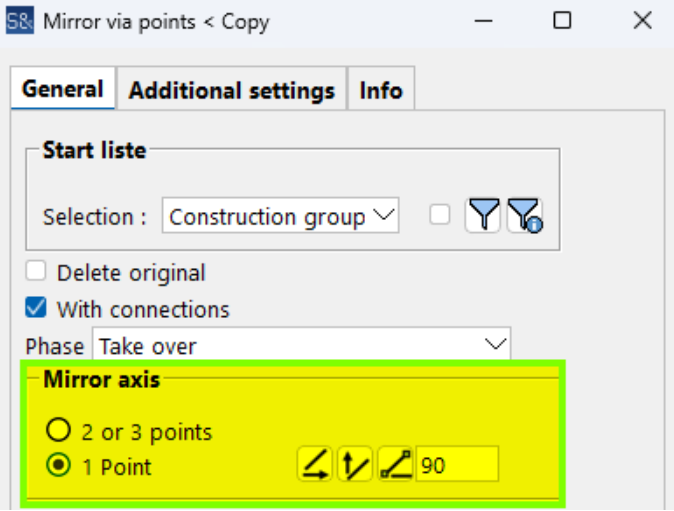
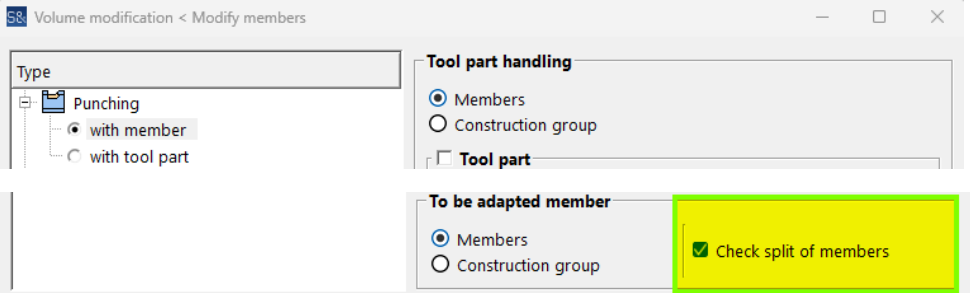
Area/ Zammad No	Description
OpenGL	 <p>The screenshot shows two windows. On the left is a settings panel with a yellow highlight around the 'Grid' section, which includes 'Grid' (checked), 'Rasterpunkte' (4), and 'Referenzmodell' (8). Below it are 'Reference' (Global selected) and 'Extension' (Front: 100000000, back: -100000000) options. On the right is a 'Grid settings' dialog box with a 'Representation' section containing 'Filter several grid number' (unchecked), 'Grid number [&lt; 0 all]' (-2), 'Grid traces' (All), and 'System points' (3 alle).</p>
3D Dimensions	<p>After having the possibility of creating a 3D dimension with the rev2023, we have added now the possibility to Move/Add/Edit a 3D-dimension as well. In the same way you can change a 2D dimensioning you can do that for a 3D dimension as well now.</p>  <p>The top part of the image shows an 'Edit' menu with a yellow highlight on the 'Dimensioning' section, which includes 'Edit', 'Move', 'Add-Move', 'Reduce', 'Merge', and '2D Edit dimensioning'. The bottom part shows a 3D model of a steel structure with red dimension lines and values (150, 4850, 4857) overlaid on it.</p>
IFC4-Import Export	<p>We have a new option to handle IFC4-files during <b>import</b> or <b>export</b>. You need to switch which schema definition you want to read or write.</p>

Area/ Zammad No	Description
	<p>Either an IFC2x3 or an IFC4 schema. Some different IFC4 Object-types still need to be implemented. Some of the new IFC4 object-types like “IfcPolygonalFaceSet” and “IfcTriangulatedFaceSet” have been implemented already.</p> <div data-bbox="359 488 925 577"> <p>IFC-Schema: IFC2x3</p> </div> <div data-bbox="359 622 925 712"> <p>IFC-Schema: IFC4</p> </div>
<p>IFC-Export Property-set</p>	<ul style="list-style-type: none"> <li>- For elements like member/bolt/assembly the property-set (P-set) attributes are configurable now via different flexible xml-files. The filename can be changed to get different output formats. In the new P-set constant values, UDAs and ffein calculated values can be handled. The .inp- files from Version 2023 are still supported but will not be enhanced anymore.</li> </ul> <div data-bbox="359 902 1417 1265"> </div> <p><b>Some of the XML definitions in the ifc_props.xml file</b></p> <pre> &lt;propset name="bocad-KEYWORD-PSET:PART:General"&gt;   &lt;prop name="MarkTxt" ifc_name="Mark Text"/&gt;   &lt;prop name="Name" ifc_name="Name" /&gt;   &lt;prop name="Profile" ifc_name="Profile"/&gt; ..... &lt;propset name="bocad-KEYWORD-PSET:PART:Fix values, FFEIN and UserDefinedAttributes"&gt;   &lt;prop name="FixedVal1" ifc_name="TeileAttribut1" value="123" output_type="int"/&gt;   &lt;prop name="TEST_FFEIN" ifc_name="NettoGewicht" ffein="yes" output_type="real"/&gt;   &lt;prop name="UDA1" ifc_name="UDA-Beschichtung" context="part_UDA1" output_type="text"/&gt;  &lt;propset name="bocad-KEYWORD-PSET:Bolt:General"&gt;   &lt;prop name="NormName" ifc_name="Norm-Name"/&gt;   &lt;prop name="BoltName" ifc_name="Designation-Schraubenbezeichnung"/&gt;  &lt;propset name="bocad-KEYWORD-PSET:ASSEMBLY:General"&gt;   &lt;prop name="MarkTxt" ifc_name="assembly Mark Text"/&gt;   &lt;prop name="Name" ifc_name="assembly Name" /&gt; </pre> <p><b>Example-ouput 1</b> <span style="float: right;"><b>Example-output 2</b></span></p>

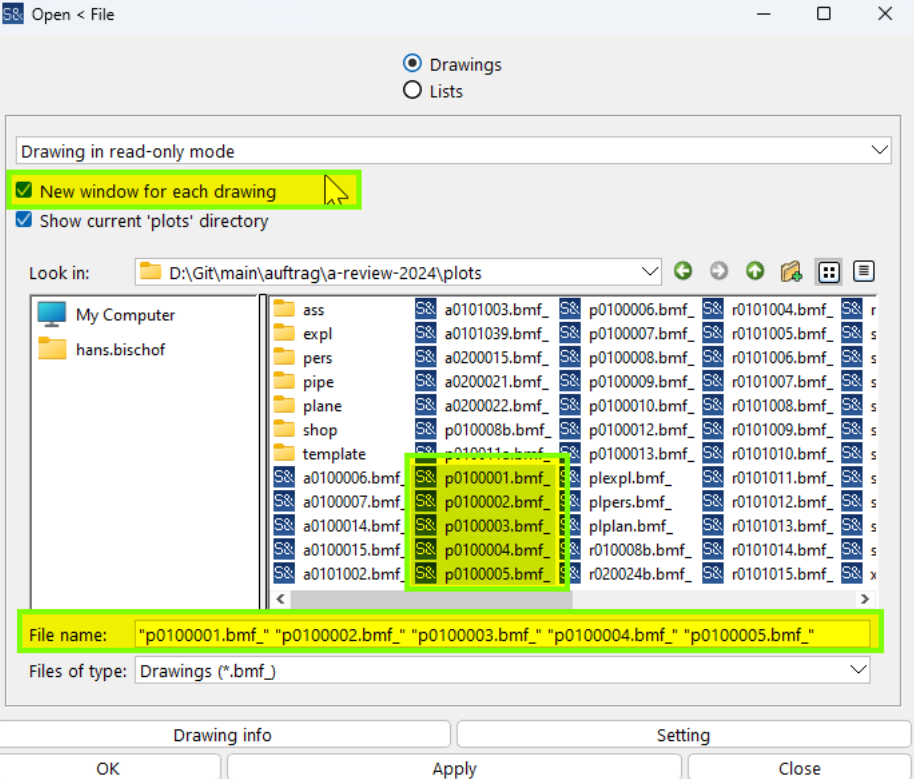
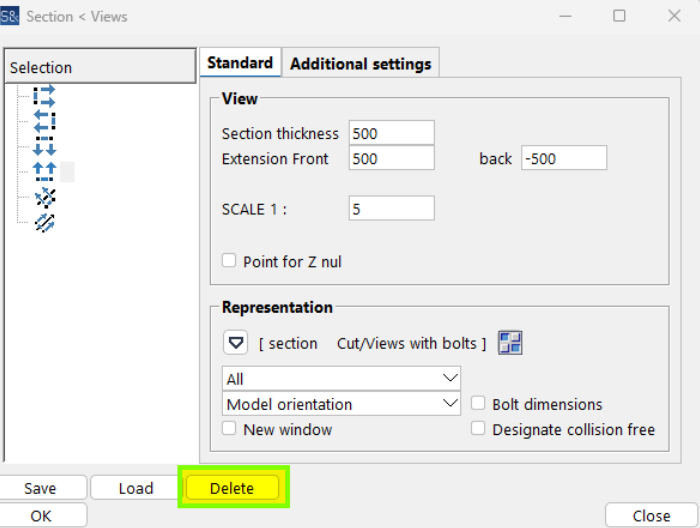
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	<div style="display: flex; justify-content: space-between;"> <div style="width: 48%;"> <p><b>bocad-KEYWORD-PSET:PART:General</b></p> <table border="1"> <tr><td>Activity Code</td><td></td></tr> <tr><td>Area Zone</td><td></td></tr> <tr><td>Article Code</td><td></td></tr> <tr><td>Colour_1</td><td></td></tr> <tr><td>Colour_2</td><td></td></tr> <tr><td>Column</td><td>0</td></tr> <tr><td>EndLabel</td><td>0</td></tr> <tr><td>Execution Class</td><td>0 0</td></tr> <tr><td>Flooded</td><td>0</td></tr> <tr><td>General Type</td><td>1</td></tr> <tr><td>Generation Date</td><td>1663572787</td></tr> <tr><td>Identnumber</td><td>104589</td></tr> <tr><td>Initial Mark Number</td><td>1</td></tr> <tr><td>Internal Type</td><td>10003</td></tr> <tr><td>Lot</td><td></td></tr> <tr><td>M3 Stage</td><td>11000</td></tr> <tr><td>Mark Family</td><td>0</td></tr> <tr><td>Mark Number</td><td>11</td></tr> <tr><td>Mark Text</td><td>11A</td></tr> </table> </div> <div style="width: 48%;"> <p><b>bocad-KEYWORD-PSET:Teile:General</b></p> <table border="1"> <tr><td>Activity Code</td><td></td></tr> <tr><td>Area Zone</td><td></td></tr> <tr><td>Article Code</td><td></td></tr> <tr><td>Colour_1</td><td></td></tr> <tr><td>Colour_2</td><td></td></tr> <tr><td>Column</td><td>0</td></tr> <tr><td>EndLabel</td><td>0</td></tr> <tr><td>Execution Class</td><td>0 0</td></tr> <tr><td>Flooded</td><td>0</td></tr> <tr><td>General Type</td><td>1</td></tr> <tr><td>Generation Date</td><td>1663572787</td></tr> <tr><td>Identnumber</td><td>104589</td></tr> <tr><td>Initial Mark Number</td><td>1</td></tr> <tr><td>Internal Type</td><td>10003</td></tr> <tr><td>Lot</td><td></td></tr> <tr><td>M3 Stage</td><td>11000</td></tr> <tr><td>Mark Family</td><td>0</td></tr> <tr><td>Mark Number</td><td>11</td></tr> <tr><td>Mark Text-Positionsnummer</td><td>11A</td></tr> </table> </div> </div> <p>- Using Swept solid as output you have the possibility to keep the output for plates as BREP or filtered elements as BREP.</p> <div style="border: 1px solid #ccc; padding: 5px; margin-bottom: 10px;"> <p><b>Objects</b></p> <p>Member-Export Type    Swept Solid, With Boolear    <b>Plates BREP</b></p> </div> <div style="border: 1px solid #ccc; padding: 5px; margin-bottom: 10px;"> <p>Member-Export Type    Swept Solid, With Boolear    <b>Filter BREP</b></p> </div> <p>- IFC Guids are already set while creating elements.</p> <p>- A local placement has been added to the elements.</p> <p>- New Layer (open list) attributes can be used.</p> <div style="border: 1px solid #ccc; padding: 5px; margin-bottom: 10px;"> <p><input checked="" type="checkbox"/> Export Layer    Std-Attribute    TX+1</p> </div> <p>- Two new attributes - IFC-CAD-layer txt+1017 and IFC-Object-Type txt+1018 have been added to the system.</p>	Activity Code		Area Zone		Article Code		Colour_1		Colour_2		Column	0	EndLabel	0	Execution Class	0 0	Flooded	0	General Type	1	Generation Date	1663572787	Identnumber	104589	Initial Mark Number	1	Internal Type	10003	Lot		M3 Stage	11000	Mark Family	0	Mark Number	11	Mark Text	11A	Activity Code		Area Zone		Article Code		Colour_1		Colour_2		Column	0	EndLabel	0	Execution Class	0 0	Flooded	0	General Type	1	Generation Date	1663572787	Identnumber	104589	Initial Mark Number	1	Internal Type	10003	Lot		M3 Stage	11000	Mark Family	0	Mark Number	11	Mark Text-Positionsnummer	11A
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Member UDA	Create/Edit Member properties (UDA) has been reviewed and simplified. Create/Modify/Remove can be done in a new dialogue now.																																																																												

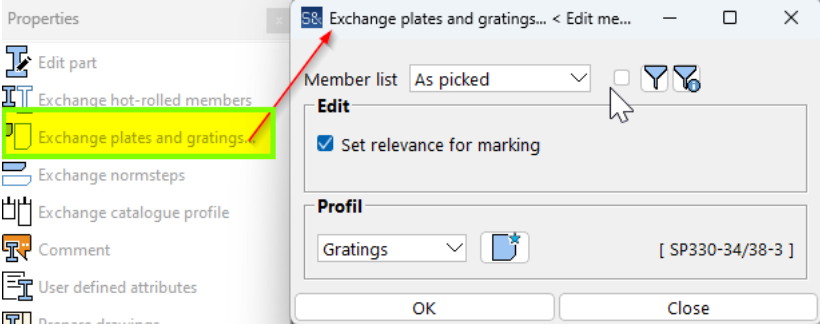
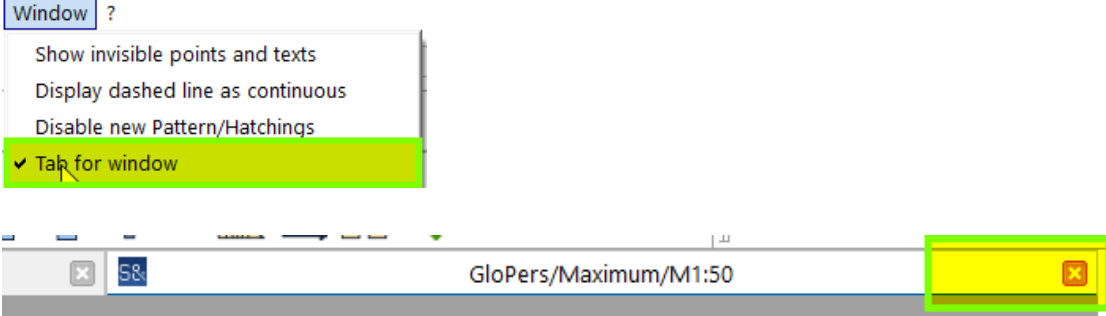
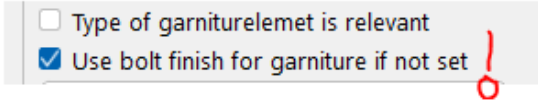
Area/ Zammad No	Description
	<p>Deleting of UDAs is possible too.</p> 
<p>License In the cloud</p>	<p>We have the possibility now to use licenses in the cloud. So, you can handle your licensing very flexible if you have internet access.</p>
<p>Drawing</p>	<p>Collision free designation of elements with drawback lines. While designating elements with drawback lines the system is checking now with the option “Free”, the closest location and use this. This gives in most of the cases a better result, see example.</p> <p>before</p>  <p>new</p>

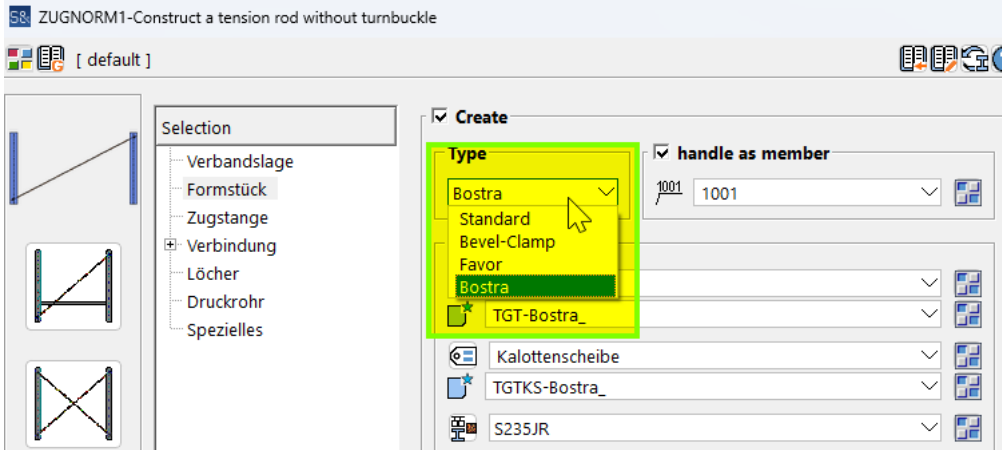
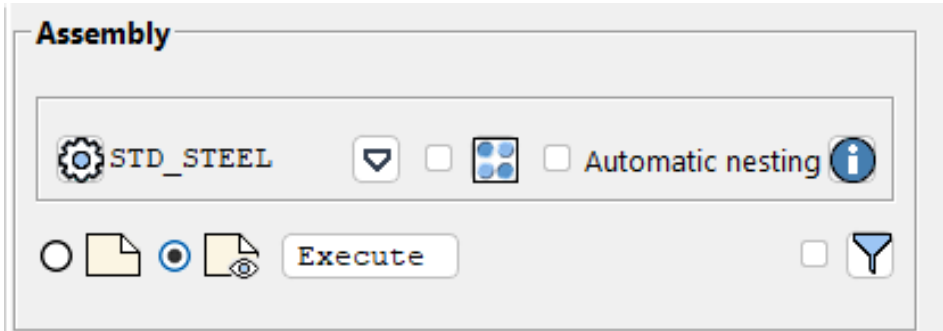
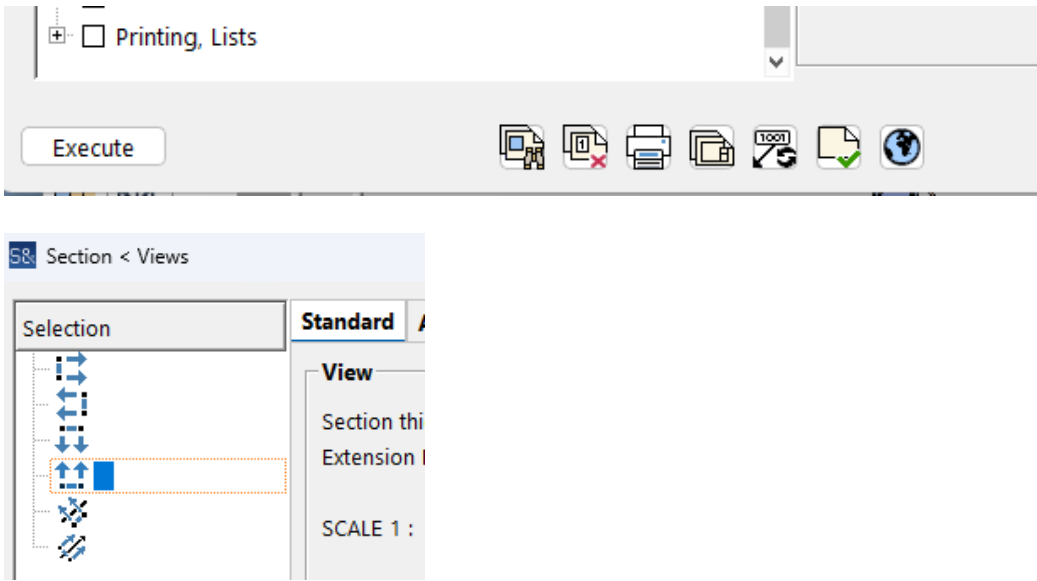
Area/ Zammad No	Description
	
<p>Grid 2022111330028</p>	<p>New option to input your own grid number. The grid can start with any number now instead of 0. Edit afterwards is possible too.</p> <div style="display: flex; justify-content: space-around;"> <div data-bbox="352 994 847 1216"> <p><input type="checkbox"/> Start directly with global plane</p> <p><input checked="" type="checkbox"/> With Gridnumber : <input type="text" value="1"/></p> <p>Save</p> <p>OK</p> </div> <div data-bbox="911 972 1449 1216"> <p>Properties other grid elements</p> <p><b>Modify</b></p> <p><b>Grid</b></p> <p><input type="checkbox"/> Grid name Grundraaster</p> <p><input checked="" type="checkbox"/> Grid number 100</p> <p><input type="checkbox"/> Phase 1</p> <p><input type="checkbox"/> Pen no. visible lines 1</p> </div> </div>
<p>3D-copy 20230202330012 20230403330014</p>	<p>3D Copy/mirror/... show open references direct in a new view.</p> <div data-bbox="352 1491 938 1917"> <p>Mirror via points &lt; Copy</p> <p><b>General</b> <b>Additional settings</b> <b>Info</b></p> <p>New connection partners <input type="text" value="show in view"/></p> <p><input checked="" type="checkbox"/> show direct in view</p> <p>Unresolved references <input type="text" value="show in view"/></p> <p><input checked="" type="checkbox"/> show direct in view</p> <p>Full colliding members <input type="text" value="show in view"/></p> <p>Colliding bolts with bolts <input type="text" value="show in view"/></p> <p>Check colliding bolts : <input type="text" value="always"/></p> <p><input checked="" type="checkbox"/> Lock view</p> </div> <p>3D mirror by 1 point +x/+y possible now.</p>

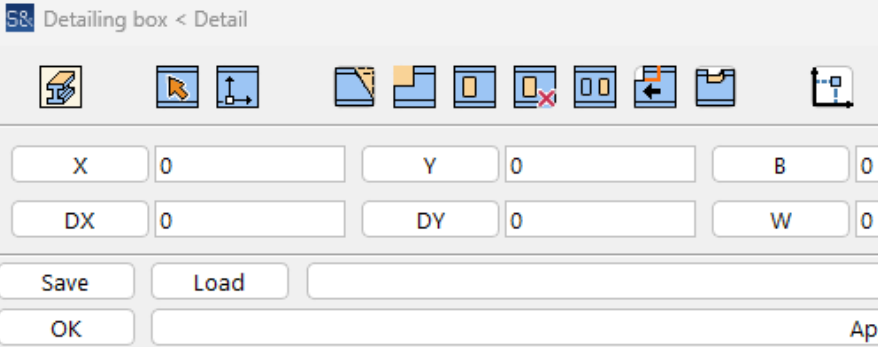
Area/ Zammad No	Description
	
<p>Detailing</p>	<p>Punch member (volume modification), you can switch on now a check if the member is consistent and not separated into elements.</p> 
<p>UI 20230622330007</p>	<p>Show/info / Open several drawings at the same time, if you select more than one drawing and the option “New window for each drawing” is switched on as well.</p>



Area/ Zammad No	Description
	
<p>UI 20230620330016</p>	<p>Additional views/Details/Sections option to delete the settings</p> 
<p>UI 20230203330024</p>	<p>Translation of the UI is done on the fly now, no folder..work.. anymore. User can switch the UI on the fly to different language. Only one original file is required now. The build -process for a new release is 10 times faster now.</p>

Area/ Zammad No	Description
<p>UI</p>	<p>Some dialogues have been reworked. Delete Files, nest drawings, IFC Im-Export, Search All of them are more dynamic now, so you can change the size and the visible items are getting more as well.</p>
<p>Member 20230605330016 20230717330019</p>	<p>New option to exchange gratings member/properties/Exchange plate and gratings. Exchanging of gratings were not possible at all before.</p> 
<p>View</p>	<p>New option to close the view direct in the tab of the view. Therefore you need to switch on that “Tab for window” are shown</p> 
<p>BoPrint</p>	<p>Creating BOMs via BoPrint the default for the finish of the bolt sets can be taken from the bolt itself now.</p> 
<p>Macro 20220517330012 20220712330011</p>	<p>Zugnorm1 - tension rod can be created as bolt or member now TGT element can be created as bolt or member now 4 different types of TGT elements are available now</p>

Area/ Zammad No	Description
	 <p>ZUGNORM1-Construct a tension rod without turnbuckle</p> <p>[ default ]</p> <p>Selection</p> <ul style="list-style-type: none"> <li>Verbandslage</li> <li>Formstück</li> <li>Zugstange</li> <li>Verbindung</li> <li>Löcher</li> <li>Druckrohr</li> <li>Spezielles</li> </ul> <p>✓ Create</p> <p>Type</p> <ul style="list-style-type: none"> <li>Bostra</li> <li>Standard</li> <li>Bevel-Clamp</li> <li>Favor</li> <li>Bostra</li> <li>TGT-Bostra_</li> </ul> <p>✓ handle as member</p> <p>1001 1001</p> <p>Kalottenscheibe</p> <p>TGKS-Bostra_</p> <p>S235JR</p>
Roof&Wall	The list of cladding systems can be filtered now
Drawing	<p>Drawing pre-view has been added to the drawing output, direct in the main dialog, which includes automatic nesting.</p>  <p>Assembly</p> <p>STD_STEEL</p> <p>Automatic nesting</p> <p>Execute</p>
UI 20230522330019 20230715330001	<p>Icon size in some dialogs was not too small. For example, Automatic drawing output, section, detailing dialog.</p>  <p>Printing, Lists</p> <p>Execute</p> <p>Section &lt; Views</p> <p>Standard</p> <p>View</p> <p>Section thi</p> <p>Extension I</p> <p>SCALE 1 :</p>

Area/ Zammad No	Description
	
UI	<p>New way to handle dialog with left and right side. Standard arrow symbols are integrated now.</p> 