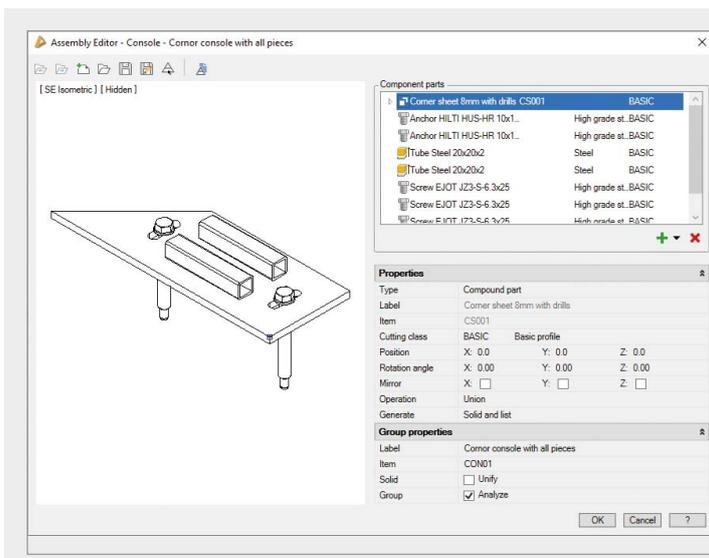




ATHENA 2021 – Simply a smart upgrade!

New time-saving functions and intuitive, smart working – those were on the list for the ATHENA 2021 upgrade. In the 3D area, the new assembly editor stands out with its convenient operation, while in the 2D area the handling of 2D projections and leaders has been optimized, among other things. Importing and exporting BIM-relevant data is now quick and easy, and software licensing has been made easier – and much more. And, last but not least, ATHENA has now also got a product logo.



Simplified assembly manager (Assembly Editor)

As with the bar assembly manager, the assembly manager has now been given a slim version as well, the assembly editor. Simplification to only the most important functions and an optimized dialog box allow for the easy and intuitive arrangement of assemblies.

When putting together an assembly in the new editor, components can be rotated or moved intuitively simply by switching briefly to the drawing. Adjustments are then confirmed and transferred to the editor.

The familiar assembly manager is supplemented by the new editor and is still available for more complex assemblies.

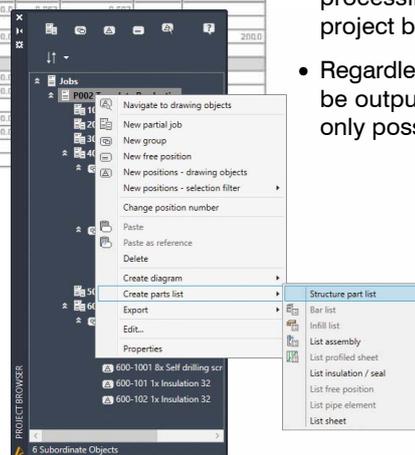
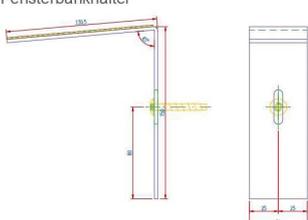
Position	Tag	Quantity	Total	Item	Label	Length mm	Weight kg	Total weight kg	Surface	Cutting length mm
400-01		30	30		Fensterbankhalter					
400-01400-1001		1	30	ath de JIC2-FR 10x45	Anchor EJOT		0.012	0.368		
400-01P05-001		1	30		Flat sealing		0.016	0.471		
400-01P05-002.1.1		1	30	ath 00945	Fensterbankhalterblech		0.325	9.985		50.0
400-01								10.704		
400-02		8	8		Fensterbankhalter schwere Version					
400-02400-102		1	8		Flat sealing	200.0				
400-02400-103		2	16	ath de JIC2-FR 10x45	Anchor EJOT					
400-02P05-006.1.1		1	8	ath 00945	Fensterbankhalterblech	200.0				200.0
400-03										
600-01		2	2		Einbauelement 38-80x120					
600-01600-01		1	2	ath 00098	Paneelblech innen	2000.0				
600-01600-02		1	2	ath 00098	Paneelblech außen	2000.0				
600-01600-101		8	16		Self drilling screw EJOT					
600-01600-101		1	2	ath Insulation 00909	Insulation hard	2000.0				
600-01600-102		1	2	ath Insulation 00909	Insulation hard	2000.0				
600-01										

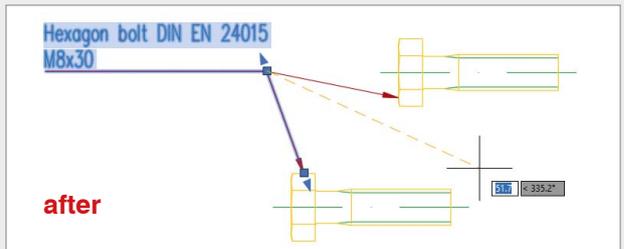
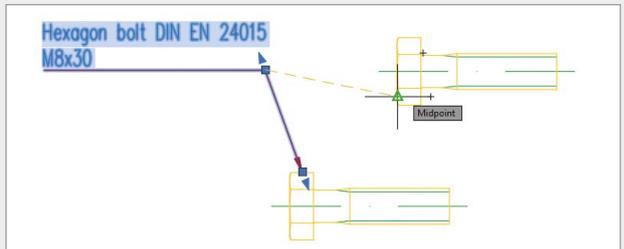
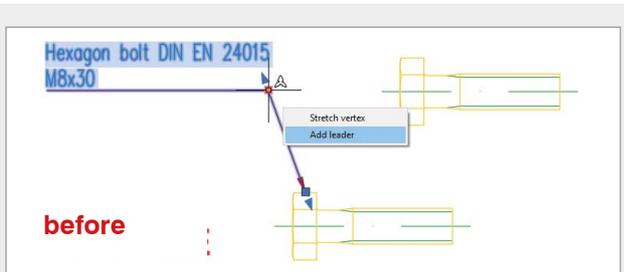
Project browser

There are two new features in the ATHENA project browser:

- The SAT export of sheets that were created with the “Sheet processing” function can now be carried out directly from the project browser.
- Regardless of the object type, structured parts lists can now also be output for groups and partial orders, which was previously only possible for bars with the associated components.

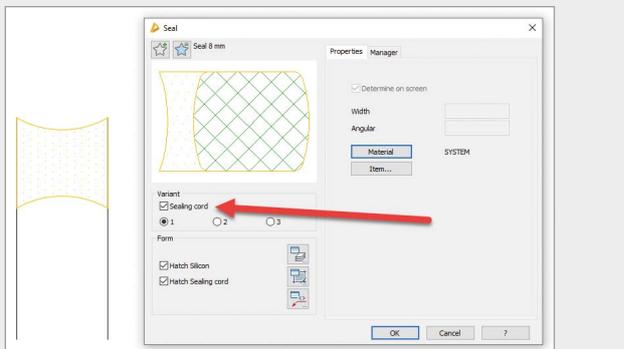
400-01 Fensterbankhalter





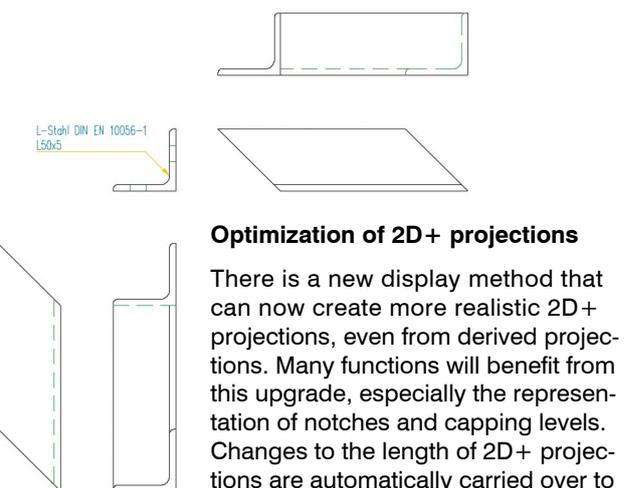
Leader: context menu at handles

ATHENA leaders have now received a handle context menu that can be used to add leader lines and vertices.



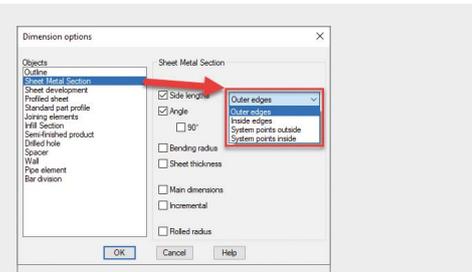
Seal editing

When editing seals whose geometry was not changed by "Gripedit", the sealing cord can be switched on or off afterwards.



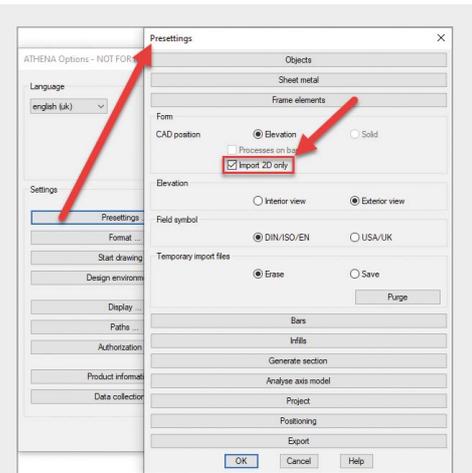
Optimization of 2D+ projections

There is a new display method that can now create more realistic 2D+ projections, even from derived projections. Many functions will benefit from this upgrade, especially the representation of notches and capping levels. Changes to the length of 2D+ projections are automatically carried over to the derived projections.



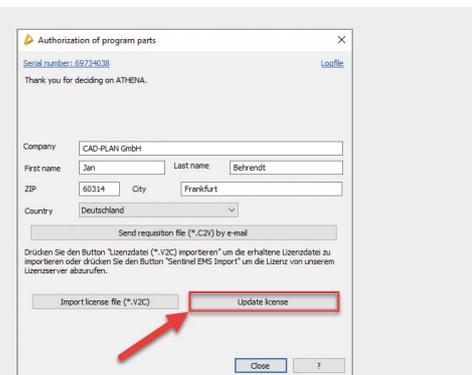
Object dimensioning for sheet metal sectionsschnitten

When applying the command "Object dimensioning" to sheet metal sections, you can now select how the edge lengths are dimensioned.



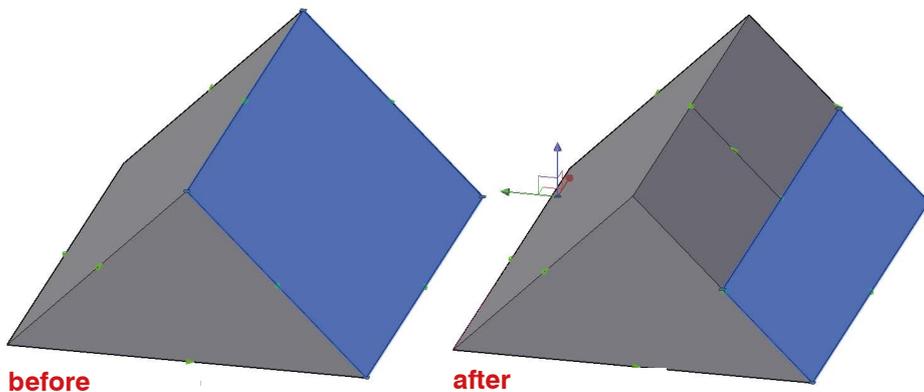
LogiKal: 2D elements import

If no 3D functionality is required in an ATHENA drawing, LogiKal elements can be inserted as 2D elements, which greatly improves performance. The presetting "Import 2D only" has been added for this option in the ATHENA options.



Automatic licensing

In most cases ATHENA is now licensed automatically when the program is started or at the push of a button.



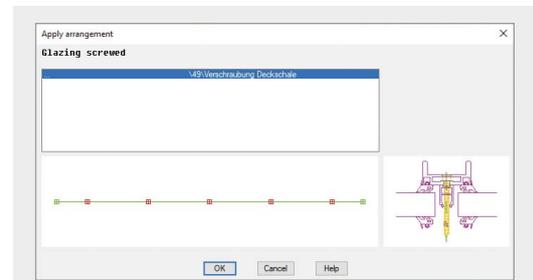
before

after

Illustration: a horizontal and a vertical division have been added.

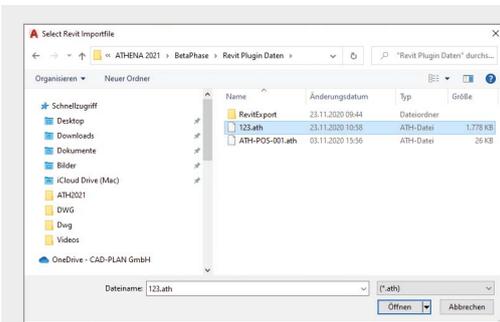
Add Axis to 3D-Model

An additional axis can now be inserted into an axis model that has already been analyzed. This is possible with the new command "Add Axis to 3D-Model". This way, as an example, additional mullions or transoms are inserted. This function can be used on recognized fields.



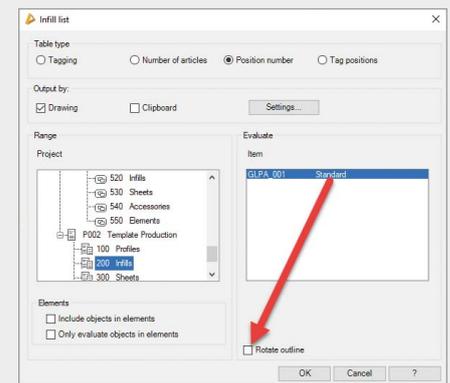
Transfer bar arrangement

Transferring multiple bar arrangements is now faster and easier. The arrangements to be transferred are selected via an intermediate dialog.



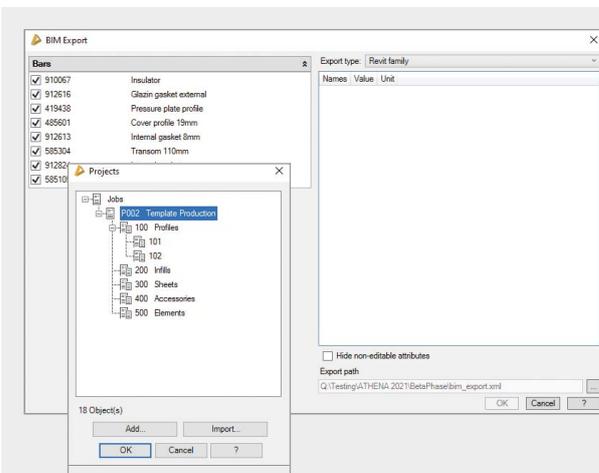
Import Revit family

With this new function, data created with ATHENA Exchange for Autodesk Revit can be imported. The ".ath file" to be imported contains DWG data and Revit families.



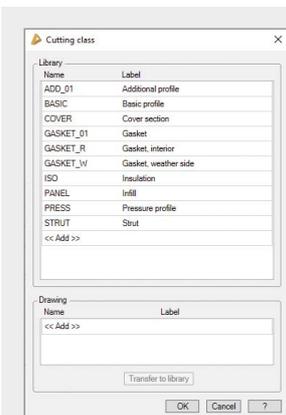
"Infill list" and "Infill diagram"

With these commands, a "Rotate outline" tick box can now be activated. This has the effect that if the infill contours are not rectangular, the infill is rotated so that the surrounding rectangle is optimally used.



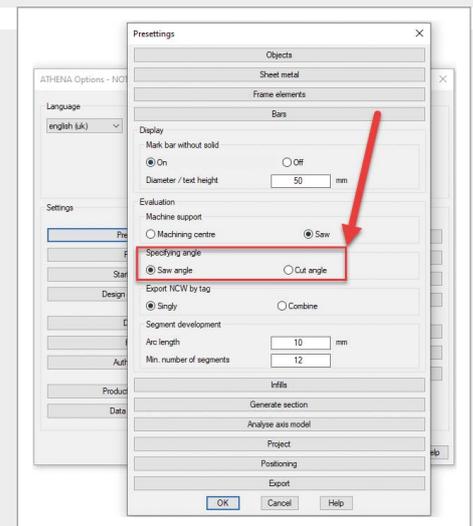
Export to BIM

This new command allows ATHENA 3D designs to be exported as an IFC file, DWG drawing or Revit family. An exported Revit family can be imported directly into the building model using ATHENA Exchange for Autodesk Revit.



Cutting class dialog

With a focus on more intuitive operation, the "Cutting class" dialog has been given a new, modern design.



Evaluation of bars: saw angle or cut angle

In the options, now it can be set whether the saw angle or cut angle is indicated in the case of extracts and lists of bars.

Further new features

- Commands in the ATHENA ribbon have been adjusted.
- The new commands have now been spread amongst the various groups in the ATHENA modeling ribbon according to their functionality:
 - New command “Z coordinates to 0”
 - New profile system manufacturer EJOT
 - New command “Edit assembly”
 - New command “Add Axis to 3D-Model”
 - New commands “Import Revit family” and “Export to BIM”
- The dialog boxes “Edit assembly”, “Cutting class” and “Structured list” have been converted from the old to the new format (faster and easier operation)
- Tagging: part numbers are no longer necessary for same-part recognition. This allows for faster generation of parts lists, as there is no need to add missing item numbers.
- New, clear design of the result tables (parts lists).
- E-R-Plus material request: a material request can be transferred to E-R-Plus from items without part numbers. The item number 0 (zero) is transferred so that items are recognized in the ERP.
- In the “Leader” dialog, three new options are added and can be selected by right-clicking in the text field: Cut, Copy, Paste. The key combinations “Ctrl + X”, “Ctrl + C” and “Ctrl + V” can still be used.
- Standard parts have been added:
 - EJOT plug and screw assortment completed
 - EJOT profile system added (incl. DWGs)
 - Foppe profiles completed
 - HTU-S Halfen channel added
- For standard parts, semi-finished products and free semi-finished products, surfaces can now be defined as for sheet metal sections. These are also adopted when creating bar assemblies from the corresponding parts.
- New object types for the “Select identical objects” and “Exchange objects” functions: sheet metal section, foil, insulation, spacer, gasket, sealing cord, sealing, free semi-finished product, weld seam and weld seam cross-section.
- The new command “Z coordinates to 0” is used to compensate for inaccuracies in the Z coordinates when porting drawings from other CAD programs.
- When executing “Explode ATHENA” command on a block with attributes, the content of the attributes can now be retained and converted into single-line AutoCAD text.
- Additions to the default settings in the ATHENA options: the modal pop-ups “Frame Elements”, Bars, Infills, has been extended by further fields.
- The labeling of surfaces can contain the color name or the color description.
- The accuracy for combining identical infills can now be set in the ATHENA options.
- ATHENA system layers can be automatically frozen in new viewports.
- Construction aids (3D wire models): the maximum height can be entered and the gradient is now set to degrees instead of % as default.
- Break bar: several breaks can now be made by specifying several break points in one action.

System requirements for ATHENA 2021 for AutoCAD

- AutoCAD 2018 - 2021
- AutoCAD Architecture 2018 - 2021
- AutoCAD Mechanical 2018 - 2021
- AutoCAD Advance Steel 2018 - 2021

Operating system: Windows 10

Hardware: ATHENA requires the same hardware configuration as AutoCAD.

AutoCAD, Revit – registered trademarks of Autodesk Inc.
LogiKal - registered trademark of Orgadata AG
Windows 10 – registered trademarks of Microsoft Inc.

ATHENA version number

In order to establish symmetry with the current AutoCAD version for the ATHENA naming, a version number was skipped. ATHENA 2019 is followed by the ATHENA 2021 version with this upgrade.

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