

ATHENA²⁰¹²

The new upgrade raises the bar on productivity

An even better return on investment

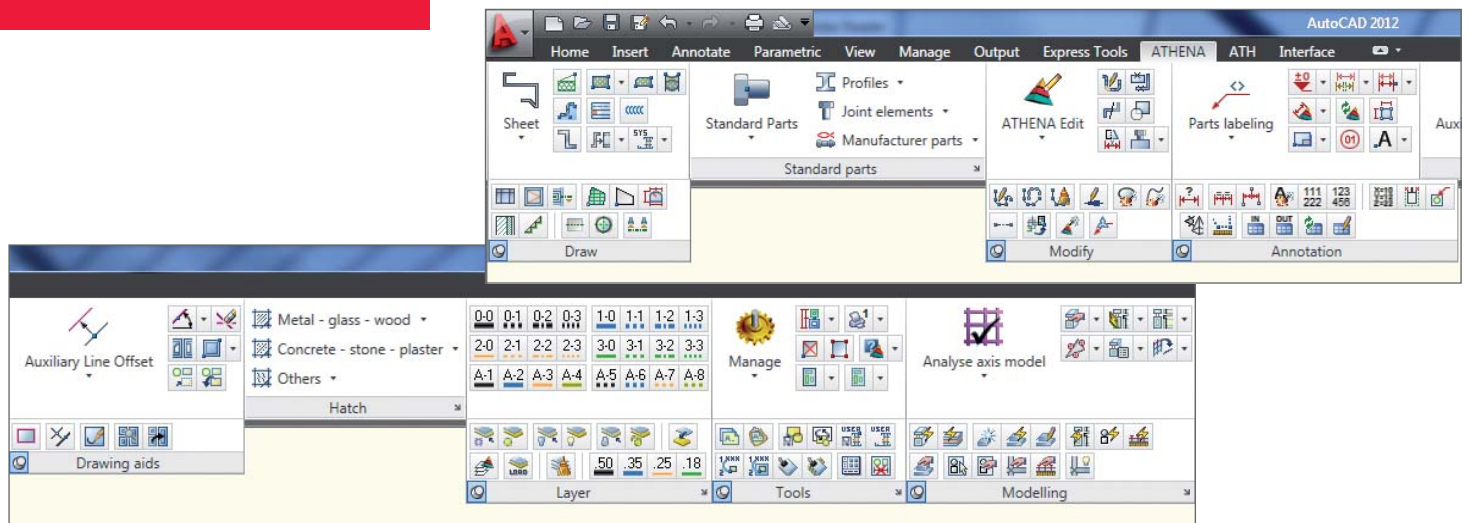
The new version of ATHENA 2012 certainly meets that claim. The 3D Modeling Program has increased functionality and a big increase in speed. The features in the 2D section have been re-oriented and optimized for a better and faster level of productivity. Never in the history of ATHENA has there been such an extensive upgrade.

The 3D module has been substantially expanded.

The 3D core of ATHENA has been thoroughly revised. In comparison to the preceding version 3D constructions can now be displayed with up to ten times the speed in ATHENA 2012. The speed is controlled through the various viewing modes. The display of hardware, e.g. joint components, in the drawing can be switched on and off. Furthermore, Extrusion cuttings and processes (e.g. drillings) can be more easily defined and set. Also the output in terms of production drawings has been increased substantially. A new interface to ERPlus (T.A. Project) has been produced.

New ATHENA ribbon groups

In ATHENA 2010 all the ATHENA commands were already organized in ribbons (multi-function bars). In ATHENA 2012 further ribbon groups have been added with which direct access can be obtained to single standard part groups, hatch patterns and layers. Also, the commands from the menu file „ATH-User“ are now accommodated in the ribbon bar.



New dialog boxes

The commands „Facade elevation“, „Grid division“, „Drilled hole“, „Screwed joint“, „Object dimensions“, „ATHENA dimension settings“, „Bar diagram“, „Coating extent“, „Shear object“ and „Axis symbol“ are equipped with new and improved dialog boxes, as were the dialogs for „Editing a bar cross-section“ and for „Changing the parameters of a bar assembly“. It has been possible to optimize the layout clarity and ergonomics within the dialog boxes for easy and productive working.

ATHENA label objects now with label scales

The possibility of assigning label scales to leaders was provided in ATHENA 2010. In ATHENA 2012 label scales can now be assigned to levels, surface symbols, edge symbols, welded seam symbols and coordinate labels.

Other new commands and supplements

- For ATHENA objects new types of grip have been added for the convenient extension of angles, reversing directions and moving objects.
- To adapt to the preferred working method settings can be made for the 3D commands.
- Even object specifications already made can be reset again to the ATHENA ex-works state with a click.
- Now also drilled holes, leaders, element views and section symbols can be deposited in the ATHENA libraries.
- Important dimension settings, such as for example, scale and dimension text height are no longer found in pull-down menus, but via a dialog box or clicking the appropriate place.
- The setup now installs ATHENA 2012 user-dependently, i.e. any user can start ATHENA, but user files are managed dependent on the user. In addition the directory for the adaptation files can be specified by ATHENA.

2D DESIGN

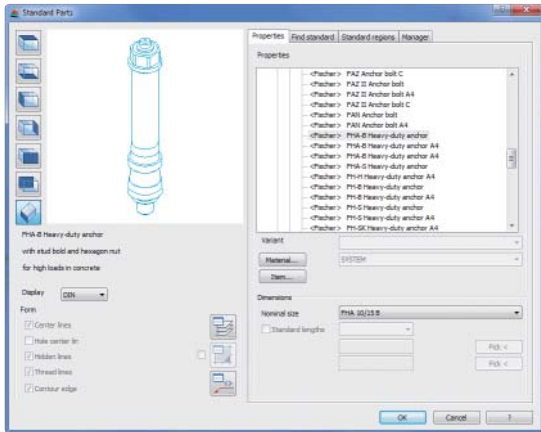
Standard Parts

The ATHENA standard parts library has been expanded once again. For example, the following standard part groups have been added:

- „Thread-forming screws, DIN 7500“
- „MAGE screws“
- „Fischer screws“
- „Hilti screws“
- „JORDAHL channels“

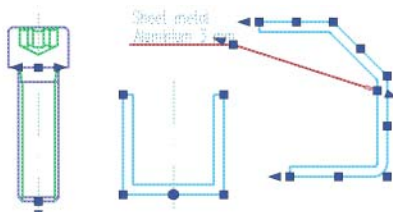
New too are the raised-head sheet screws with ISR, ISO 7049 TX and the cap screws according to DIN 34821 with a 12-point socket. With the cap-head sheet screws further diameters have been added and various libraries updated, such as for example the self-drilling screws, SFS-Intec screws, Fischer plugs or Hilti anchors.

Currently, there are about 80,000 genuine standard parts available in ATHENA 2012. With the use of the find function you can change directly to the relevant part with a double click on the search result on the tab „Find standard“, similar to using the „Go to“ button.



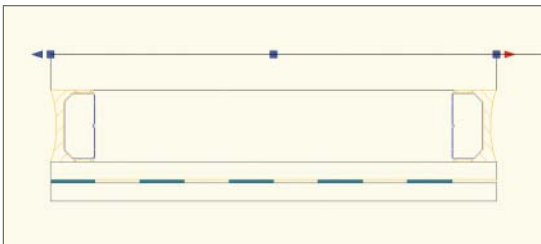
New grips

For ATHENA objects new types of grips are added to make changes easier. For example a sheet fold can be extended at the same angle without knowing the angle (triangular grip) or pushed on the base point of a part (round grip). With 3D extrusions a grip indicates the direction as an arrow and when it is clicked, the direction is reversed.



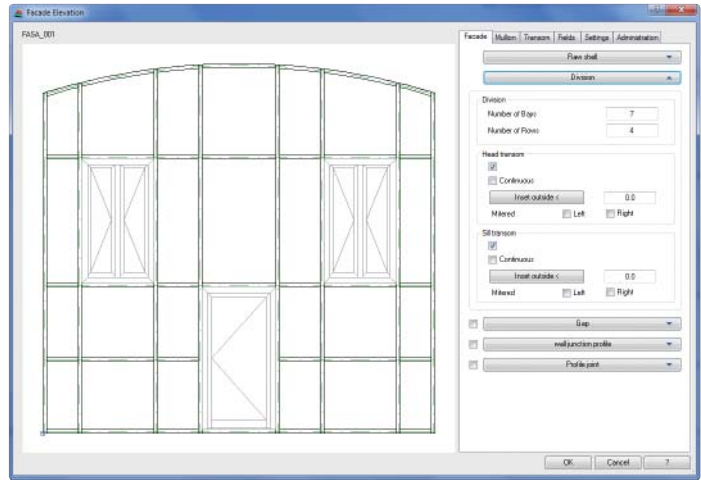
Infills

Infills (glass or panels) can now be modified very simply in length using the grips.



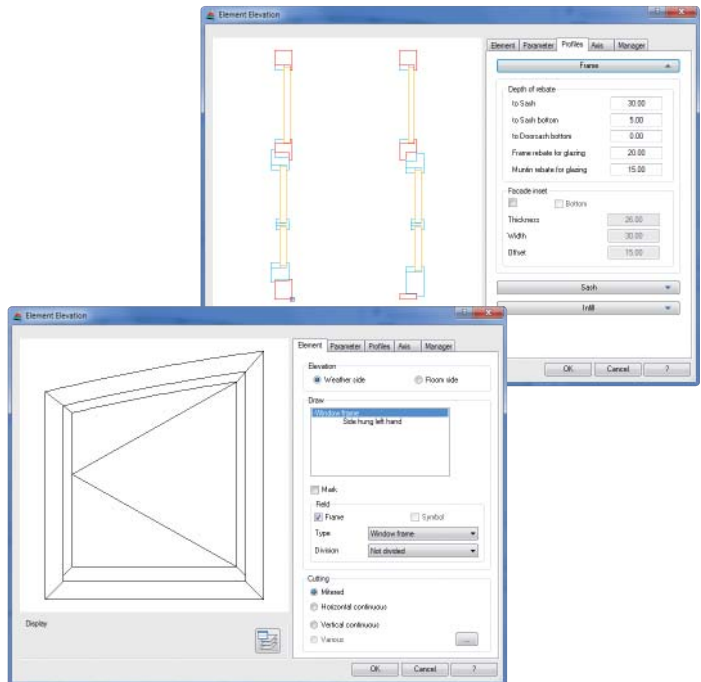
Elevation Program

The Façade program, which has been present for many years, has been rebuilt in ATHENA 2012. Any required facade elements can now be generated quickly and simply using a dialog box and then inserted into the drawing.



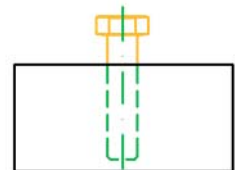
Doors and Windows

The Doors and Windows command view as been expanded. In the new dialog box, among others, rebate depths, insets and infills can be specified and the effect becomes visible on generating a section. Furthermore, Door and Window views can also be saved in libraries.



Cover mode

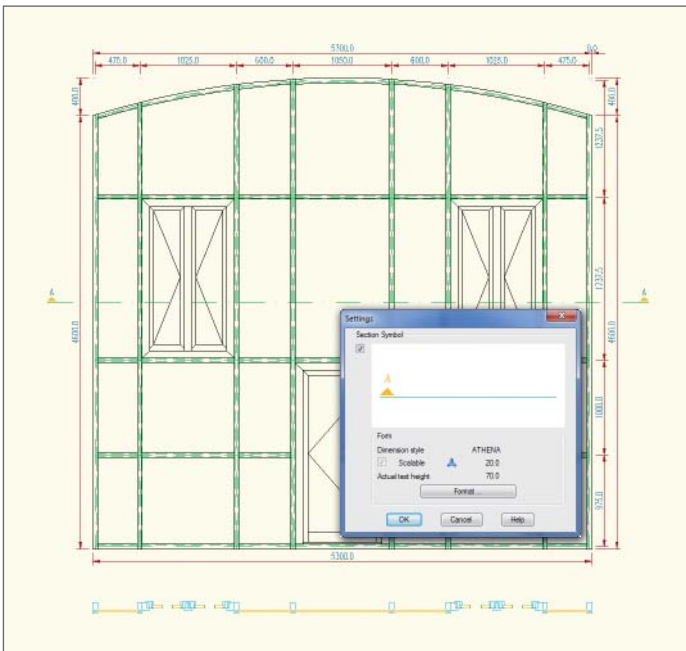
This command offers a new possibility of influencing the representation of covered objects. Covered objects or their covered areas can be invisible or the covered outlines are illustrated on a certain layer (e.g. with broken lines).



2D DESIGN

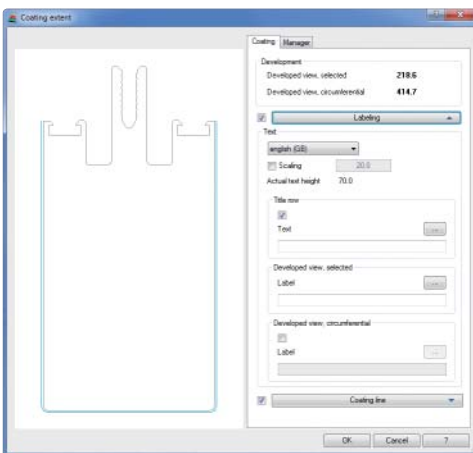
Generating a section from 2D

This new command enables sections through element views and facade elevations to be generated.



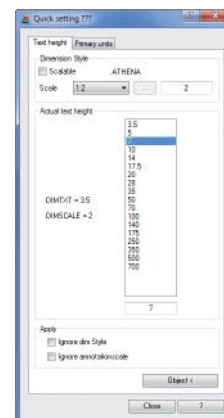
Coating extent

This new function outputs a subsection of a closed outline which is to be coated.



Close
Ea/V 218.6 mm

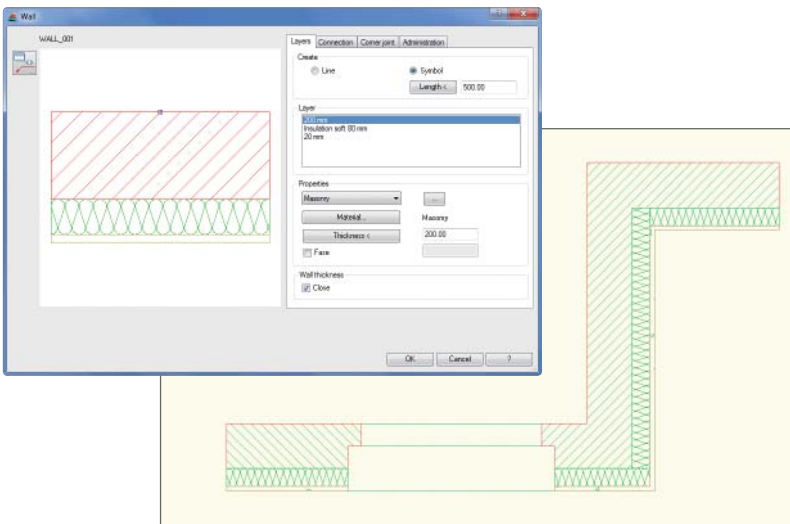
Changing dimension settings



This command replaces the previous command „Change dimension figure height“ and enables the most important dimension settings, such as for example the scale, text height, decimal places, etc. to be changed using a dialog box and/or clicking as appropriate. Furthermore, label scales can be activated for selected dimensions.

Floor Plan and Wall

Using the new Floor plan and wall manager you can assemble walls, save them and insert them into drawings. The wall structure may consist of several layers and can also be placed on a free continuous polyline.



Other new 2D commands and supplements

- The sheet metal section labeling dialog now also enables a fold table to be ticked.
- The commands Sheet metal section, Insulation and Membrane call up dialog boxes which hold settings for the drawing of further objects.
- The command for changing label scales now relates to levels, surface symbols, edge symbols, welded seam symbols, coordinate labels and AutoCAD label objects.
- For better orientation in very extensive drawings with many definitions all the levels and interrupted dimensions belonging to a group can be highlighted.
- The dimension object can now dimension a valid model (e.g. glass model) according to the model description.
- Leaders can now be aligned to the current view or the current UCS.
- An auxiliary line can now be set between two lines, bisecting the included angle.
- When setting auxiliary lines, many further auxiliary lines can be generated all at once by stating the spacing.
- New hatching patterns for stainless steel and silicone have been added.
- Unnamed blocks can now be converted into named blocks.

3D DESIGN

Significantly higher operating speed in 3D

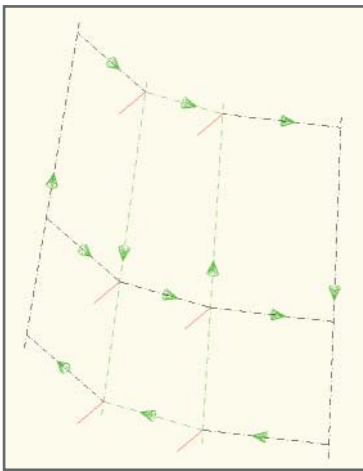
Due to a revised 3D core, 3D constructions can now be displayed in ATHENA 2012 with up to ten times the speed compared to the preceding version. The speed is controlled through the various viewing modes and the display of hardware, e.g. joint components, in the drawing can be switched on and off.

Generating a section from 3D

The command now generates a region on the specified sectional plane. This means the sectional plane can be more simply determined at a later point in time.

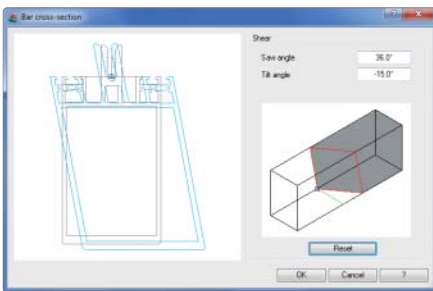
Analysis of axis model

In the analyzed axis model the direction of the bars is now also displayed. The conical symbols used for indicating the direction can be deactivated at any time. Due to optimization of the function, it is now also able to analyze more complex axis models.



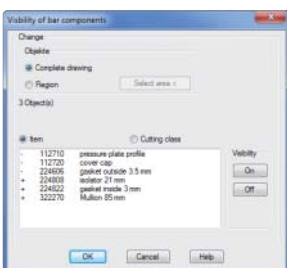
Shear object

This new command displays a bar cross-section with the specified cutting and oblique angles and is ideal, for example, for drawing the outline of a double-miter cut on a mullion.



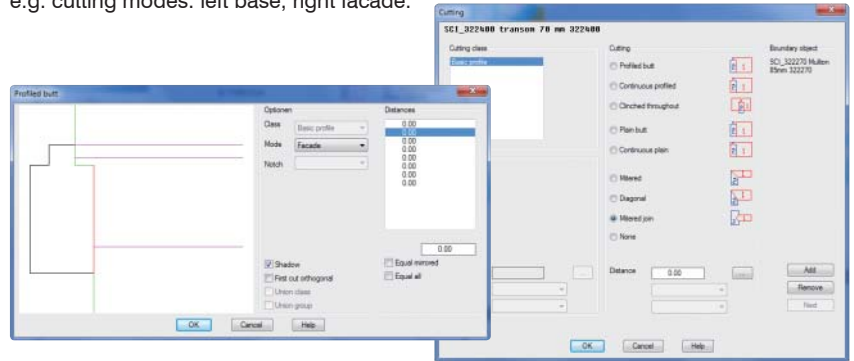
Component visibility on Extrusions

This new command enables single components of bar assemblies, which have been used on a 3D model, to be switched off, either in the whole drawing or within a selected area. This gives additional clarity and working speed with complex drawings.



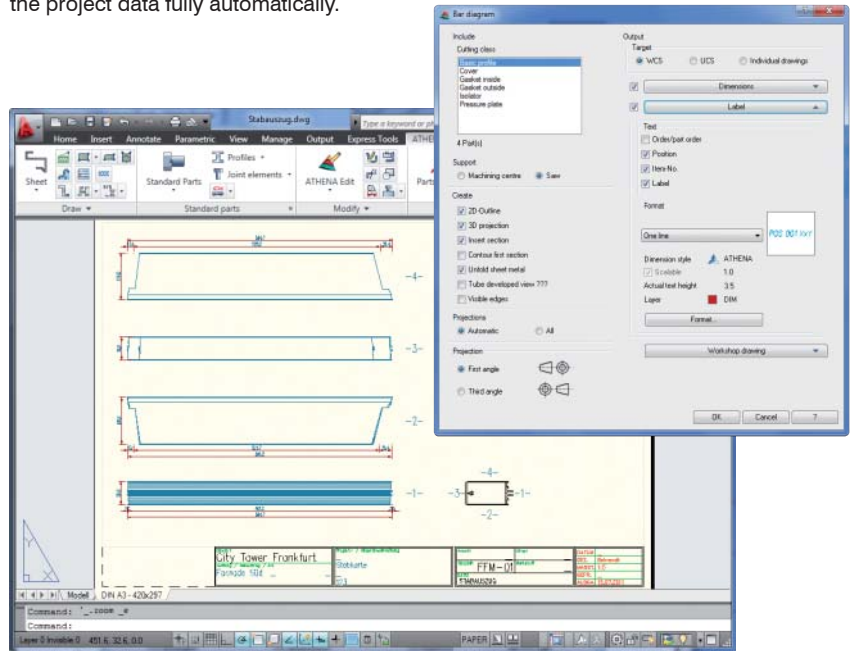
Determining the cutting and bar joint

This command has been substantially expanded. A new „miter joint“ cutting has been added. Depending on the cutting type, a spacing can also be specified for each joint face. A joint is produced by this spacing. Furthermore, there are now various modes depending on the cutting type which enable the production of the cutting to be influenced, e.g. cutting modes: left base, right facade.



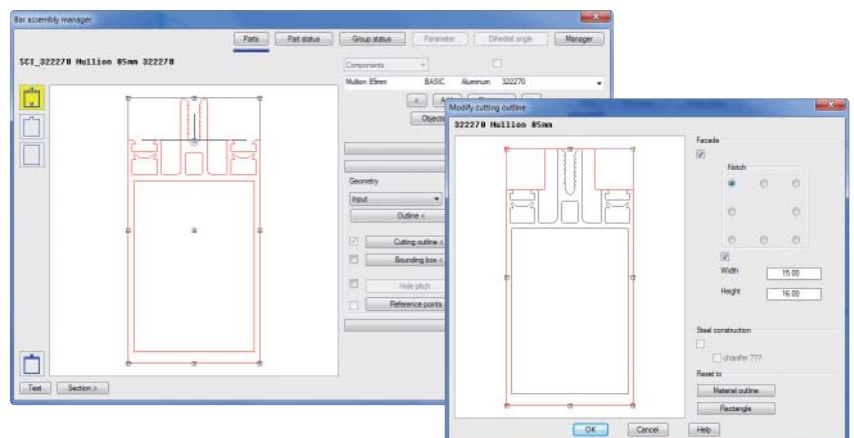
Fabrication Diagram

In the new version the ATHENA bar diagrams have been substantially expanded. They can be freely configured, e.g. views, scale or hidden edges, etc. In addition it is possible to define whether the processing drawings are saved in the main drawing file or in separate DWG files. The drawing captions in the drawing frame can be supplemented with the project data fully automatically.



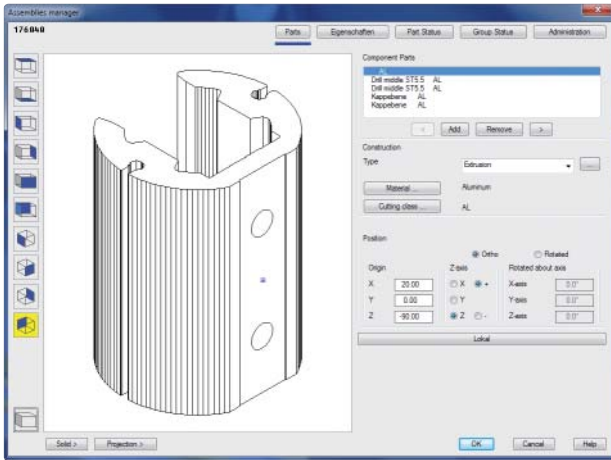
Bar Assembly Manager

In the Bar Assembly Manager it is now possible to modify the cutting outline via the dialog box. Clinches can be specified at eight „positions“ (corresponding to the cardinal directions) by stating the width and height. Using a new option, for steel construction profiles (e.g. IPE beams) the radii can be simplified as chamfers. The advantage of this new feature, i.e. generally no longer having to draw the cutting outline, but rather just simply being able to define it via this dialog box, produces a significant time saving.



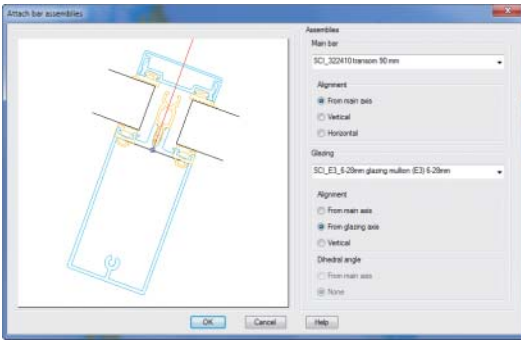
Assembly Manager

The Assembly Manager now provides further viewing options, also including a 3D view. A coordinate symbol now helps with orientation, e.g. relative to the bar to which an assembly is to be appended.



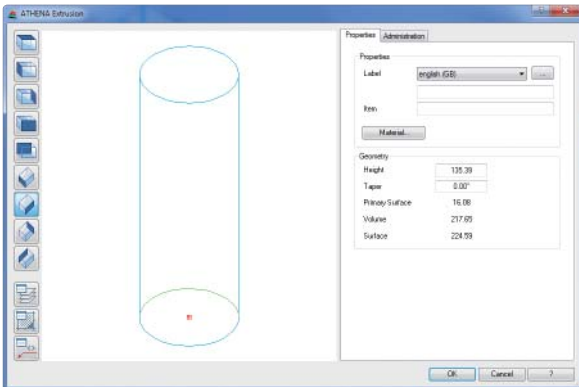
Reassigning bar assemblies

This new function assigns two specifiable bar assemblies with separate orientations to analyzed axes.



ATHENA extrusion

Similar to the AutoCAD command „Extrusion“, the new command „ATHENA extrusion“ produces an ATHENA solid which can be conveniently modified with the grips. Simple „processes“ on bars can be generated with the extrusion.



Bar work

Processes which have been generated with „ATHENA extrusion“ or „ATHENA drilled hole“ can be applied to a bar with this new function with a minimum of effort.

Associative bar work

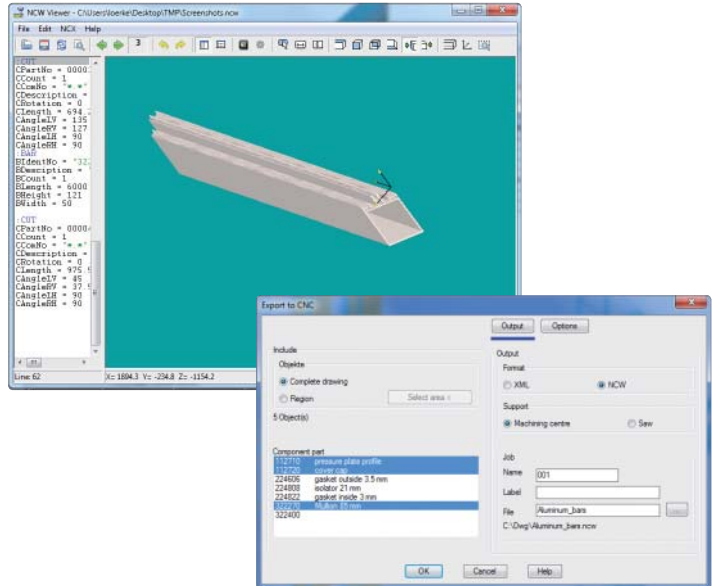
With this new routine 3D drilled holes and ATHENA extrusions can be easily and quickly positioned on a bar. In contrast to „Bar work“ the associative processes can be processed or removed with the „Use arrangement“ command.

Export ERP

With this command 3D models (bars, assemblies and infills) can be output to an XML file which can then be read in with the ERP system, ERPlus from T.A. Project. Furthermore, article numbers of standard parts used in a drawing can also be passed on.

Export CNC

With this new function you are able to export the output of bars of a construction as an XML or NCW file. With NC software this can then be passed directly to the machine. The NCW data contain the first saw cuts at both ends of the bar.



System requirements for working with ATHENA 2012

- AutoCAD 2010 - 2012
- AutoCAD Architecture 2010 - 2012
- AutoCAD Mechanical 2010 - 2012

Operating system:

Windows XP prof., Windows Vista, Windows 7

Hardware:

ATHENA requires the same hardware configuration as AutoCAD.



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