

ATHENA₂₀₀₈

The new upgrade - setting a trend in user friendliness

Concentrating on that which matters.

With the new version of ATHENA 2008 the optimization of the working processes takes the limelight. Functions have been added which, more than ever before, ease the flow of the work during design and planning. Practicable expansions and careful on-going development of existing functions are the result of our efforts in always having a finger on the user's pulse. In particular, the current upgrade addresses the wishes of a large number of customers.

In the course of a software redesign we have made ATHENA even more user friendly. Many dialog boxes have been revised and now offer even more ease of use which has a positive effect on the working speed and simplifies introduction for the newcomer.

Array Division

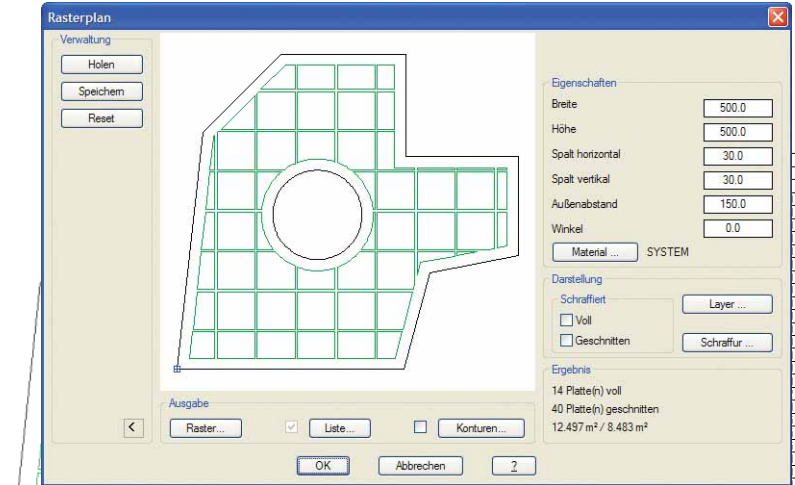
The new function "Array Division" facilitates the division of any area into uniform rectangles with a defined starting point. This function is very versatile in application; typical fields of application are for example, element facades, profiled sheet metal facades, double floorboards, wall panels, ceiling panels and much more.

The properties in detail:

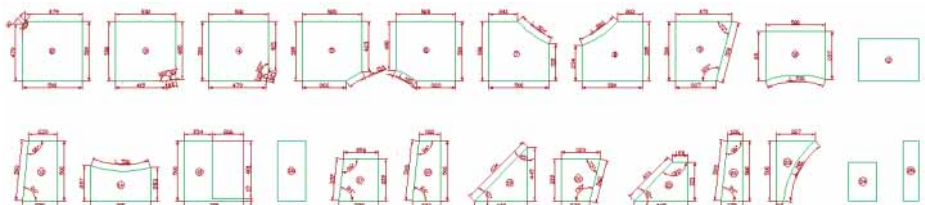
- The size and rotation angle of the rectangles can be freely selected.
- An outer space, which is not to be filled, can be defined as a boundary
- The gap width can be specified separately for horizontal and vertical gaps.
- Overlapping of the rectangles by entering a negative number for the gap width.
- In the border region the rectangles are cropped.
- The rectangles can be generated hatched as an optional representation.

For output options there are Array, List and Contours:

- "Array" places the defined array into the boundary contour.
- "List" produces a table with the number and cut size of the rectangles.
- "Contours" outputs the contour of the cut elements.



Höhe	Fläche	Form
mm	m²	
500.0	0.250	<
500.0	0.250	<
498.5	0.249	/
500.0	0.249	/
500.0	0.239	/
500.0	0.234	<
500.0	0.229	<
500.0	0.203	<
500.0	0.183	<
500.0	0.178	<
300.0	0.150	/
300.0	0.150	/
357.8	0.162	<
300.0	0.071	/
300.0	0.071	/
271.1	0.136	/
500.0	0.108	/
500.0	0.051	/
243.7	0.105	<
500.0	0.082	/
500.0	0.079	/
300.0	0.078	/
300.0	0.078	/
377.9	0.071	/
300.0	0.071	/
271.1	0.066	/
128.9	0.051	/
184.5	0.050	/
252.1	0.047	<
80.0	0.040	/
80.0	0.034	/
213.7	0.030	<
500.0	0.027	<
153.7	0.025	<
72.2	0.023	/
115.3	0.012	<
15.6	0.001	/
50	7.640	

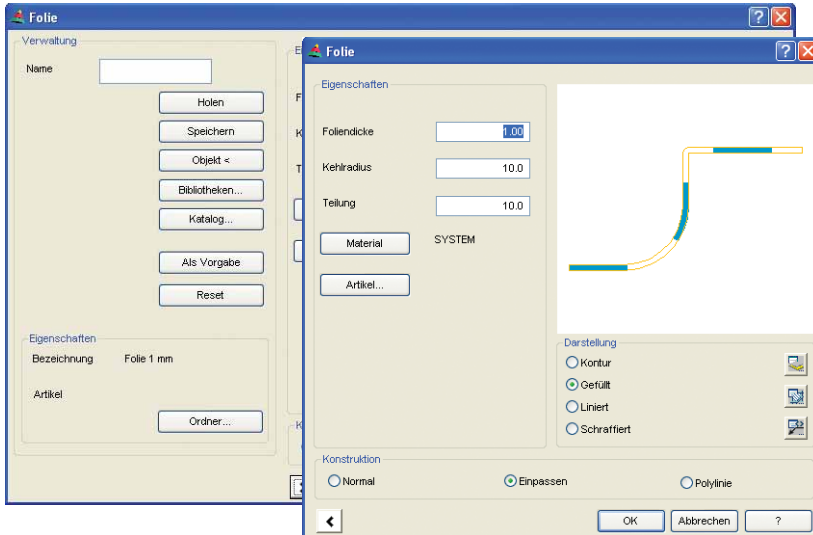


New MFC dialog boxes

Now even more commands in ATHENA are controlled via MFC dialog boxes. The MFC boxes are more flexible and react more quickly than the classical AutoCAD DCL boxes.

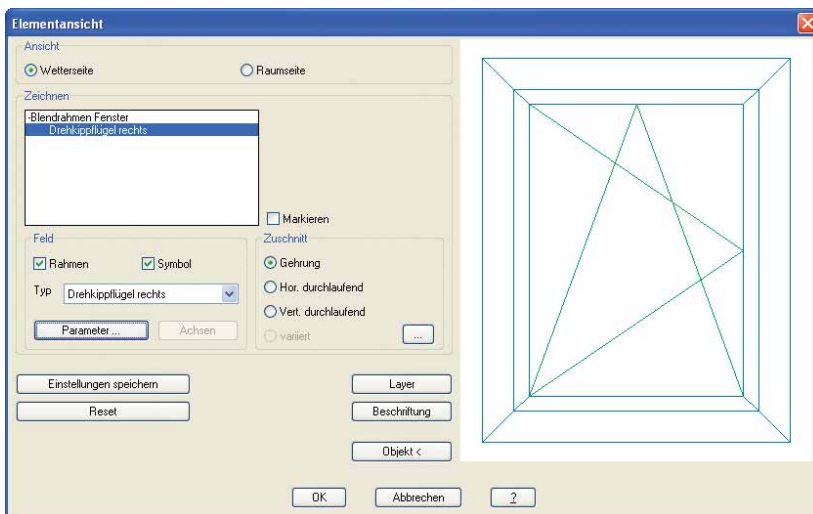
The dialog boxes Sheet Metal Section, Membrane, Spacer and Standard Parts have also received a section "Manager". Now sheet-metal section definitions, membranes, spacers and a selection of standard parts can be saved in a dedicated library.

The "Manager" has been accommodated in a section with optional drop-down. Consequently, the dialog boxes largely retain their familiar appearance and the users of previous ATHENA versions will immediately feel at home in ATHENA 2008.



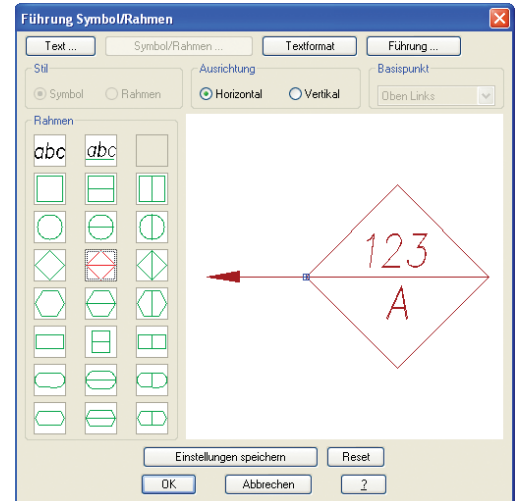
Window element

Settings for window elements can now be saved. In addition the generated element is an ARX object. This enables the element to be edited with a double click and the element settings to be transferred to another window element with "Transfer ATHENA properties". The elements can now also be labeled and can be stretched using the AutoCAD grips. The blank can now be determined separately for each corner.



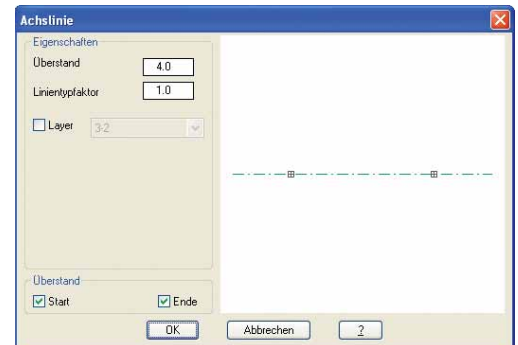
Leader

Extensive types of format have been introduced for the ATHENA leaders. Instead of "Text on a line" there is now a choice of many different symbols which significantly expands the labeling methods.



Axis

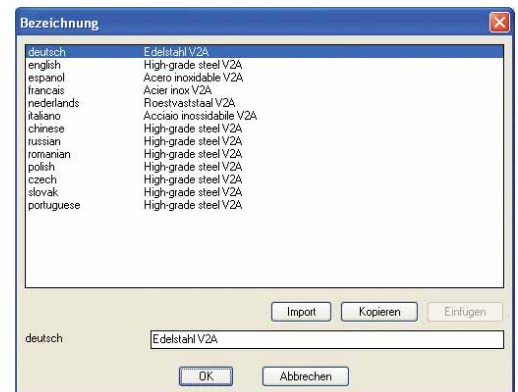
Previously, center lines could be produced with ATHENA for marking the center point of circles. Analogous to this, axes can be produced with the new function. The axes are automatically placed on the correct layer. Axes are ARX objects whose object properties can be easily modified.

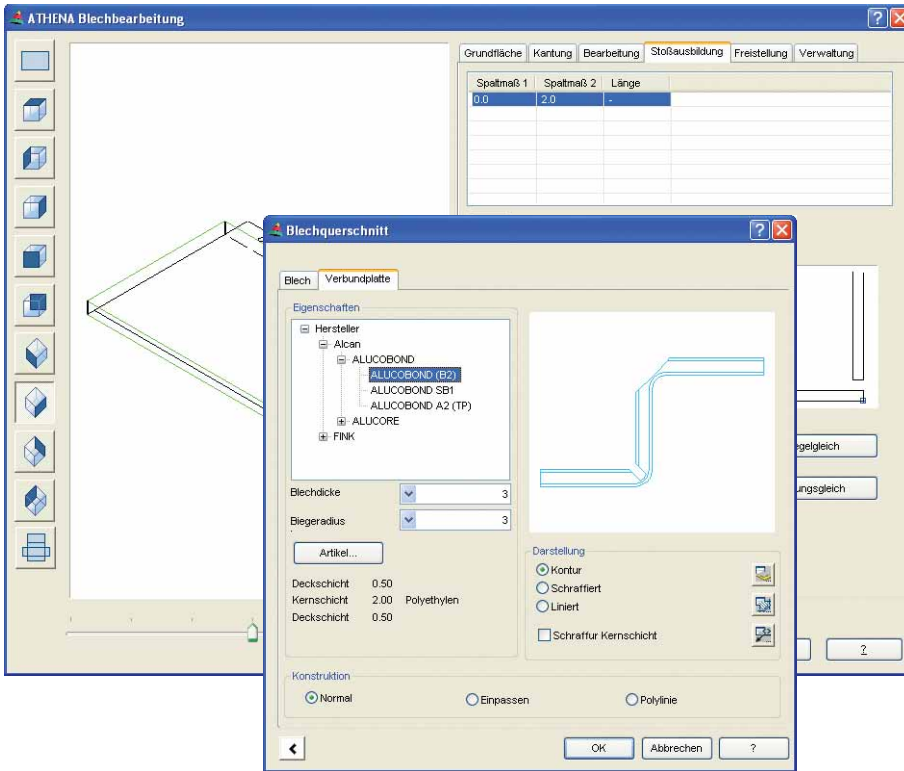


User designations in different languages

In all dialog boxes offering a choice of language a switch has been inserted near the word list of the respective language to simultaneously edit words in a number of languages.

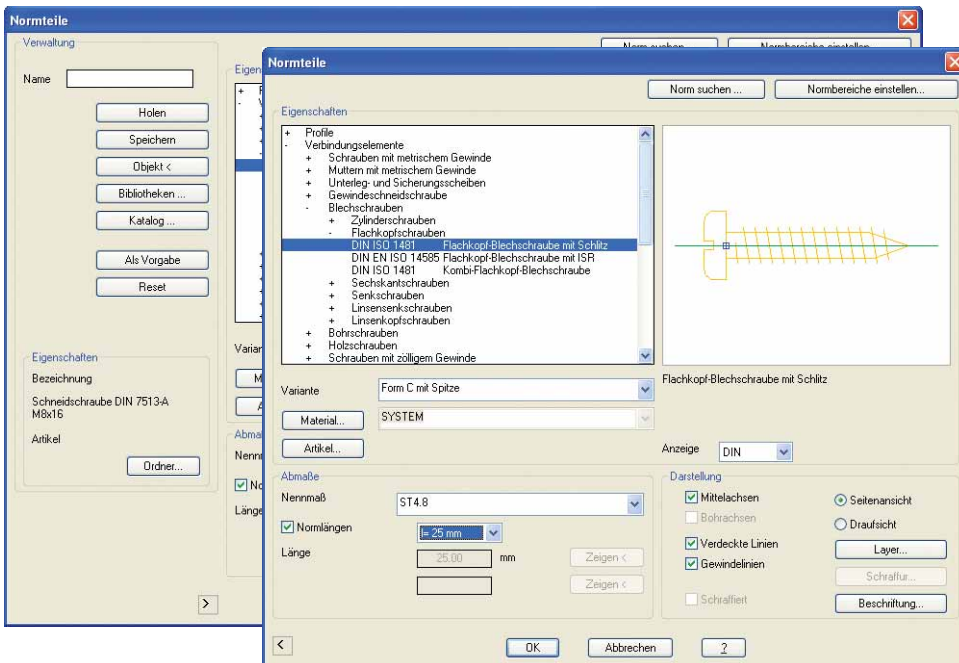
Previously, the languages were selected one after the other. The new dialog box simplifies the creation of multi-language texts and provides an immediate overview the languages for which the text has already been created.





Sheet metal processing

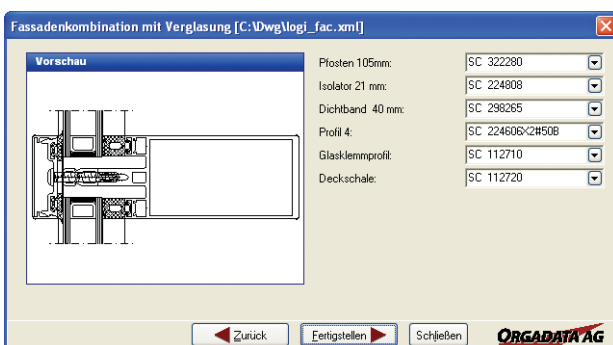
The module for sheet metal processing introduced into ATHENA 2006 has been expanded with many functions. Apart from normal sheets, now composite panels can be processed, e.g. Alucobond and Reynobond. Furthermore, additional types of joint are available for the folds. Apart from development, sections and 3D model, also various views of a sheet can be inserted. Folds appended to a primary surface can now be cropped and beveled with an angle.



New standard parts

The ATHENA standard parts library has been extended and now has about 58,000 parts. The newly added parts include: welded studs, SFS screws, new sheet screws, new metric screws, SPAX screws (especially interesting for wood/aluminum designs), and much more.

The standard parts dialog box has been revised: It now has a tree structure for a better overview and it possesses a search function for quickly finding parts. A filter function can mask out all the standard sections not required; so only parts available in the selected standard are shown.

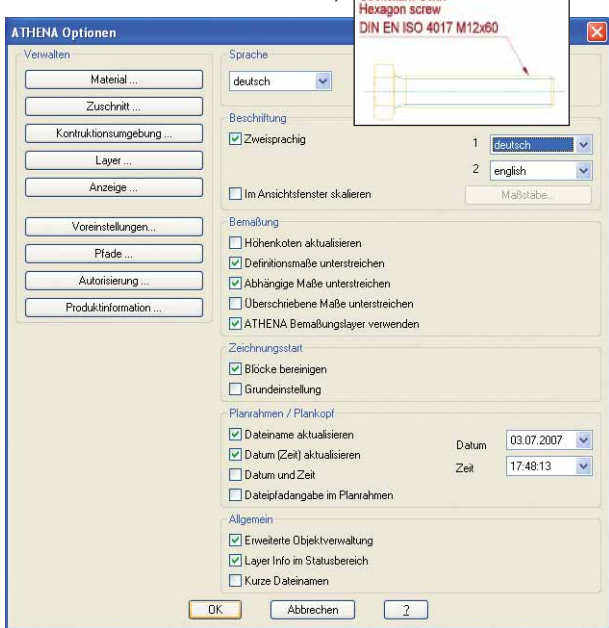


3D interface to logiKal (bi-directional)

The 3D interface to logiKal has been completely implemented in ATHENA 2008. Directly from ATHENA, this interface enables a logiKal dialog box to be opened where a section of a profile assembly (e.g. a mullion) can be defined and imported into the ATHENA bar assemblies manager. The bar assemblies can then, for example, be used on an axis model and the cut blanks can be generated. The finished 3D model can then be passed again to logiKal where it can be processed further or supplemented and also evaluated. Furthermore, it is also possible to use logiKal in the 2D field as a rule-based system library.

Labeling now possible in two languages

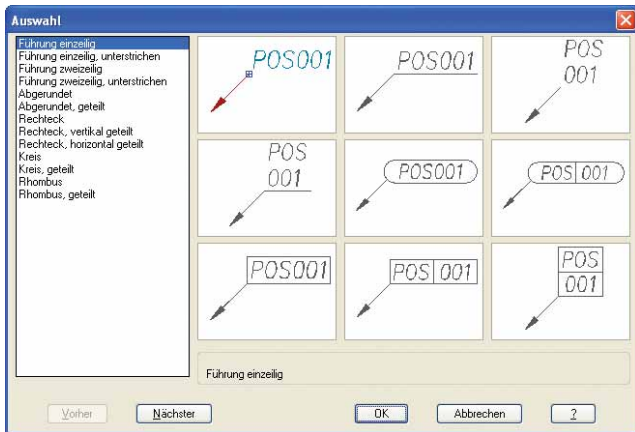
In ATHENA options can now be set of whether ATHENA objects are to be labeled in two languages. Previously, double labeling had to be carried out as required. The routine automatically detects identical label parts and does not repeat them in the second language (in the illustration "DIN EN ISO 4017 M12x60").



Position symbol

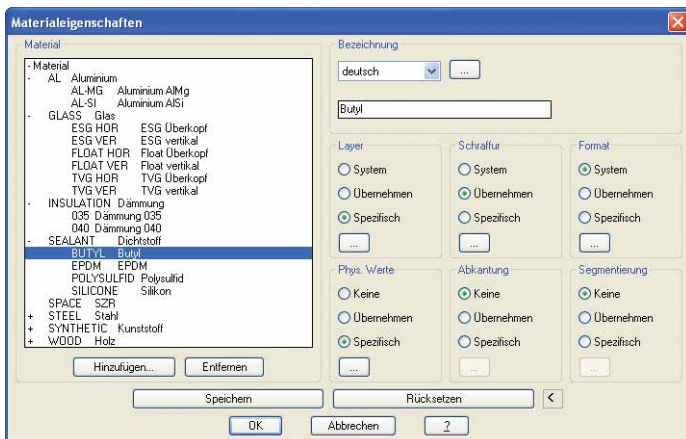
With the position symbol from now on not only figures, but also ASCII characters are permissible. The characters can be written in upper or lower case. Incrementing occurs as with Microsoft Excel.

Through this new functionality the position symbol can be comprehensively matched to one's own requirements. Individual labels for the most varied purposes can be realized easily and quickly.



New dialog box for the material configuration

The dialog box "Material Configuration" has been designed more clearly laid out with a view to a more intuitive configuration of materials.



Infills

A new option enables position text and dimensions of an infill to be placed in the center of the original bounded area, for example directly in a facade view and thus to provide the assignment of the element contour to the view. This facilitates the easy production of a placement plan for assembly and with complex views a quick check can be made of whether all areas with infills are assigned.

Material detection by projection

The projection now optionally takes over the material layer of the profile to be projected when the material is present in the material database of ATHENA. In this way Flixo AT, for example, can detect the materials of projected standard profiles and automatically accept the physical values from the material database.

Coating line with sheet metal sections

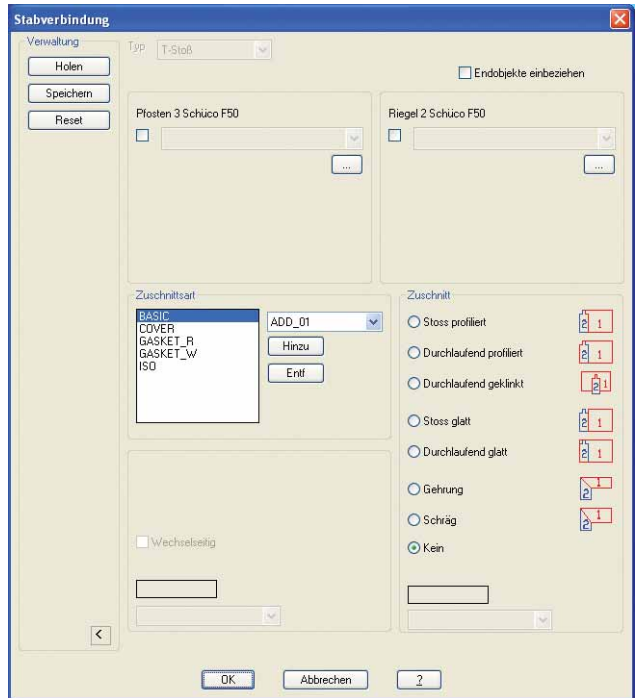
In the dialog box Sheet Metal Section an option "Coating Line" has been introduced. Previously a coating line was only able to be produced by generating a development.

3D display modes

The configuration of the display modes, e.g. for bars and infills, can now be saved. The settings then apply to any following generated bars and infills.

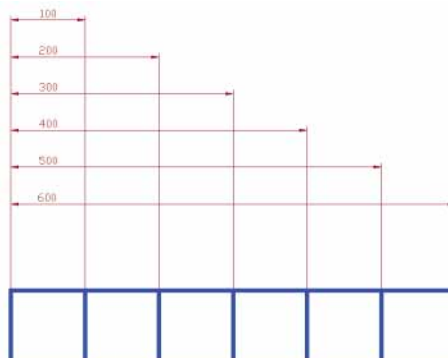
3D blank dialog

There are two new types of blank: "Continuously clinched" and "Oblique". In addition icons illustrate the joint situation.



Sorting dimension figures

It was possible previously to arrange dimensions aligned in ATHENA and now this new function also facilitates the aligned arrangement of dimension text. The position of the dimension chain is unaffected.



ATHENA 2008 – drawing, planning and designing productively

Features	ATHENA 2000 ARX	ATHENA 2000 ADV ¹ ATHENA 2002 ²	ATHENA 2003 ³ ATHENA 2004 ⁴	ATHENA 2006 ⁵ ATHENA 2007 ⁶	ATHENA 2008
2D drawing and design					
Standard parts library (curr. 58,000)	x+	x+	x+	x+	x+
Draw sheet metal section	x+	x+	x+	x+	x+
Draw thermal insulation	x	x	x	x+	x+
Draw sealing foil	x	x	x	x+	x+
Interrupted dimensions/levels	x	x	x+	x+	x
Automatic labeling (multi-lingual)	x	x	x	x+	x+
Fillings (glazing and panels)	x	x	x+	x+	x+
Position symbol	x	x	x	x	x+
Layer and material management	x	x	x+	x+	x+
Leader	x	x	x	x	x+
ARX objects (intelligent objects)	x	x+	x+	x+	x+
Draw welded seam	x	x	x	x+	x+
Unify sheets, foils or welded seams	x	x	x	x	x
Automatic object dimensions		x	x	x	x+
Draw semi-automatic positioning symbols		x	x	x	x+
Draw element views (window, door)			x	x	x+
Arrange viewport			x	x+	x+
Draw holes (incl. slotted holes, tapped holes, etc.)			x	x+	x
Generate window sill			x	x+	x
Slice ATHENA objects			x	x	x+
Break ATHENA objects			x	x	x
Activate and deactivate ATHENA objects				x	x
Hide and unhide objects				x	x
Draw and manage screwed joints				x	x+
Profiled sheet generator				x	x+
Sheet processing and development				x	x+
Sheet processing composite panels					x
Save standard parts, foils and others in libraries					x
Draw axes					x
Sort dimension text					x
Array Division of polygonal areas					x
Labeling in two languages					x
New MFC dialog boxes					x
3D drawing and design					
Create assemblies and transfer them to axes		x	x	x+	x+
Assign profile cuttings		x	x	x+	x+
2D production documentation (drawing and MS Excel)		x	x	x+	x
Duplication of profile cuttings				x	x
Fully automatic analysis of axes with profile assignment (3D+)				x	x+
Apply processes and components (3D+)				x	x
3D interface to logiKal					x
Save display modes					x
Engineering (structural analysis and building physics)					
Panel / solid thickness calculation	x	x	x	x	x
Center of gravity and moments of cross-section	x	x	x	x+	x+
Required moment of inertia / deflection	x	x	x	x+	x+
Thermal resistance computation		x	x	x	x
Isothermal calculation (flixo AT)			x	x+	x
UCW value calculation for a facade				x	x
RW value calculation for a material layer				x	x
AutoCAD-Version	AutoCAD 2000	¹⁾ AutoCAD 2000(i) ²⁾ AutoCAD 2002	³⁾ AutoCAD 2000/2002 ⁴⁾ AutoCAD 2004	⁵⁾ AutoCAD 2006 ⁶⁾ AutoCAD 2007	AutoCAD 2004 to 2008 and Architecture 2008, ADT 2007

x = included

x+ = extended



CAD-PLAN GmbH
Frankfurter Str. 59-61
63067 Offenbach
Germany

Tel. +49-69-800 818-0
Fax +49-69-800 818-18

info@cad-plan.com
www.cad-plan.com

System requirements

AutoCAD 2004 to 2008, ADT 2007, AutoCAD Architecture 2008

Operating system:

- Windows 2000 (with SP4), Windows XP prof. or Windows Vista

Hardware:

ATHENA requires the same hardware configuration as AutoCAD.

Recommended configuration:

- Intel Pentium 4 or higher
- min. 1 GB RAM
- Graphics card with min. 128 MB RAM (screen resolution 1280 x 1024)

AutoCAD – registered trade mark of Autodesk Inc.

Pentium – registered trade mark of Intel Inc.

Windows XP, Windows 2000, MS-Excel – registered trade mark of Microsoft Inc.