

CADprofi 8.19



✓ Public information symbols – CADprofi Architectural

We have added a new standard of public information symbols in the *"Safety and evacuation symbols"* command.

Safety and evacuation symbols		2
Statety and evacuation symbols Image: State of the symbols Image: Public Information Symbols	Helicopter Bus Filling sta Taxi Toil Stairs down Helicopter Men Filling sta Official stains Official stains Image: Stains Stairs down Helicopter Men Filling sta Image: Stains Image: Stai	Image: Aircraft Image: Aircraft
Image Sector	<pre></pre>	vator Way in/E Restau
Sort Show norms	Angle Symbols size Rotate Scale: • Angle: 0	×
_<u></u><u></u><u></u>	Mirror and isometry With frame Mirror X Mirror Y Isometry	Insert multiple
Stairs down	Current unit: millimetres 2DA_SYM_SM5:ARSGNZC_1054	to Insert symbol ▼



✓ Norsok symbols

We have added Norsok symbols, (which are widely used worldwide) to CADprofi program.

) Safety	and evacuation symbols									×
] ?	 Bafety sings → A Arrow straight → A Arrow angled 	^		Life buoy	Stretcher	First aid s	Letter A\$Z	Not to be	Embarkati	Liftable
	-⊳-o-Life boat -⊳o-Life raft -⊳o-Life buoy -⊳o-Life jacket		Arrow str	Life jacket	Breathing	Emergenc	Variable t	In case o	Ladder	Emerge
	-⊳o- Survival suit -⊳o- Ladder -⊳o- Bridge -⊳o- Stretcher -⊳o- Breathing apparatus		Arrow an	Survival suit	Use eye	Eye wash	Utgang Exit Exit	Survival c	Emergenc	Eye w
			Life boat	Ladder	Emergenc	Sliding door	Emergenc	First aid e	First aid e	Life b
	-⊳⊲- Emergency shower -⊳⊲- Eye wash -⊳⊲- Silding door -⊳⊲- Number 1\$9		Life raft	Bridge	Escape ro	Number 1\$9	Pick up Bost Man over	Stairs	Stretcher	Life b
<	-⊳	~	<							>
Sort	Show norms		Angle O Rotate	×	Symbols siz Scale:		Syste	em		
			• Angle:	0 ometry	With fr	ame				
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	Arrow straight		Current unit: 2DA_SYM_SM	millimetres 15:ARSGNZC_0	883			⊡ Inse ¢∛	ert multiple Insert symbol	•



✓ Usage of frames in some symbols

We have introduced a new feature in the new CADprofi version. You can now turn on or turn off frames in symbols located in the *"Safety and evacuation symbols"* command.

Thanks to the usage of frames, projects are now easier to read when symbols are used on a background of a colored or hatched area.

🕑 With frame



With frame



Without frame

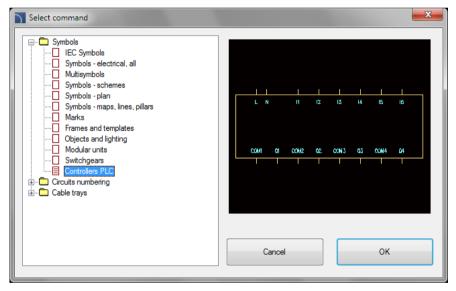


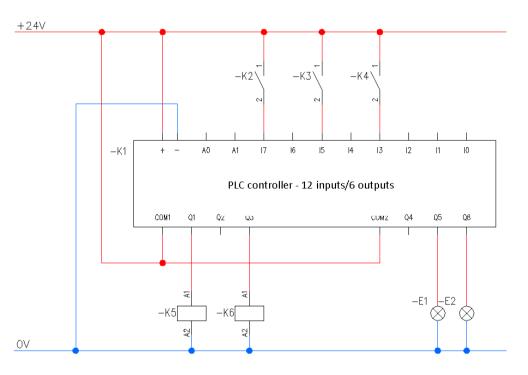
✓ Designing PLC controllers

The *"Controllers PLC"* command allows to insert PLC controllers into the project with any configuration type.

This command allows to define any type of input/outputs, their number and addresses (numbering).

PLC controllers may be freely modified with the *"Edit symbols"* command.



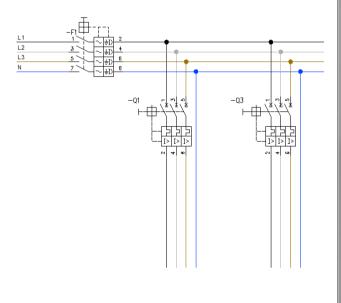


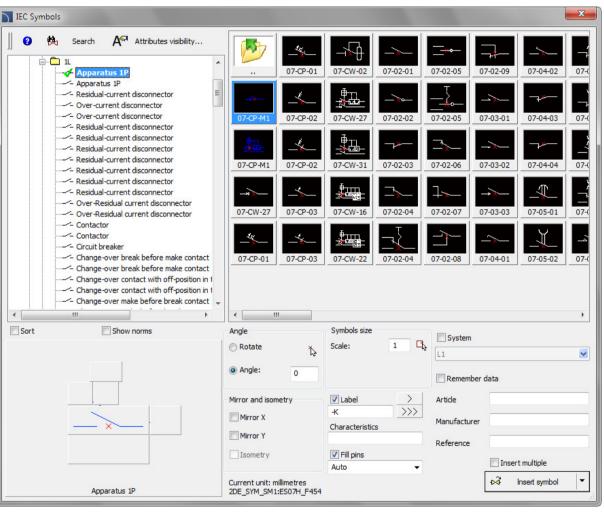


✓ Horizontal symbols – CADprofi Electrical

We have added horizontal symbols in the *"IEC symbols"* command. Those symbols are adapted for insertion in horizontal lines of electrical circuits.

Thanks to the *"Edit symbols"* command user has a possibility to replace the horizontal symbol into a vertical or vice versa.







✓ A new type of products search system in the databases

Currently, in most libraries you can fully search for items in product databases. It is possible to search products in the whole database (button) or only in a chosen branch (button).

List of all founded products is displayed directly in the dialog box.

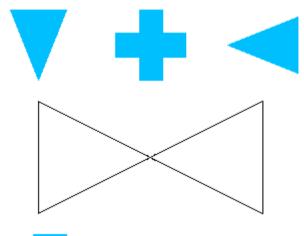
II II 🛠 🛛	DN100	~	Q (\$)		
	248 elements were found		• • •		_
E Flange armature					
Stop valve	Amortising fitting flanged	DN100, PN16			
B Stop valve	ANSI flange	DN100, class 150			
The ball valve between the flange	ANSI flange	DN100, class 300			
	ANSI flange	DN100, class 400			
	ANSI flange	DN100, class 600			
Ball valve flanged with rotary-piston	Ball valve flanged	DN100, PN16			
	Ball valve flanged	DN100, PN25			
	Ball valve flanged	DN100, PN16			
Butterfly valve between the flange	Ball valve flanged	DN100, PN25			
Gate valve	Ball valve flanged	DN100, PN16			
	Ball valve threaded	DN100, PN40			
Check valve flanged	Ball valve threaded	DN100, PN40			
Check valve between the flange	Ball valve welded	DN100, PN40			
Check valve flanged (oblique)	Ball valve welded	DN100, PN40			
	Blind flange	DN100, PN2.5			
Reduced coupling	Blind flange	DN1000, PN2.5			
Reduced coupling	Blind flange	DN100, PN6			
Threaded armature	Blind flange	DN1000, PN6			
	Blind flange	DN100, PN10			
🗈 🧰 Regulating valves	Blind flange	DN1000, PN10			
Actuators for regulating valves	Blind flange	DN100, PN16			
	Blind flange	DN1000, PN16	rameters		
Sort Foto	 View and insertion point 	Pa	rameters		
↑	Insertion point Base p	ioint 🔽 🔽	System	Supply	
	• View 1	Dir	mension X:		
	O 3D Plane	[XY] V	mension Y:		
	○ 2D/3D	Dir	mension Z:		
	View 2	Symbol Le	vel:	1	
	O Scheme O	View 3	Start element	Neck flanges	
0			End element	Neck flanges	
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	L			Insert multiple	
<u>∦ ⊾ </u> ∦	Current unit: millimetres			OK	



✓ Improvements in many commands

CADprofi 8.19 brings many improvements in already existing commands including:

- improvements in defining sets of cables schematics,
- improved user's definition of cables (installations).
- improved insertion of reduction when drawing 2D lines,
- modified drawing of 2D flex cables
- improvement of the "Quick edit" command,
- many other minor improvements made at the user's request.





✓ Adjustment to many base CAD programs

Program has been adjusted to work with ZWCAD+ Professional. Notice: ZWCAD+ Standard doesn't allow to load applications. ZWCAD+ Professional is needed to load CADprofi.

CADprofi works with many base CAD programs including AutoCAD (since the 2000 version), AutoCAD LT, Bricscad, GstarCAD, IntelliCAD, progeCAD, ZWCAD and others.







CADprofi 8.17



✓ Block schemes

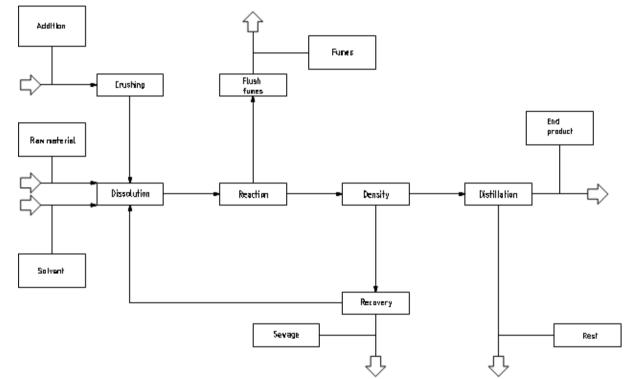
♦

We have introduced a new command "Scheme and algorithms" that is used to draw block schemes, diagrams, algorithms, flowcharts etc.

One of the areas where you can use this new command is to draw any type of block and technological schemes.

All symbols will automatically adjust its size to the amount of entered text. It is also possible to specify fixed dimensions for each element.

The drawing on the right shows an example industrial installation block scheme.

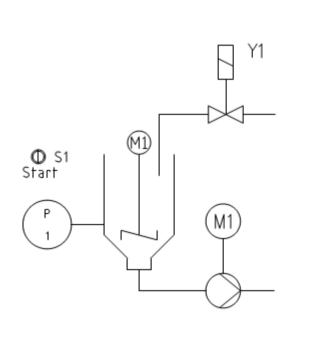


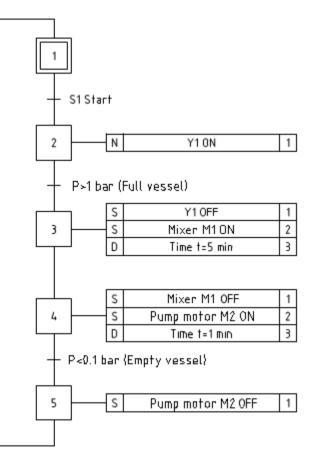


✓ Functional schemes – EN 60848

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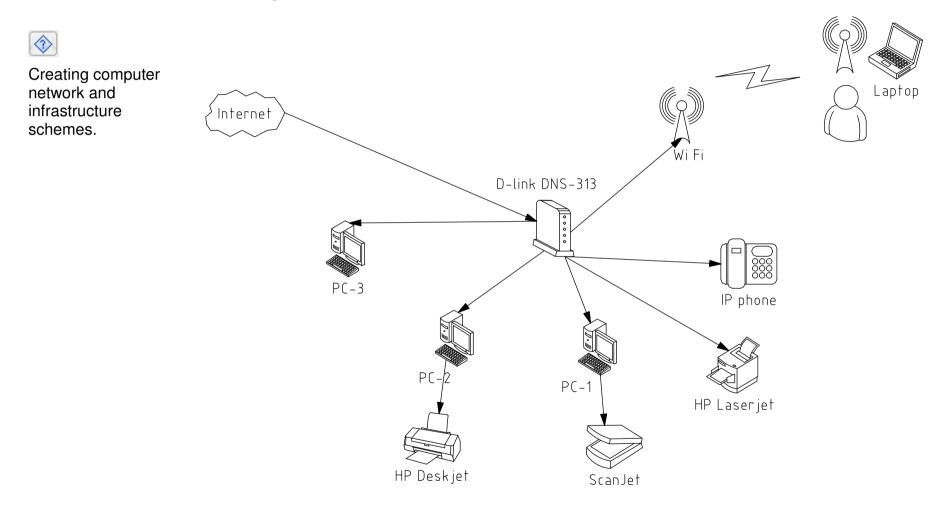
Another area where we can use the "Scheme and algorithms" command is to draw functional schemes according to the EN 60848 norm.







✓ Infrastructure and computer network schemes



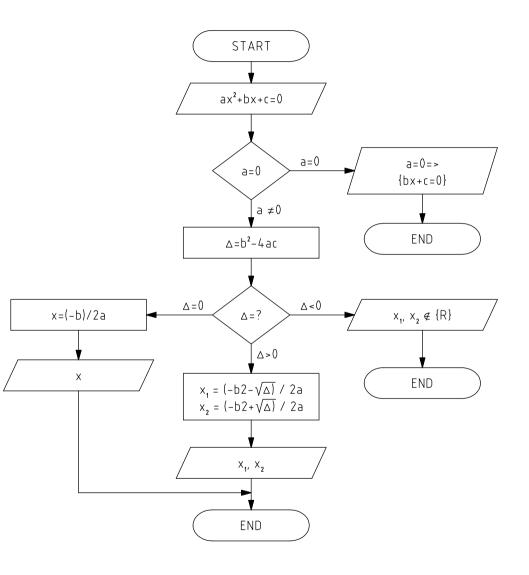


✓ Flowcharts, algorithms etc.

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Possibility to draw flowcharts, organization charts, algorithms etc.

The drawing on the right shows an example algorithm of square root calculation.





✓ BPMN schemes (Business Process Modeling Notation)

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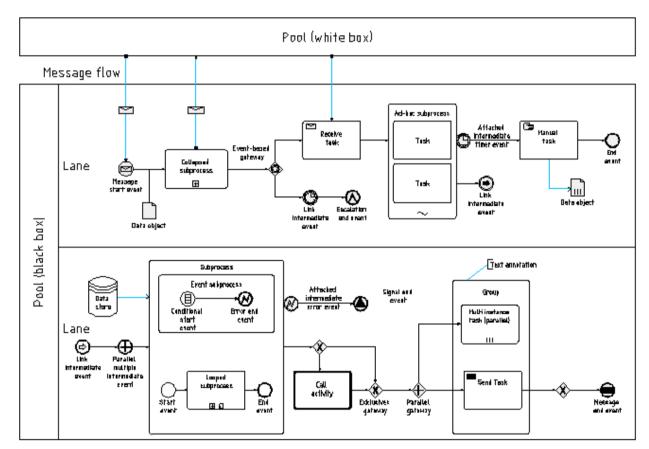
Possibility to draw BPMN schemes. Business Process Modeling Notation is a graphical method of showing business processes.

BPMN describes three basic processes types:

- internal process
- public process
- global process

In CADprofi program you can find the following categories of graphical elements:

- flow objects
- connecting objects
- swim lanes
- artifacts that are used to add additional information (data, annotations and groups).



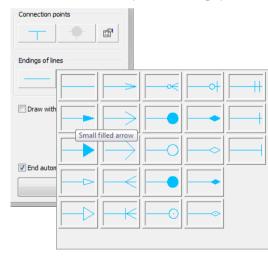


✓ New command "Lines (diagrams, block schemes)"

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New command that is used to draw connections lines when drawing block schemes, algorithms, diagrams etc.

This command is similar to other commands that are used to draw lines in other CADprofi modules (HVAC & Piping, Electrical etc.). We have included many line types used in the block schemes drawings as well as we have added a possibility to choose connection points and arrowheads (line endings).



Lines (flowcharts and diagrams)					
	List of selected line:		🗖 🔲 One-li	ne mode	
Continuous	Name	Layer	Line type	Туре	
Border Center Dashdot Dashed Hidden Lines - HVAC & Piping Lines - Electrical Lines - Mechanical Process line	Continuous	2DR_PLS_C	Continuous		
ines - other information	 Draw by type left center right 		Spacing: Offset:	200	
	Drawing settings			Connection points	
	Rectangle snap Additional			<u> </u>	ß
	Isometric - left	(F5)		Endings of lines	
	 Isometric - up (F5) Isometric - right (F5) 				
	Advanced orth			Draw with polyline	
	 2 segments 3 segments 				
Sort Show category *User*	Current unit: n	nillimetres		End automatically	
Help Cancel				ОК	

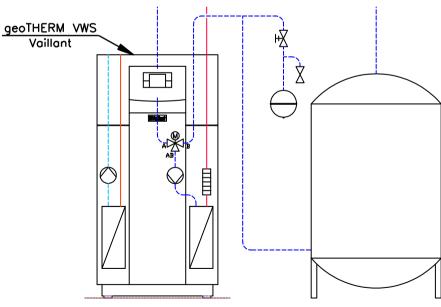


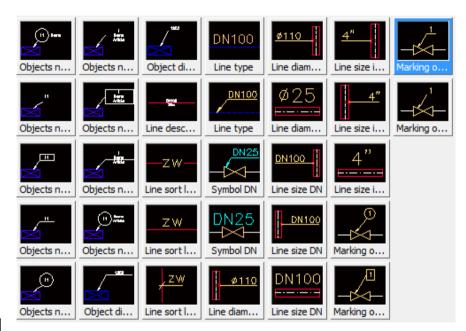
✓ New marking symbols

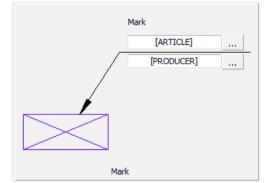


We have introduced new universal marking symbols, which can retrieve any kind of data from the described objects. Marking symbols include fields, which are used to retrieve attributes, technical specifications, dimensions etc. from objects.

Example of marking symbols with two fields: Type and Producer (attributes [ARTICLE] and [PRODUCER])









✓ New way of objects numbering

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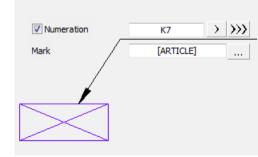
We have introduced a new object numbering system with use of special marking symbols. Separate numbering sequences are available for piping, ventilation, electrical and mechanical installations.

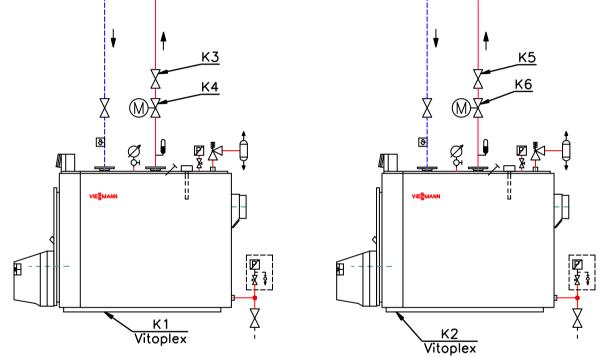
Still it is possible to use already existing ways of numbering:

- command "Numbering",

- circuits numbering,

- numbering of symbols labels and electrical objects.





Example of K1 – K6 numbers added with marking symbols

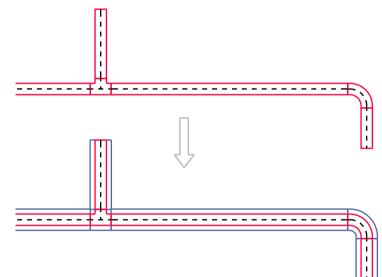


✓ New command: "Insulation"



This command allows to quickly insulate or change insulation parameters for many types of pipes, ducts and fittings.

Many types of filters makes it easier and quicker to choose the right insulation type (for example only the selected type of installation or all specific pipes type).



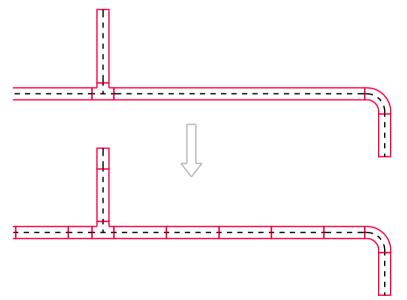
Edit insulation		x
Thickness of insulation		
50	₽	
 Apply to selected objects Apply to all objects 	•	
Apply only for:		
Plumbing/heating		
Ventilation		
Electrical		
Installation/System	Specify CADprofi fitting	
Diameter/Width and Height	Specify CADprofi fitting	X ;
Current unit: millimetres		
Cancel	ОК	



✓ Changes in "Divide pipes/ducts" command



We have added an additional dialog window that allows user to easily select filters when determining which lines or pipes he would like to divide.



Divide pipes		x
Segment length		
200	Ъ,	
Apply to selected objects		
O Apply to all objects		
Dynamically		
Apply only for:		
Plumbing/heating		
Ventilation Electrical		
Installation/System	Select 2D line	R.
Form	Select 2D line	rs
Current unit: millimetres		
Cancel	ОК	



✓ Automatic room description – CADprofi Architectural

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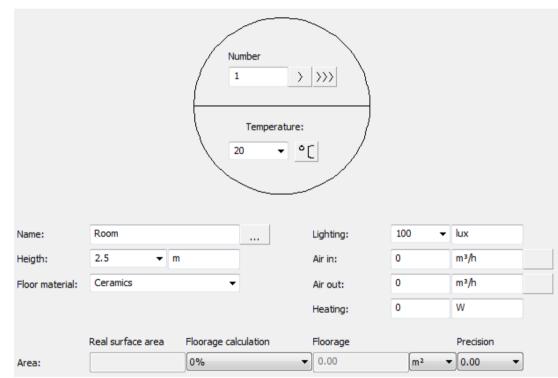
We have created a new command that is used to define rooms with automatic calculation of the surface area.

If the project has been made with CADprofi Architectural walls then it is possible to determine the rooms outline. In other cases it is possible to acquire the outline or the area boundaries which will be treated as rooms.

We have also introduced a possibility to draw rooms division with use of logical lines.

Å.	Define room
	Automatically
	Select boundary
	Outline a room
	Dividing line of rooms

When changing the boundaries, program will automatically calculate and update the room area.





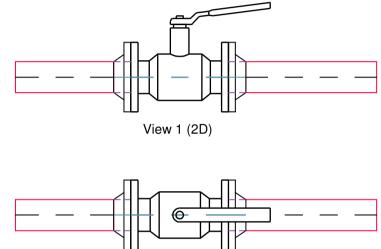
✓ Additional views for flange valves – CADprofi HVAC & Piping



For flanged valves we have added additional views: top view, front view, schematic view (simplified), side view.

One of the new program's features is a possibility to insert symbols used in schemes directly from the flanged valves library. These symbols posses full information about both the type and size of the product used in the project.

The "Create alternative view" command allows to easily get different views of chosen object. It can be used when creating cross-sections, projections and schemes for installations.

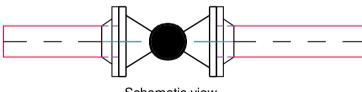












Schematic view

View 2



✓ Multi-variant symbols in CADprofi Electrical

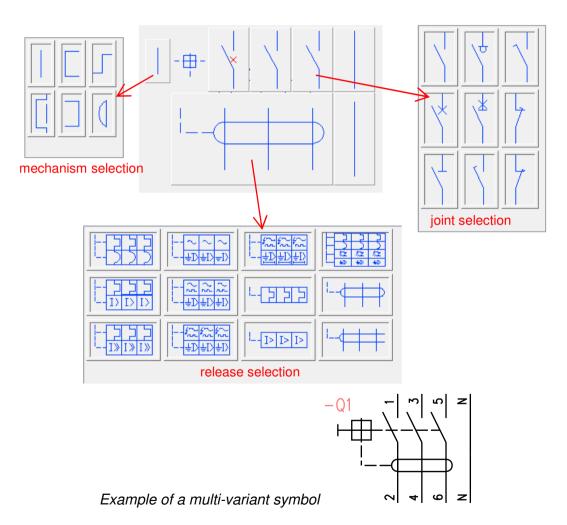
\$7

We have included additional apparatus, connectors and sockets symbols to CADprofi Electrical that have a different option choices of joints, actuators, releases etc. Thanks to these multi-variant symbols user can insert apparatus that contain any kind of contactors or other elements configuration type.

One multi-variant symbol can replace many "traditional" ones. Until now, when user needed to insert some unusual symbols he had to define a new symbol on his own. Currently this task has been made a lot easier because user can choose the right apparatus elements.

Multi-variant symbols can be freely modified with the use of "Edit symbols" command.

Apart from multi-variant symbols we have also added many other symbols such as clips, complex apparatus and passive components according to the 60617-4 standard.



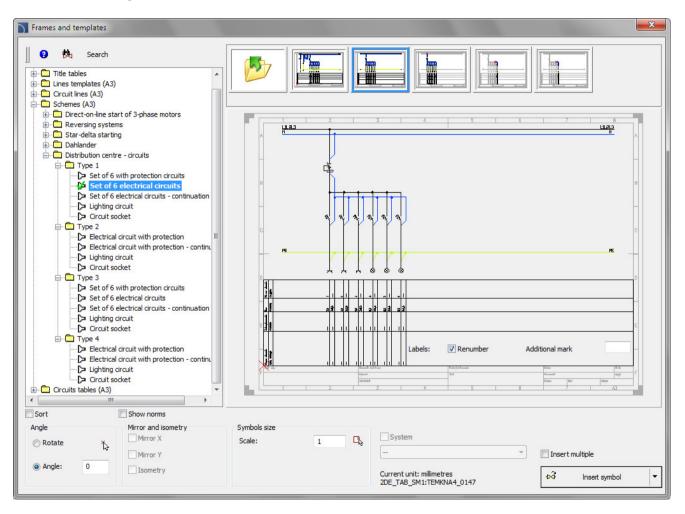


✓ Distribution centre circuits – CADprofi Electrical



We have added distribution centre circuits to the "Frames and templates" command in CADprofi Electrical. There are both full sets as well as single circuits available. Thanks to this it is possible to quickly create a large variety of switchboard schemes.

When inserting new additional elements it is possible to renumber them as well as it is possible to add additional markings to them.





✓ Apparatus modules – CADprofi Electrical

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We have prepared a new command that contains apparatus modules (previously you could find apparatus modules in the "Switchgears" command).

Additionally it is possible for apparatus modules to insert several apparatus at once.

For all apparatus it is possible to insert symbols and one line symbols that are used on schemes.

We have also added voltage surge protectors and terminal blocks to the program.

Apparatus modules		×
📗 🏟 Search 🗊 Details	🗐 Description 🛠	Tools ?
Over-current disconnectors Fuses disconnectors Selective disconnectors Current difference disconnectors Current difference - and over-current disconne Main disconnectors Disconnectors Disconnectors Disconnectors Outron lamp Control lamp Control lamp Outrage surge protector 1-pole Voltage surge protector 3-pole Voltage surge protector 4-pole Outron Lans Outron Lans Voltage surge protector 4-pole Outron Lans Outron Lans Voltage surge protector 4-pole Outron	Name A B C Up=1,5kV Imp= 36.0 83.0 45.0 Up=1,5kV Imp= 36.0 83.0 45.0	Objects to insert
Sort Foto	View and insertion point	Parameters
	Insertion point Base point v	System 💌
	@ 2D	Dimension X:
	◯ 3D Plane [XY] →	Dimension Y:
	○ 2D/3D	Dimension Z:
X 0 8	Side 1 Symbol	Level: 1
	Side 2 Symbol (one line) Object style	
Up=1,5kV Imp=25kA	Current unit: millimetres ELSNNHQ_0072;SW0Y062_0001	Label > Insert multiple F >>> OK



✓ Update of CADprofi Mechanical standards

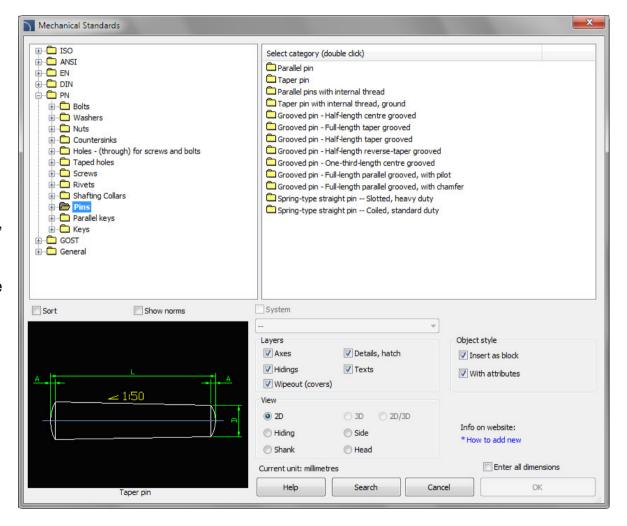
T

We have added and updated many standards in the Mechanical module, including:

ISO 2491, DIN 6885, PN-M-85005, PN-M-85001, PN-M-85002, ISO R 773, ISO R 774, ISO 2492, DIN 6886, DIN 6887,

DIN 6883, DIN 6889, PN-M-85031, PN 85035, PN 85034, PN 85037, PN 85036, GOST 24068-80, GOST P 50536-93.

We have also added new marking symbols, that makes it easier to describe and number objects.





✓ Adjustment to many base CAD programs

Program has been adjusted to work with AutoCAD 2013, GstarCAD 2012 and Bricscad V12.2.

CADprofi works with many base CAD programs including AutoCAD (since the 2000 version), AutoCAD LT, Bricscad, GstarCAD, IntelliCAD, progeCAD, ZWCAD and others.





Update of manufacturers' libraries













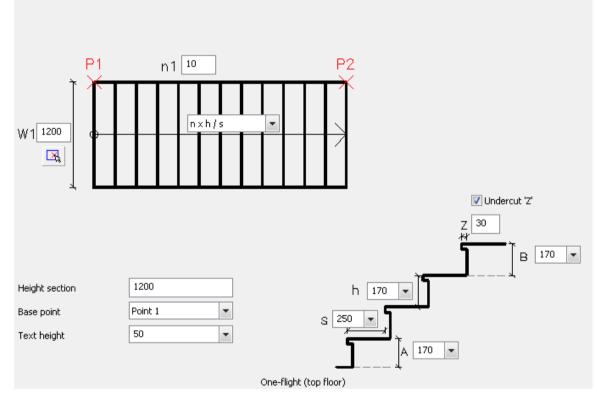
CADprofi 8.01/8.03



✓ Stairs – Architecture

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New command used to insert stairs. Currently you can insert one-flight stairs in the repetitive and ground floor as well as in the cross-section view. User is able to determine both the size and number of the stairs treads. Defining separately the first and the last tread is also possible.





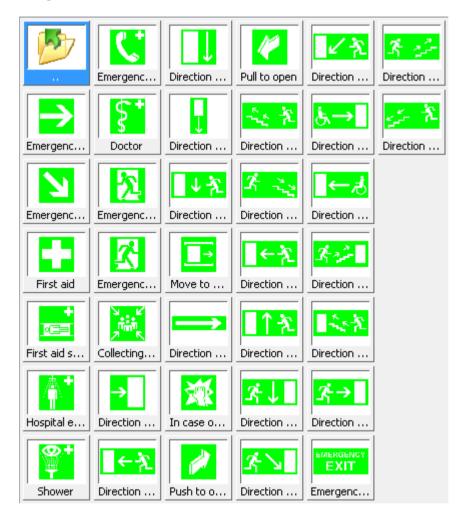
✓ Additional symbols for evacuation and anti-fire plans – Architecture

Additional evacuation, anti-fire, warning and safety symbols.

Improved library display

(new – improved display of thumbnails for all symbols).

Update of most symbols in order to improve their readability when printed.





✓ Drawing walls (additional option) – Architecture

There is a possibility to "measure" the offset in the drawing when drawing walls with offset from other walls or objects.

] Walls ¢ № 🔳 🗙 📩	► ↑ + × 🖻 🖬
 Walls by material Examples Concrete Bricks Clinker Air-brick Expanded polystyrene Mineral wool Walls by purpose *User* Structural walls 	Wall layers parameters Name Thickness Bricks 120 Image: Stress of the stress
Sort	 ● lieft ○ center ○ right Offset: Current unit: millimetres
Help	Cancel



✓ Additional standards in the mechanical module

ANSI flanges - ANSI 300lb/sq.in. and correction of ANSI 150lb/sq.in.

Keyway on shaft - DIN 6885

Additional rivets and screws – including the ones with the GOST standards

Hexagon socket head shoudler screw - ISO 7379

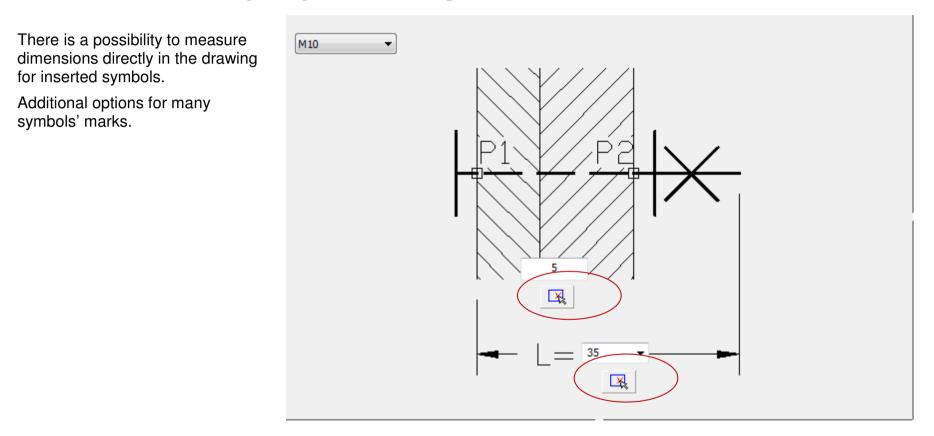
External Retaining Ring - DIN 471, DIN 472, PN 85111

Circlip for Shafts - DIN 6799, PN 85112

Mechanical Standards					— ×
∓- <mark>©</mark> ISO	Article	D1	S		
- ANSI	-30 x 2	30.0	2.0		
EN 💼 EN	-32 × 1.5	32.0	1.5		
🗉 🧰 DIN	-32 x 2	32.0	2.0		
PN PN	- 34 × 1.5	34.0	1.5		
🕀 🛄 Bolts	- 34 x 2.5	34.0	2.5		
Washers	-35 × 1.5	35.0	1.5		
⊕ — Countersinks	- 35 x 2.5	35.0	2.5		
	- 36 × 1.75	36.0	1.8		=
Holes - (through) for screws and bolts	38 × 1.75	38.0	1.8		
	- 38 x 2.5	38.0	2.5		
E Clews E □ Rivets	- 40 × 1.75	40.0	1.8		
Shafting Collars	40 x 2.5	40.0	2.5		
External Retaining Ring	42 x 1.75	42.0	1.8		
Internal Retaining Ring	42 x 2.5	42.0	2.5		
Circlip For Shafts	45 x 1.75	45.0	1.8		
🛨 🛅 Pins	45 x 2.5	45.0	2.5		
GOST	48 x 1.75	48.0	1.8		
- 🛅 General	48 x 2.5	48.0	2.5		
	50 x 2	50.0	2.0		
	- 50 × 3	50.0	3.0		-
Sort Show norms	System				
				*	
	Layers			Object styl	e
	🗸 Axes	🔽 D	etails, hatch	V Insert	as block
	V Hidings	🔽 те	ovte		
			52(5	📝 With at	tributes
	Wipeout (cov	/ers)			
	View				
	© 2D	O 31	D 🔿 2D/3D		
	<u> </u>			Info on w	ebsite:
	©	() Si	ection		add new elements ?
	0	🔘 Vi	ew		
	Current unit: millir	metres			Enter all dimensions



✓ Extended functionality of symbols and signs in the mechanical module



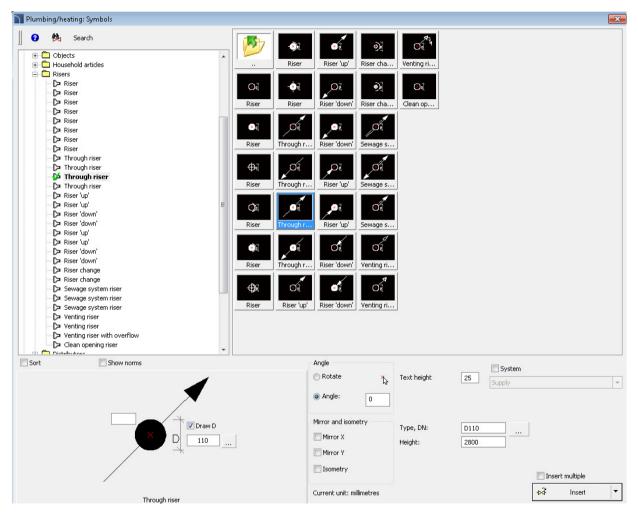


✓ Risers in the HVAC & Piping module

New risers symbols for which there is a possibility of inserting in a specific scale or giving the actual dimensions (diameters).

You can also determine the risers height, thanks to which the the vertical cables are being included in the cables specifications.

Risers symbols can be edited or converted to into other variants (eg, the through riser into an end riser symbol)



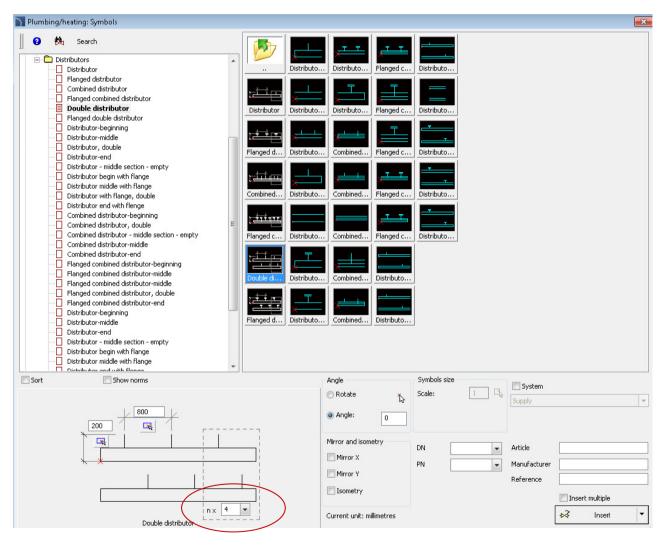


✓ Distributors in the HVAC & Piping module

Parametrical distributors' symbols, for which it is possible to define any size type as well as any number of sections.

Previously distributors were "folded" from sections and inserted using the "Multisymbols" command. New symbols make it much more easier and faster to insert distributors.

You can edit both the size and the number of sections for symbols that were inserted into the drawing.



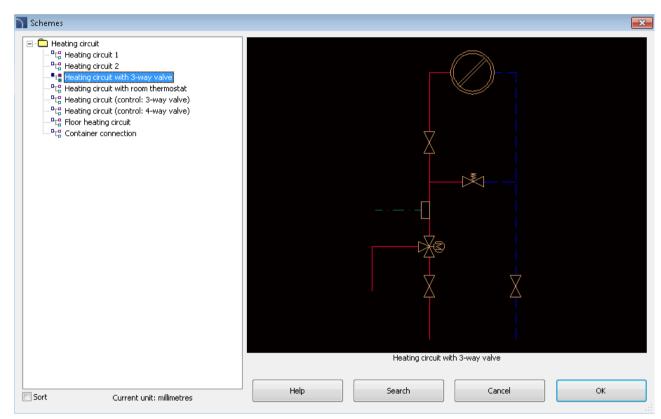


✓ Schemes in the HVAC & Piping module

Update of schemes available in the "already made schemes". Currently all schemes are adapted to be inserted in new distributors' symbols.

All symbols from the predefined schemes can be edited using the quick edition tool (previously symbols didn't have this functionality).

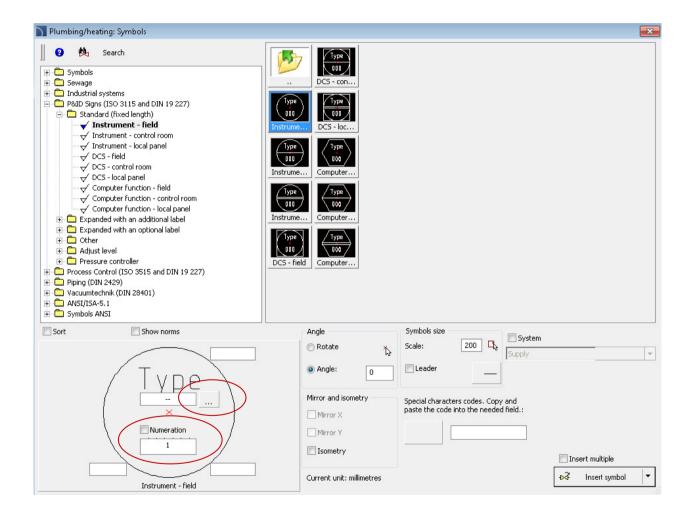
What is also new in the schemes is that when they are being inserted to the drawing all elements and lines are being automatically translated in accordance to the program language (previously only Polish and German languages were supported).





✓ Extended functionality of many symbols in the HVAC & Piping module

For many symbols an ability to specify or select different parameters was introduced. You can also use the functionality of automatic numbering (eg, for measuring points in symbols of automation process).





✓ Frames and templates in the Electrical module

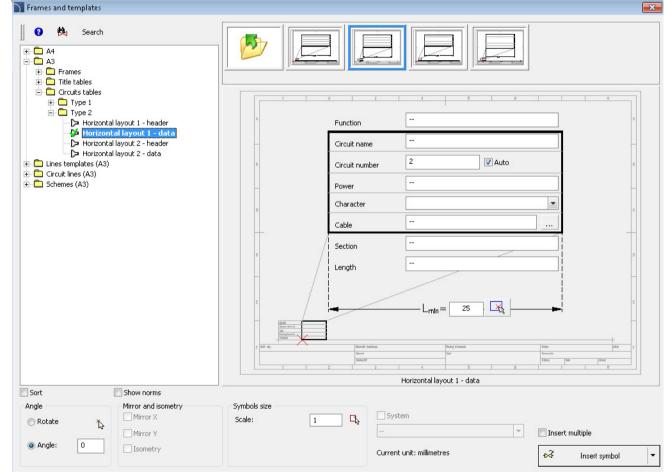
Frames according to ISO 5457 – addition options for frames insertion.

Tables according to ISO 7200 – additional options, including multiline attributes in the company address or the project name.

Cover page sheet -A4.

Additional electrical circuits tables.

Automatic numbering of drawing tables inserted into a one, single drawing.





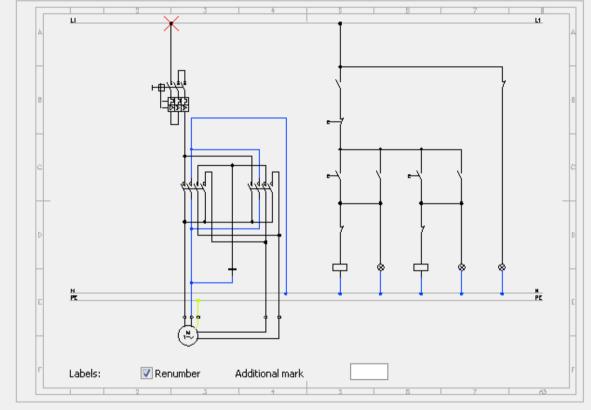
✓ Line circuits and already made schemes in the Electrical module

Potential lines – prepared in a parametrical way. Thanks to this it is possible to determine any type of spacing between the schemes' lines (size of the scheme).

Circuit lines – additional lines used to quickly create schemes.

Electrical schemes – already made schemes (Direct-on-line start of 3phase motors, reversing systems, Star-delta starting, Dahlander).

When inserting the schemes all symbols are being automatically numbered.



Forward and reverse selection of motor rotation, motor 1ph



✓ Expanded library of symbols in the Electrical module

Additional symbols:

Terminals

Complex apparatus – contactors, relays etc.

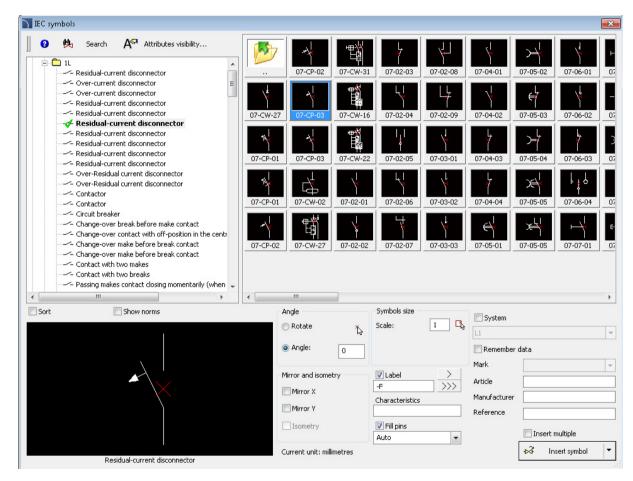
Cable joints schemes

Standard 60617-8:2004 "Measure devices"

Standard 60617-6:2004 "Making and transforming electricity"

Standard 60617-5:2004 "Active elements"

Line address symbols (address to the next or previous sheet).





✓ Frames and tables

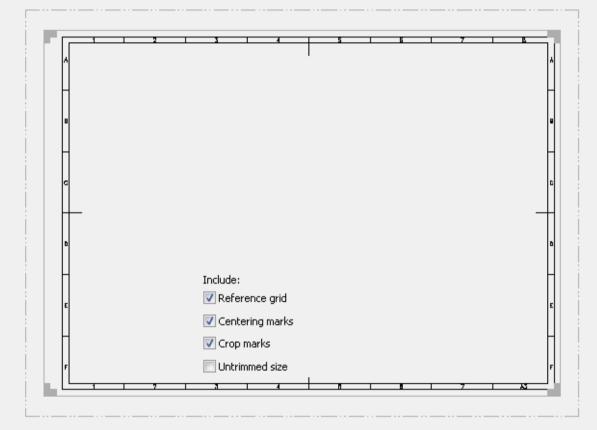
New command that is used to insert frames and tables.

New frames according to ISO 5457. When you insert a frame you can choose the elements which will be included into the drawing (reference grid, centering marks, crop marks and untrimmed size). Frame for the untrimmed size also contains markers for sheets making.

New tables according to ISO 7200, in which we included multiline attributes in the address and project name.

Modified specification tables.

Modified cable legends.

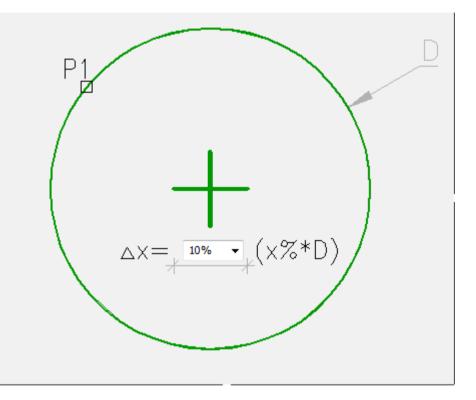


A3 - ISO



✓ Drawing tools

In the command "axis between the lines", "circles axis", "center marks" and "bisector" we have included a possibility to define parameters (extension of the symmetry and bisector axis and the mark size).

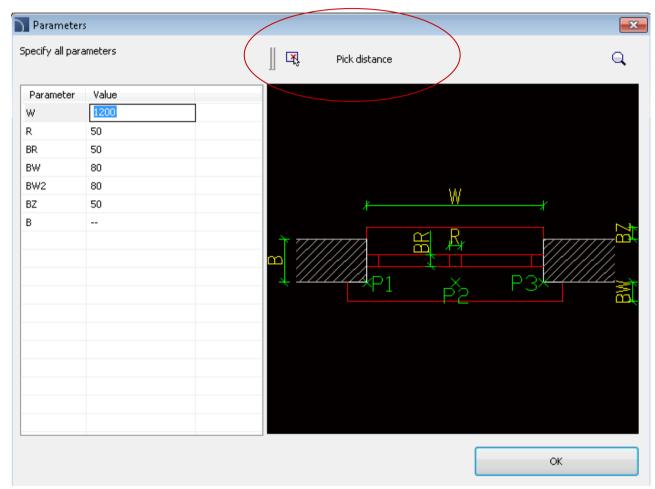




✓ Indicating dimensions, angles and scales in the drawing

In many dialog windows, buttons were introduced in order to dynamically indicate dimensions and angles directly in the drawing. Thanks to this it is possible for example when you define the parametrical object dimensions to "measure" all or selected dimensions without having to type them from the keyboard.

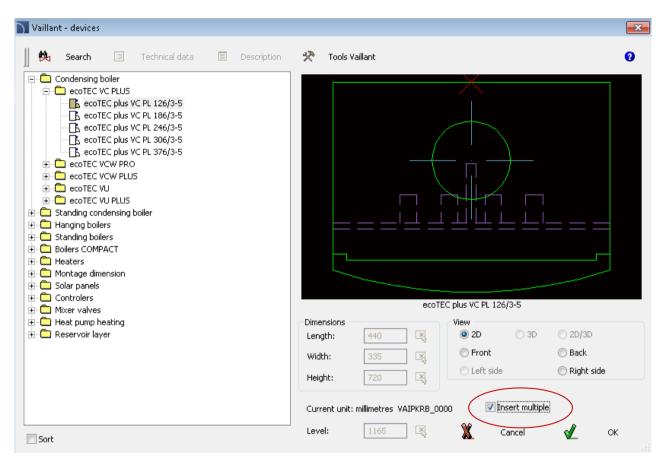
In the dialog window where you can insert symbols we have also introduced a possibility to get the scale from other symbols that were previously inserted in the drawing.





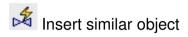
✓ Insert multiple

In some commands we have added an option "Insert multiple" which allows to insert a selected object multiple times. Symbols and objects that are being inserted using this option benefit from all CADprofi features such as automatic interruption of lines and cables, automatic reduction insertion, adjustment of the angle when connecting to other objects etc. That's why the "insert multiple" option gives better results than just normal copying with the base CAD command.



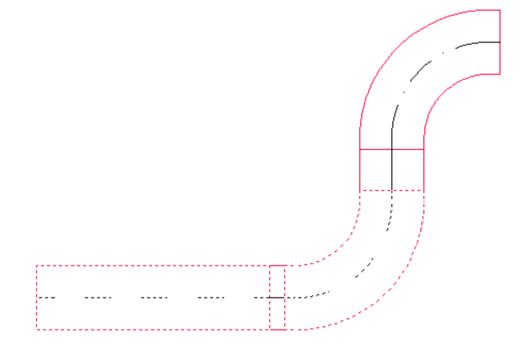


✓ Draw similar objects



This command has been extended and now it also recignizes cables, ducts, trays and fittings.

Schematic objects and cables are also being recognized.





✓ Drawing schematic lines

Additional option "Overwrite elements", which allows for faster choosing the right type when drawing single lines. When this option is enabled the chosen line type replaces the lines on the list (so there is no need to delete the lines from the list that user doesn't want to use anymore).

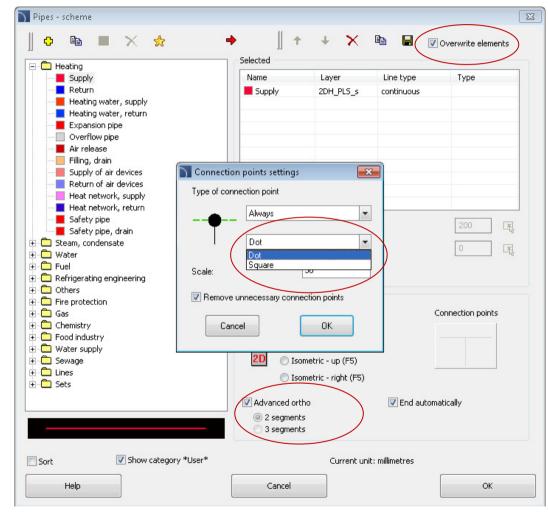
When drawing using the advanced Ortho you can choose in the dialog window to automatically draw two or three lines. Previously this option was only available in the command line.

When drawing lines program will automatically insert connection points.

In the new version user can choose the kind of point.

User can indicate in the drawing the spacing between lines and the offset (when drawing along the walls or other objects).

There is a possibility to draw lines with polyline (see description below).



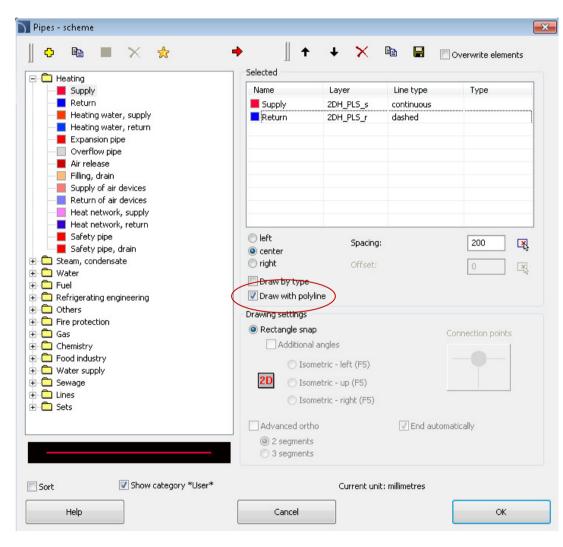


✓ Schematic lines - polyline

At the request of many users we have added to the "Pipes – scheme" a possibility to draw lines with the help of a polyline. Therefore, we have added the support of polyline in many other commands. This applies particularly to editing line types, making specifications, describing lines as well as commands used insert symbols into lines (in a polyline you can insert all symbols except for the cross symbols).

When drawing lines with the polyline next lines' sections are one drawing object. When it is necessary it is very easy to select this object, for example when we need to check the length of the whole line. This is important when designing large lines, telecommunications and water networks etc.

If necessary polylines can be broken into lines using the standard base CAD command "Explode". Broken lines are still being treated by the CADprofi program as normal lines.

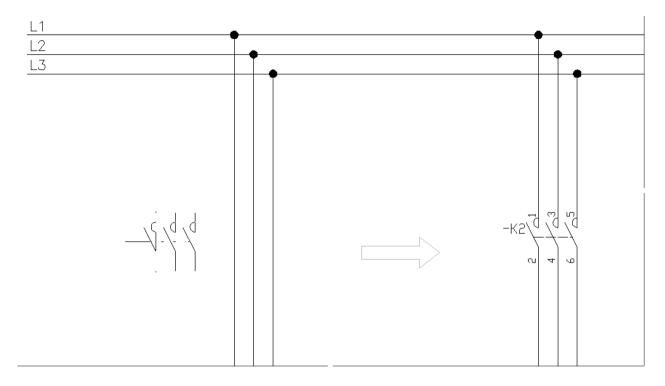




✓ Multiline symbols

Many symbols in the CADprofi program are multiline symbols. In the new version those symbols can be inserted with an automatic multiple line break.

When deleting multiline symbols program will automatically connect lines where the symbols have been inserted.





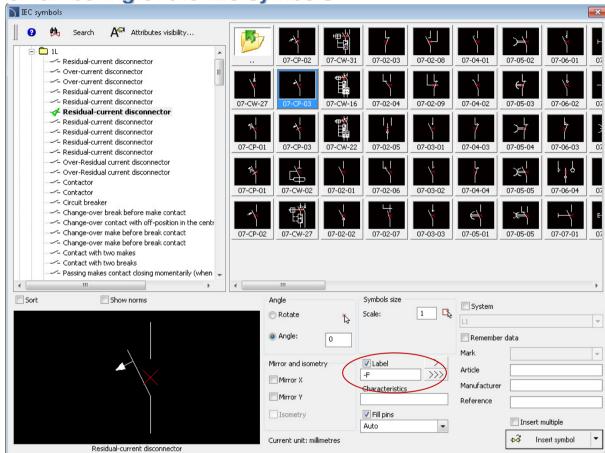
✓ Enhanced possibilities of the numbering of the IEC symbols

Possibility to use multilevel numbering.

Faster numbering of symbols in large drawings.

Automatic designation of numbers directly after selecting the right symbol in the library (previously numbering was only available "at request" ie when clicked the ">" or ">>>" buttons).

You can use prefixes in numbers when inserting already made schemes and complex apparatus.





✓ Attributes visibility template

IEC symbols which are available in CADprofi 8 have got visible attributes that include objects' labels (numbers) and their technical parameters. Thanks to the template, user can specify which parameters he wants to have visible for inserted symbols.

Each attributes have been moved to separate layers so you can disable the layer and therefore also a particular attribute for all symbols in the drawing.

\mathbf{D}	Settings of attributes visibility	×						
	Mark attributes which are to be visible							
	✓ Label							
	Characteristics							
	✓ Link							
	✓ Article							
	Manufacturer							
	Reference							
	Function							
	Contractions							
	Connections							
	ОК							



✓ Isolations

Possibility to draw isolation of pipes and ducts and for all bends, curves and reductions.

Isolations are included when drawing single installation elements as well as when drawing whole lines' strings, when making connections and when editing lines and fittings.

🖃 💼 Plumbing/heating			Installation and drawing				
Pipe			Installation	Supply			
🖸 🛅 Pipes flex			Reference edge	Axis			
			Offset: S	0			
			Туре	Pipe			
			Manufacturer and ty	e			
Elbow parameters —			Manufacturer				
			Туре				
Radius (171.45)	1.5		Product				
Radius as a multiplier o	of width		Dimensions				
			Diameter: D	114.3			
Type Elbo	w 💌		Options				
Limit max angle to	90°		Installation fit				
			Diameter fit				
Dimension E	20		Join object				
Dimension			Thickness of isolation	30			
Dimension F	20						
Ę	BA /						
Jort		Sp	ickness of isolation ecity isolation thickness Description				

X

Pipes - plan 2D



✓ Defining user connectors

In CADprofi 8 we have introduced an ability to define and add the user's own type of fittings, ducts as well as cable trays and channels. Currently these data is definied by editing text files that are placed in the User Data folder.

By default for the HVAC & Piping module it is located in the below folder:

 $C:\CADprofi\UserData\Components\Sanit\Pipe2D\User).$

And for the Electrical module it is located below: C:\CADprofi\UserData\Components\Electro\Pipe2D\Use r).

In the next version an editor for these data will appear.

AcCzworRe.utc	AcRedRe.utc	🖻 HsKolaRoZ.utc
AcCzworReRo.utc	AcRedReRo.utc	HsPipeFx.utc
AcCzworRo.utc	AcRedRo.utc	HsPipeRo.utc
AcCzwrRRo.utc	AcTroj3Re.utc	🖻 hsReduRo.utc
AcCzwrTRe.utc	AcTroj3Ro.utc	🖻 HSTroj3Ro.utc
AcCzwrTRo.utc	AcTrojCRo.utc	HSTrojCRo.utc
AcKolaFx.utc	AcTrojReRo.utc	HSTrojTRo.utc
AcKolaRe.utc	AcTrojRoRe.utc	User.utb
AcKolaReZ.utc	AcTrojTRe.utc	
AcKolaRk.utc	AcTrojTRo.utc	
🖻 AcKolaRkZ.utc	HSCzworRo.utc	
AcKolaRo.utc	HSCzwrRRo.utc	
AcPipeFx.utc	HSCzwrTRo.utc	
AcPipeRe.utc	HsKolaFx.utc	
AcPipeRo.utc	🖻 HsKolaRo.utc	

📔 Pipes - plan 2D 🧮 🔀								
□ 🗀 Plumbing/heating			Installation and drawing					
Pipe			Installation	Supply				
⊡- C Pipes flex			Reference edge	Axis				
			Offset: S	0				
			Туре	Pipe				
			Manufacturer and type					
Elbow parameters			Manufacturer	~				
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Radius as a multiplier of	width	Ξ	Dimensions					
			Diameter: D	114.3				
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	$R_{A}}}}}}}}}$							
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Always show dialog								
			Help	Cancel OK				
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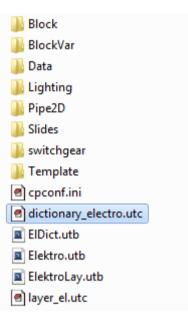
✓ Language dictionaries

In CADprofi 8 we have introduced an ability to translate libraries and program content in additional languages. In order to have complete specifications in all languages we have introduced in the program dictionary files, which can be edited by users.

Way how to edit those dictionaries is being described in the dict*.utc.files.

We have shared files of the substantive program content (symbols' libraries). For those who are interested we can also give dictionaries from the program interface.

- Common_ru.utb
- 😭 cp_help.chm
- cpconf.ini
- Dict_ru.utb
- Dictionary_ru.utc



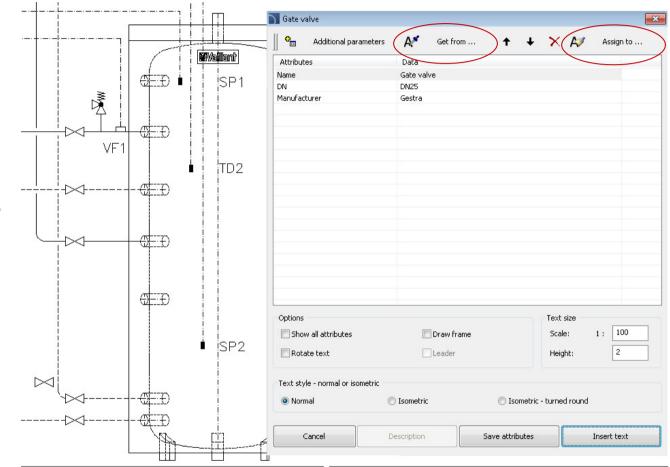


✓ Extended command "Attributes and descriptions"

In the command "Attributes and descriptions" we have added an option for quick synchronization of attributes between objects.

Option "Get from..." is used to retrieve selected attributes from an object that will be selected in our drawing.

Option "Assign to...' is used to enter selected attributes to objects that are already selected in the drawing.





✓ And many other changes

In CADprofi program we have introduced many changes, including:

- Significant acceleration of many commands It's mostly visible in large drawings.
- Increased functionality of symbols and objects that are definied by user.
- Introduction of additional options in objects and parametrical symbols (multiline attributes, inserting objects with a specified detail, remembering of data that is included in the registry etc).
- Improved creation of graphical legends

¢.	Outside temperature sensor			
	Swing check valve			
\bigcirc	Diaphragm extension tank			
0	Heating circuit			
Y	Funnel			
P	Manometer			
0	Pump			
\bigcirc	Pump			
Δ	Reducer			
Φ	Thermometer sensor general			
Я	Cap valve			
202	Ball valve			
Χ	Stop valve			
₹	Three-way valve			
M	Overflow valve			
F	Non-return valve with discharge			
	Pipe - Supply			
	Pipe - Return			
	Pipe - Warm water			
	Pipe - Cold water			
	Pipe - Circulation			



✓ Adjustment to many base CAD programs

AutoCAD 2012 with Service Pack, Bricscad V12, ZWCAD 2012, progeCAD 2011, 4M CAD, JetCAD, IntelliPlus, GstarCAD.





Update and addition of additional manufacturers' libraries

New products in the manufacturers' libraries:

WILO - update of many pumps (engine change) and introduction of many new pumps

SALMSON - a significant expansion of products' library

Legrand – update of the electrical apparatus. Simultaneous insertion of many apparatus into the project – new feature.

Lovato - new library of electrical equipment (about 7 thousand new devices)

Reflex, EMB, KSB - many new devices

Wavin – update of products in order to use them with the one-click technology















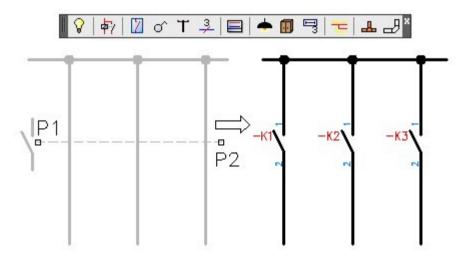


Changes introduced after CADprofi 7.01 version



✓ Automatic labels numbering during inserting many symbols

CADprofi 7 introduced automatic label numbering when inserting single symbols. New version also works while inserting many symbols, for example in option "insert into many lines" or when the option "insert multiple" is turned on.



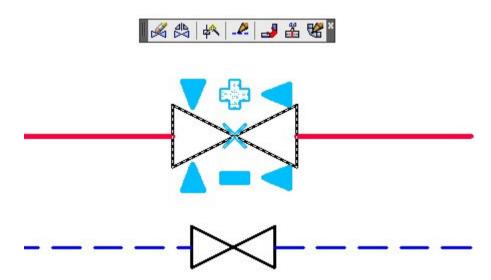


✓ Symbols dynamic scaling

In the command that is used for dynamic editing (symbols reverse) we introduced the possibility of scaling symbols using tags "+" or "-".

When you change the size of the symbols inserted in the cable our program automatically adjusts the connection points.

Dynamic scaling can be performed on most symbols except the CADprofi software symbols whose size is dependent on the physical dimensions of objects and isometric symbols.

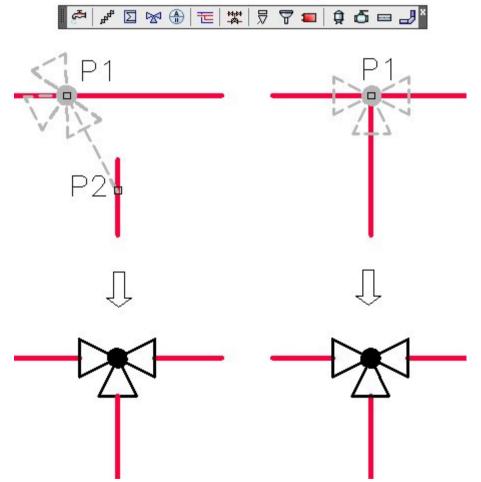




Improved inserting of cross symbols

In CADprofi software it is possible to insert cross symbols. So far, in order to insert a symbol in the crossing of two lines it was necessary to point the main line (P1) and then point the secondary line (P2). It was not possible to directly point the crossing point of two lines.

CADprofi 7.11 introduced automatic insertion of cross symbols with the ability to directly point the line crossing. We have also left the current mode, which simplifies inserting symbols in case when lines are not connected together (command makes it easier to attach these lines).





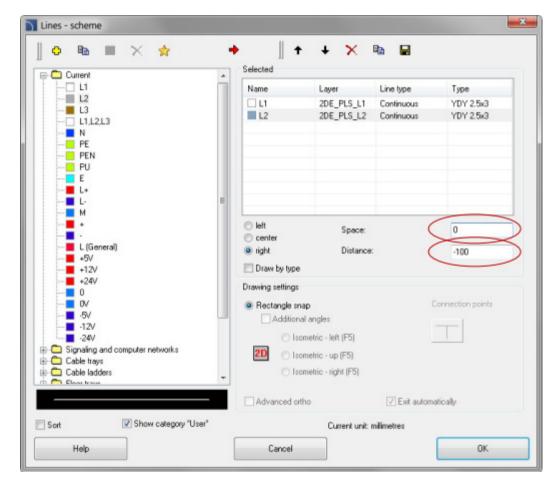
✓ Changes during schematic lines drawing

• Space

While drawing several lines we have introduced a possibility to put lines "one above the other", with zero space.

• Distance

In the command "Lines - scheme" it is possible to draw lines with specified distance. This option is used for example when drawing lines that run along the walls (designer shows points on the walls and then draws them with the distance). In CADprofi 7.11 we have introduced a possibility to draw lines with negative which can become useful for example when drawing lines that are routed inside the walls.



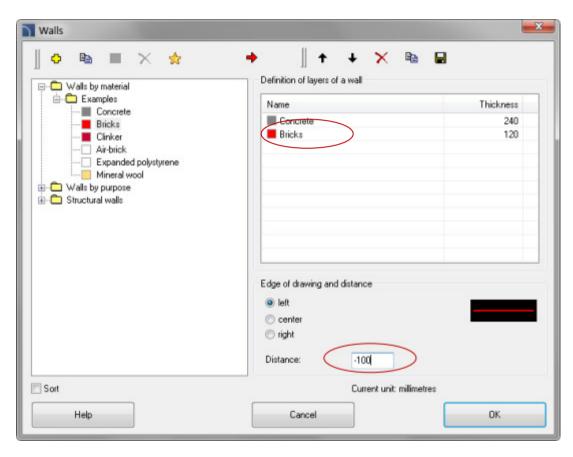


✓ Changes during walls drawing

• Drawing with negative distance

When drawing walls it is often necessary to draw the symmetry axis of the carrier layer which for a multi-layered wall is not located in the center of the wall.

In CADprofi 7.11 we have introduced the possibility to draw walls with negative distance making it possible to implement such a distance that drawing takes place carrier layer symmetry axis.

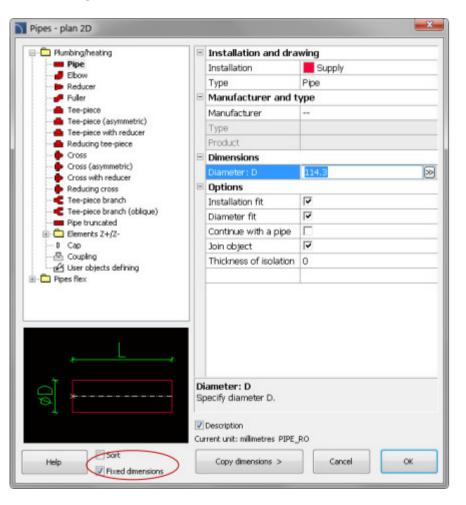




✓ Fixed dimensions while drawing lines and 2D shapes

When drawing next lines or 2D shapes CADprofi software proposes the main diameter, the same that had the last line (pipe or ventilation) that was recently drawn. When you insert a reduction the software automatically changes the default line diameter to a diameter of line that was reduced. In this way next lines are drawn with a reduced diameter.

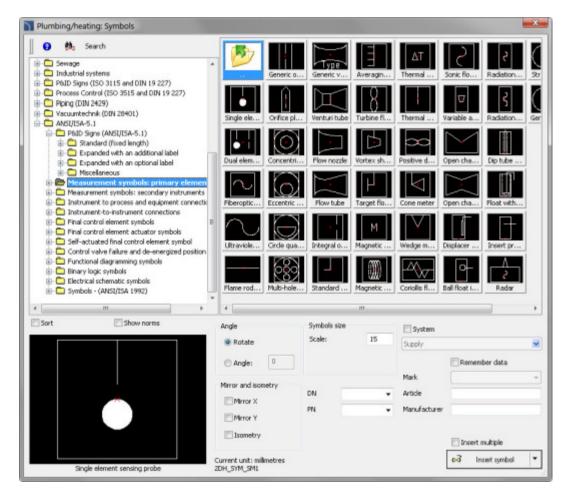
Sometimes this mechanism interferes, therefore in CADprofi 7.11 we have introduced the "Fixed dimensions" option which blocks changes of shapes default dimensions.





✓ New symbols in HVAC & Piping module

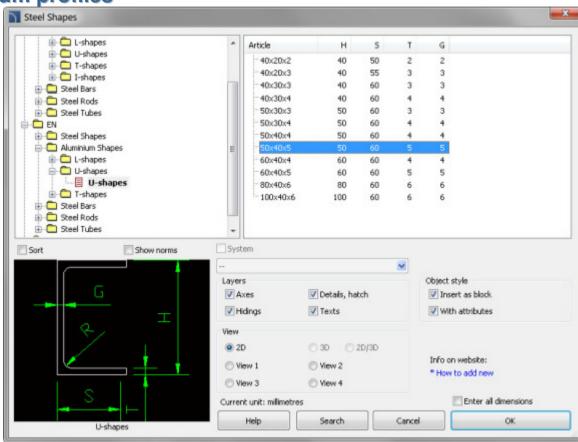
CADprofi HVAC & Piping software is being successfully used in designing installations in general construction as well as in industry. In order to extend this we have included many symbols from ANSI / ISA standards which allow better, broader cooperation and implementation of projects according to additional standards.





Shapes and steel and aluminium profiles

In CADprofi 7.11 we have updated existing standards and we have introduced additional standards: PN, EN, DIN and ANSI including steel shape shapes, steel and aluminum profiles.





✓ PN and EN flanges

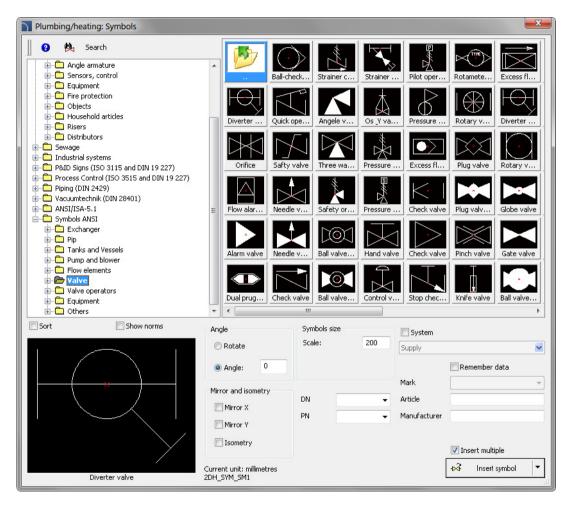
New standards (PN and EN)were introduced. They include different types of flanges.

	Article		D	s	н	Bolts	
Welding Flanges for Pressure Vessels DIN 2003 Welding Flanges for Pressure Vessels DIN 2003; We	PN 2.5 PN 6 PN 10 PN 10 DN10 DN15 DN20 DN25 DN20 DN25 DN20 DN25 DN32 DN32 DN40 DN50 DN50 DN50		90 95 105 115 140 150 165 185 200	17.2 21.3 26.9 33.7 42.4 48.3 60.3 76.1 88.9		M12 M12 M12 M12 M16 M16 M16 M16 M16 M16 M16	
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✓ ANSI symbols in HVAC & Piping module

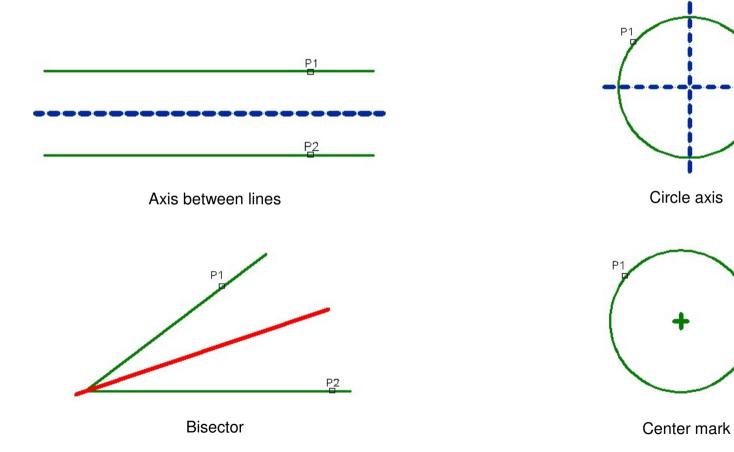
For HVAC & Piping module we have added over 300 additional symbols according to ANSI standards.





✓ Quick tools

We have added four new commands to quickly draw the axis between the lines, circles axis, center marks and construction lines for bisector.





✓ Additional options in the command "Quick edit"

In the command "Quick edit" we have added additional options allowing to quick copy and rotate the symbols.



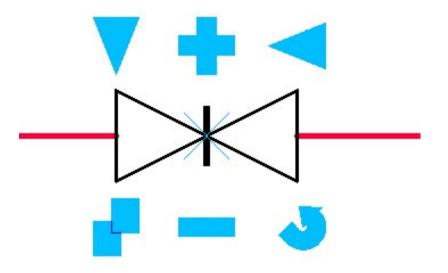
Copying – this option allows for quick symbols copying with automatically inserting into lines.

Rotation – quick symbol rotation relating to base points.

Scaling – in new version we have updated symbols scaling with attributes.

Mirror – rapid reversal of symbols relative to the axis X or Y.

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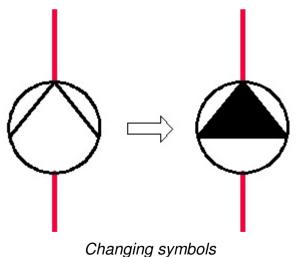


✓ New command – "Edit symbols"

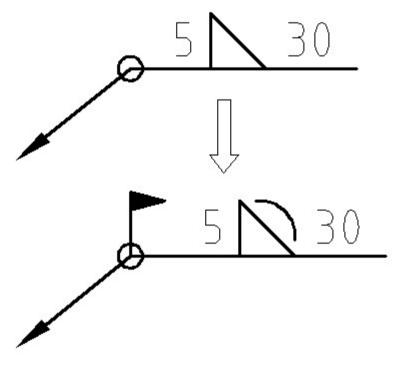
New command "Edit symbols" allows to edit CADprofi symbols in every way.

This command is especially useful when editing symbols weld marks, roughness etc. Until now if you needed to edit such symbols it was necessary to erase the symbol and insert a new one. New program version have made modifying symbols a lot easier.

Command "Edit symbols" is also used to convert a symbol into an alternative one.



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Editing symbols



✓ New command - "Insert similar object"

🗚 Insert similar object

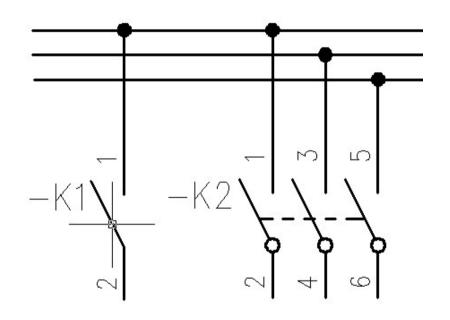
When creating projects it is necessary to insert into the drawing symbols from different categories. CADprofi program has got a very large library of symbols and choosing the right symbol may take some time when searching the right library and changing categories. New command simplifies this task.

Command "Insert similar object" rapidly opens the right category in the library which allows you to access the necessary symbols faster. All you need to do is to select the desired symbol in the drawing.

This command will simplify work for example when inserting alternate, one and multipolar symbols while making Electrical schemes. In the HVAC module command "Insert similar object" will be used for example when inserting alternate valve symbols and symbols from many categories.

Notice: The "Insert similar object" works now only on symbols. In next versions it will be possible to sue this command on all CADprofi objects.

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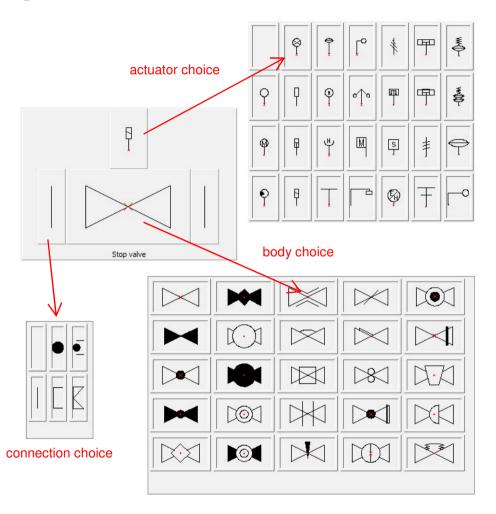
✓ Multi-variant symbols in the HVAC & Piping module

In HVAC & Piping module we have added valve symbols for which there is choice of different options of bodies, actuators and connections (for example: flanged, threaded, welded).

Multi-variant symbols can be modified by using the "Edit symbols" button.

Multi-variant symbols ease the work because one multi-variant symbol can replace many "traditional" symbols. Until now when it was necessary for example to insert a valve with a right actuator into the drawing we had to find the right valve and the right actuator. Now this valve can be inserted in one easy step. In addition to this an easy edition of symbols inserted to drawing is possible (for example changing flanged symbols into threaded symbols).

Multi-variant symbols can be used in usual schemes as well as in isometrics.





✓ Ribbons optimization and some minor improvements in many commands

We have optimized buttons layout on CADprofi ribbons so they take up less space. This was especially important for users who are working on low resolution screens. In ribbons and toolbars we have included commands that have appeared in the current program version.

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Exception	Image: Cool of the coo	Architectural

CADprofi ribbon (in GstarCAD 2011)

In CADprofi 7.21 we have introduced optimization and adjustments in many procedures, which purpose is to increase the speed and reliability of the program.