



CADprofi 2019.17/18



CADprofi

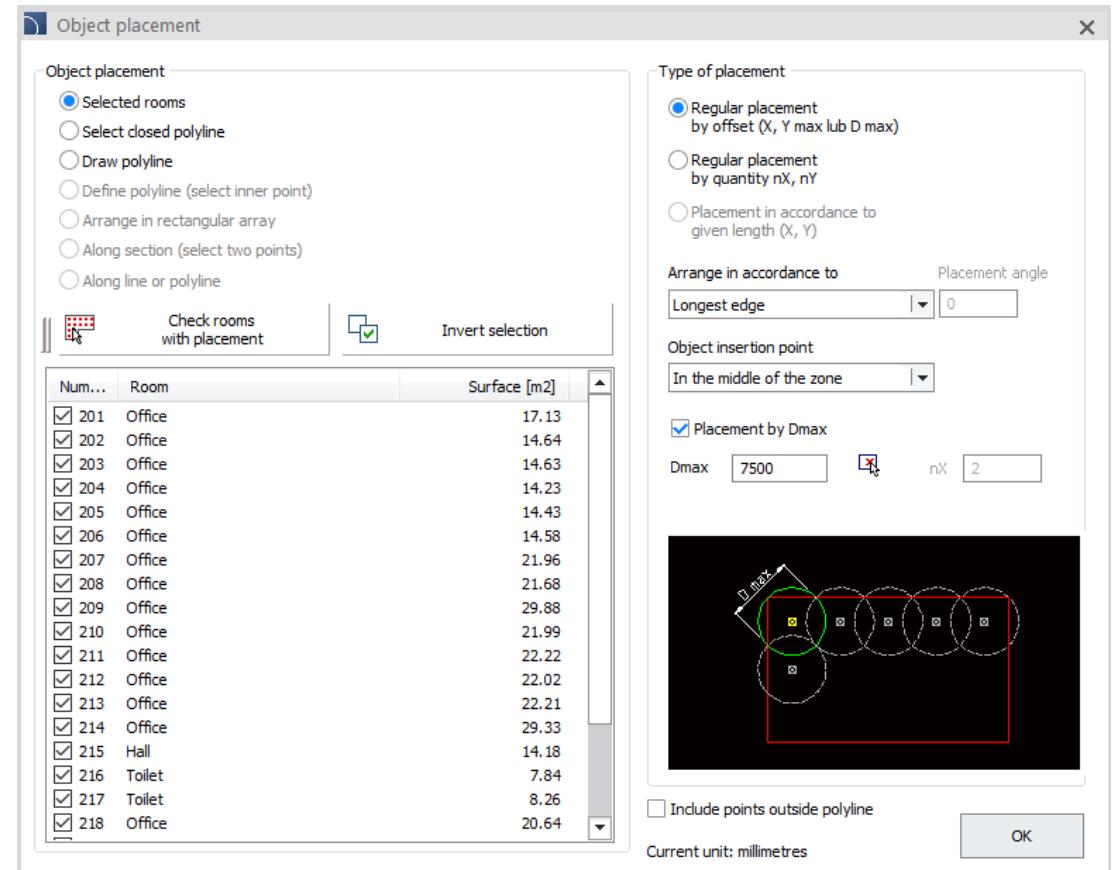
✓ CADprofi – object placement

The *Arrange* command allows user to quickly arrange objects in selected rooms. It is possible to arrange objects in selected rooms, in the indicated boundary (polyline) or in the newly drawn boundary. User can arrange objects by regular placement by offset or quantity.

The *Arrange* command significantly speeds up the insertion of fire detectors, sprinklers and other objects.



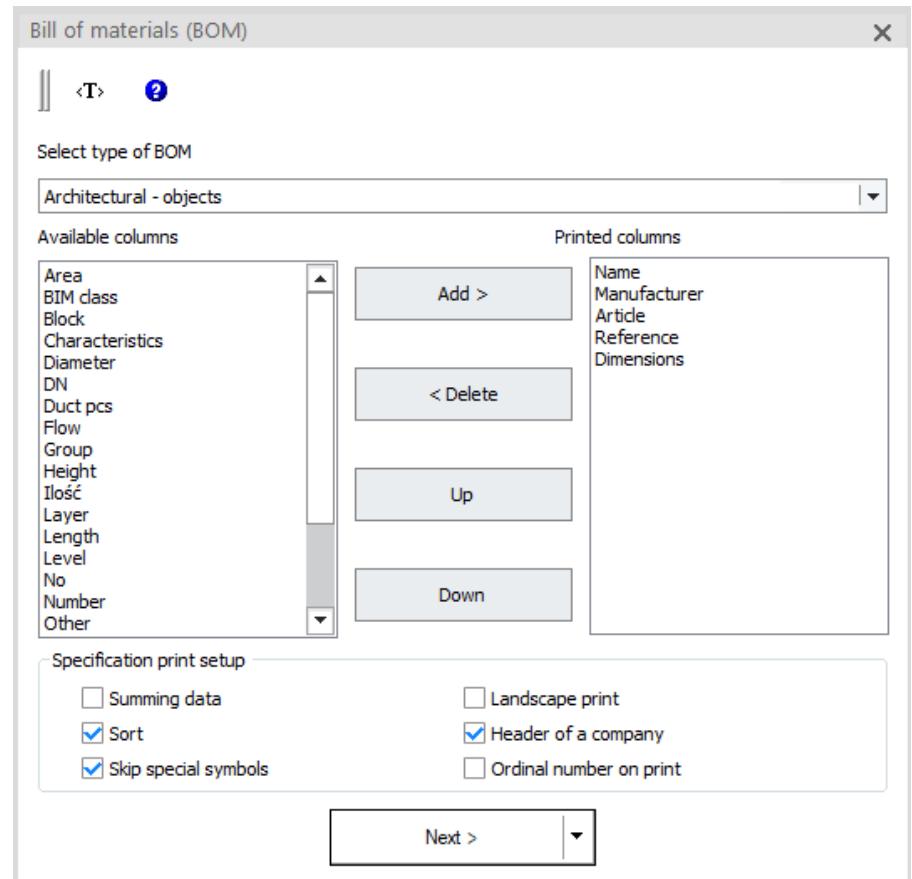
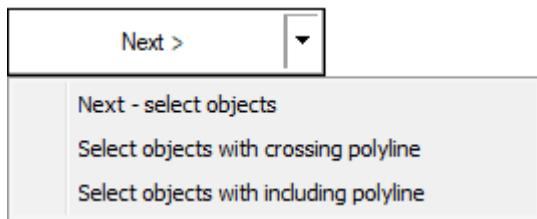
[Watch video](#)





✓ CADprofi – specifications (command extension)

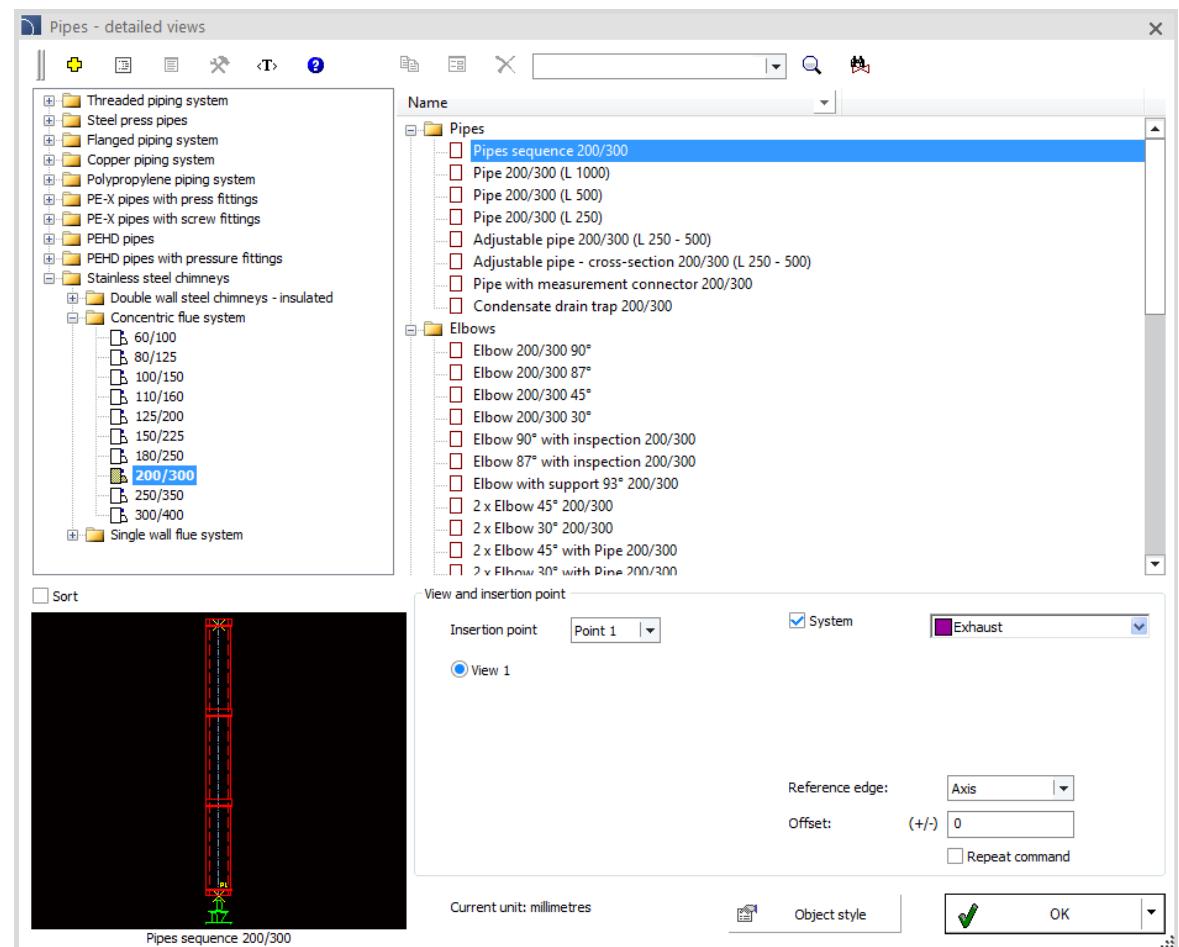
The *Bill of Materials*  command has been extended with the possibility to include select objects with a crossing polyline or an enclosing polyline. Thanks to this it is possible to obtain specifications from specific areas in the drawing.





✓ CADprofi HVAC & Piping – concentric flue system (additional sizes)

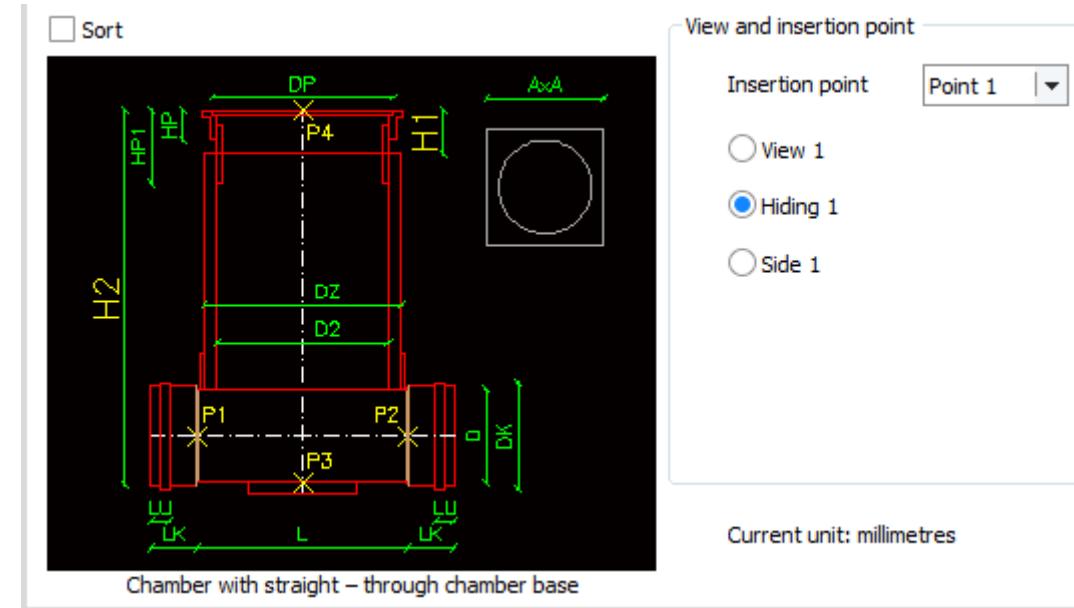
On user request, the concentric air / flue gas system was expanded with additional sizes.





✓ CADprofi HVAC & Piping – additional insertion points in the sewer wells

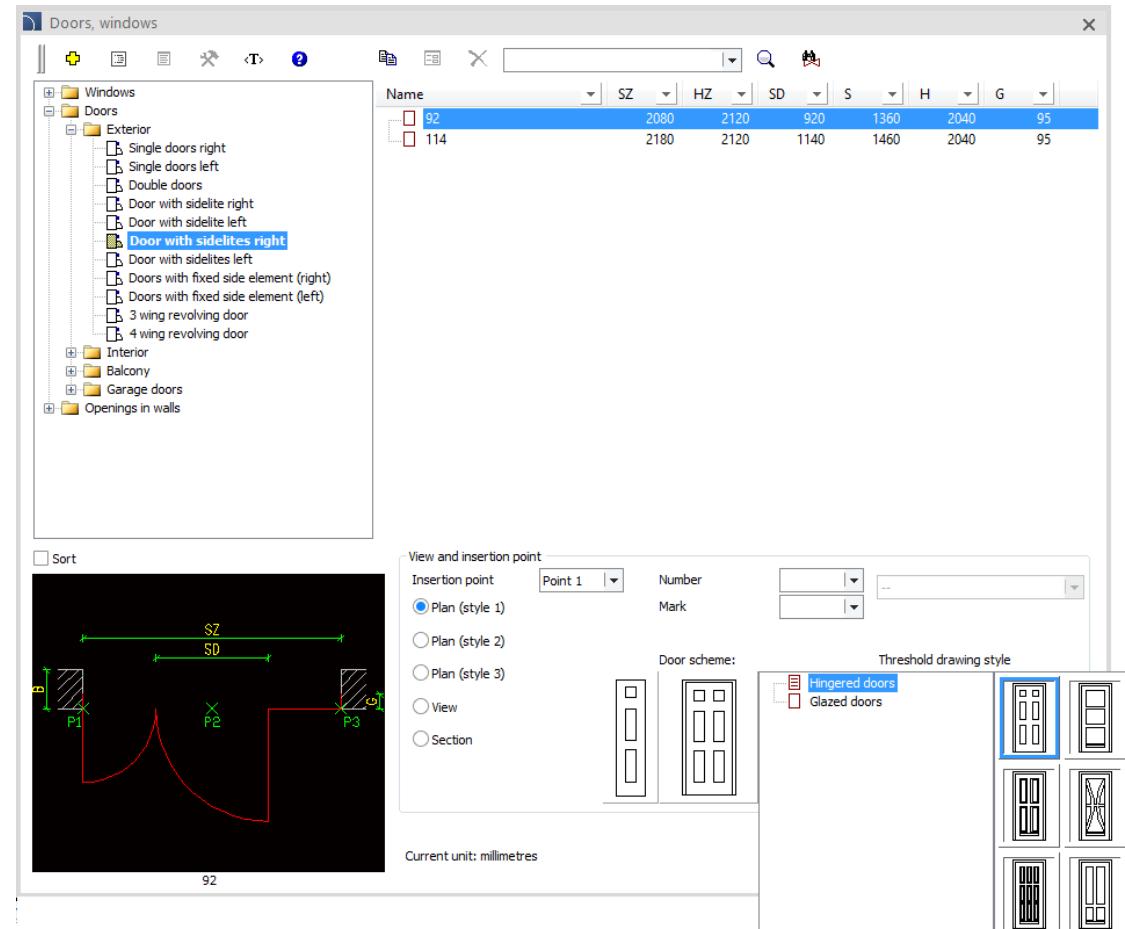
Additional insertion points have been introduced in the sewer wells in order to facilitate accurate positioning of the wells, e.g. relative to the terrain in the network profiles.





✓ CADprofi Architectural – new door views

The woodwork library available in the CADprofi program has been expanded with new door views.

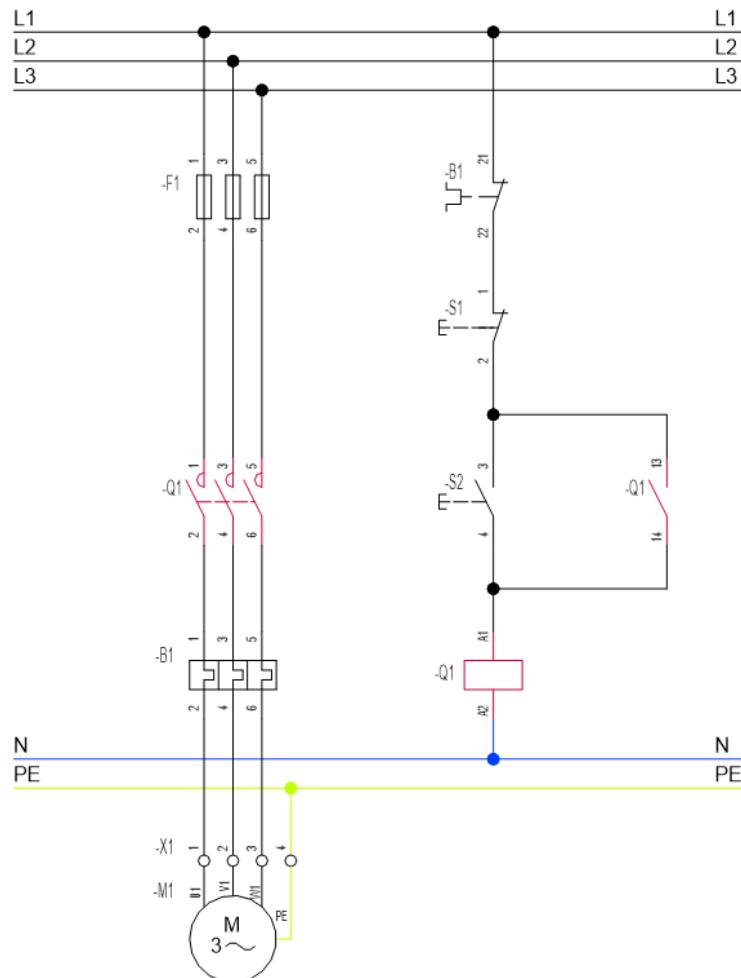
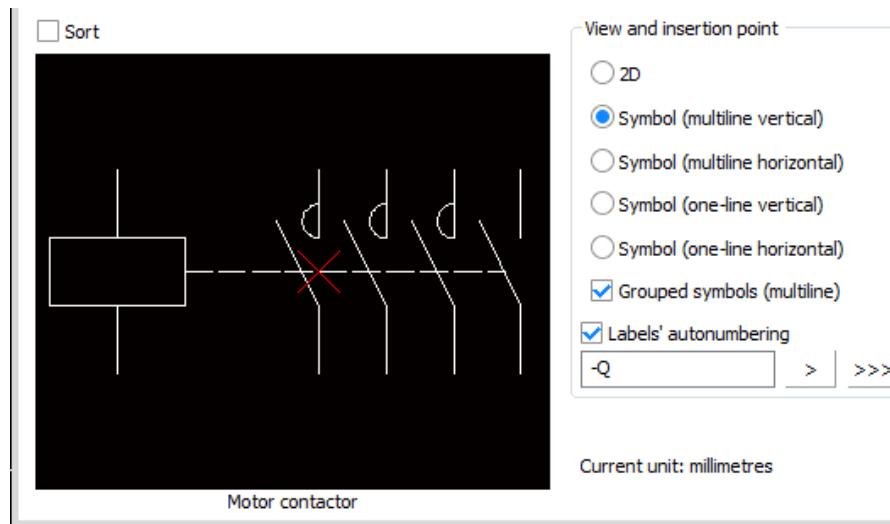




✓ CADprofi Electrical - extension of functionality and content of IEC symbols libraries

The IEC and NFPA symbols library has been expanded with additional electrical symbols.

The library of modular apparatus has also been extended with the possibility of inserting symbols with grouped or ungrouped main contacts. This allows the use of existing symbols in various types of schemes (e.g. in energy distribution schemes, automation, etc.)



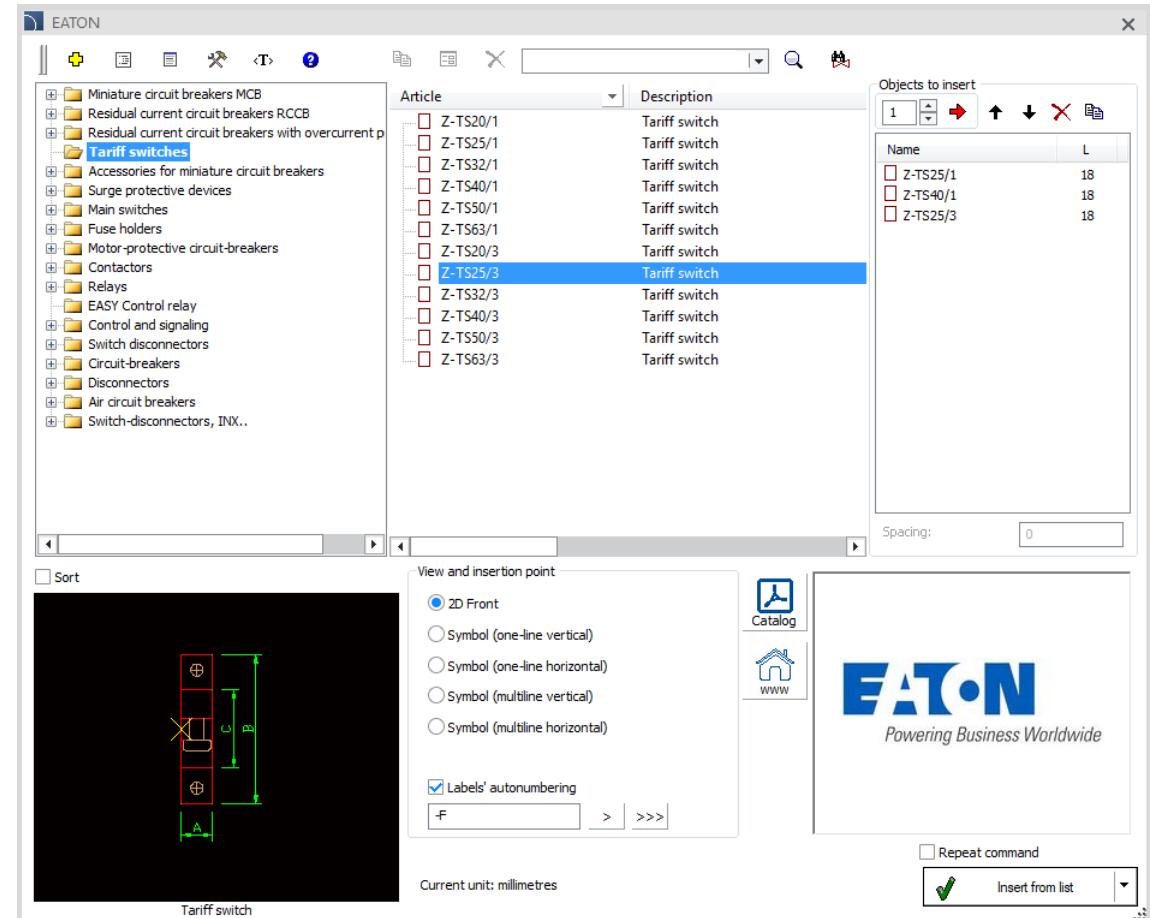


CADprofi

✓ New EATON library

The new library available in the CADprofi program contains EATON products, including:

- Miniature, residual current, motor-protective circuit breakers.
- Accessories for circuit breakers.
- Surge protective devices.
- Switches and switch disconnectors.
- Contactors.
- Relays (including EASY control relays).
- Control and signaling.





CADprofi

✓ New Budniok Technika library

The new library available in the CADprofi program contains Budniok Technika products in the field of lightning protection.

The library also has additional design tools - a calculator for calculating the resistivity of simple earthing systems and a calculator for elements of vertical earthing sets.

This library is currently available only in Polish language.



The screenshot shows the CADprofi software interface with the 'BUDNIOK TECHNIKA - Produkty' library open. The left pane displays a hierarchical tree view of product categories: Uziemienie (Earthing), Przedłużalny (Extending), Uziom gwintowany, pomiedziany (Grounded threaded, braided), Uziom bezłączkowy, pomiedziany (Grounded without connector, braided), Uziom bezłączkowy, ocynkowany (Grounded without connector, zinc-coated), Akcesoria do uziomów pionowych (Accessories for vertical earthing), Grot (Rod), Glowica/adapter (Tip/adaptor), Złączka (Connectors), Nieprzedłużalny (Non-extending), Zestawy uziemiające (Earthing sets), Uziom poziomy (type B) (Horizontal ground (type B)), Uziom poziomy (type B), odcinek prowadzony (Horizontal ground (type B), leading segment), Złącza (Connectors), Złącze kontrolne (Control connection), Złącza kontrolne miedziane (Copper control connections), Złącza kontrolne ocynkowane (Zinc-coated control connections), Złącza krzyżowe i krzyżowe, równolegle (Cross connections and cross connections, parallel), Złącza krzyżowe i równolegle miedziane (Copper cross connections and cross connections, parallel), Złącza krzyżowe i równolegle ocynkowane (Zinc-coated cross connections and cross connections, parallel), Złącza krzyżowe i równolegle nierdzewne (Stainless steel cross connections and cross connections, parallel), Złącza krzyżowe i równolegle kwasoodporne (Corrosion-resistant cross connections and cross connections, parallel), and Złącze do pręta zbrojeniowego (Reinforcement bar connection). The right pane shows a table of product details:

Opis	Wysok...	Rodzaj	Nr katalogowy
Uziom gwintowany, złączk... 1,22 m	uziom 5/8 cala, powłoka 254 µm	E635840	
Uziom gwintowany, złączk... 1,52 m	uziom 5/8 cala, powłoka 254 µm	E635850	
Uziom gwintowany, złączk... 3,05 m	uziom 5/8 cala, powłoka 254 µm	E635800	
Uziom gwintowany, złączk... 1,52 m	uziom 3/4 cala, powłoka 254 µm	E633450	
Uziom gwintowany, złączk... 3,05 m	uziom 3/4 cala, powłoka 254 µm	E633400	

Below the table, there are two preview windows: one showing a 2D view of a threaded connection and another showing a 3D view of a threaded rod. The bottom right corner includes buttons for 'Pomoce' (Help), 'Karta katalogowa' (Catalog card), 'www' (Website), and 'OK' (OK).



CADprofi

✓ Update of manufacturers' libraries:





CADprofi

✓ Adjustment to many base CAD programs

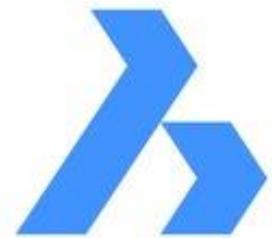
CADprofi 2019.17 has been adjusted to work with latest CAD programs, including: CADopia 19.

CADprofi 2019 currently works with many base CAD programs including: AutoCAD (since the 2000 version), BricsCAD, GstarCAD, IntelliCAD, progeCAD, ZWCAD, ARES Commander Edition and others.

AutoCAD®

ZWCAD

GstarCAD
An Alternative CAD System

The logo for BricsCAD, featuring a blue stylized 'B' shape composed of two arrows pointing right.
BRICSCAD

The logo for progeSOFT, featuring a blue globe with a yellow 'I' shape in the center.
progeSOFT

The logo for IntelliCAD, featuring a purple diamond with a yellow 'I' shape in the center.
IntelliCAD

The logo for ARES Commander, featuring a red swoosh graphic and the text 'Gräbert ARES® Commander'.
**Gräbert
ARES® Commander**



CADprofi



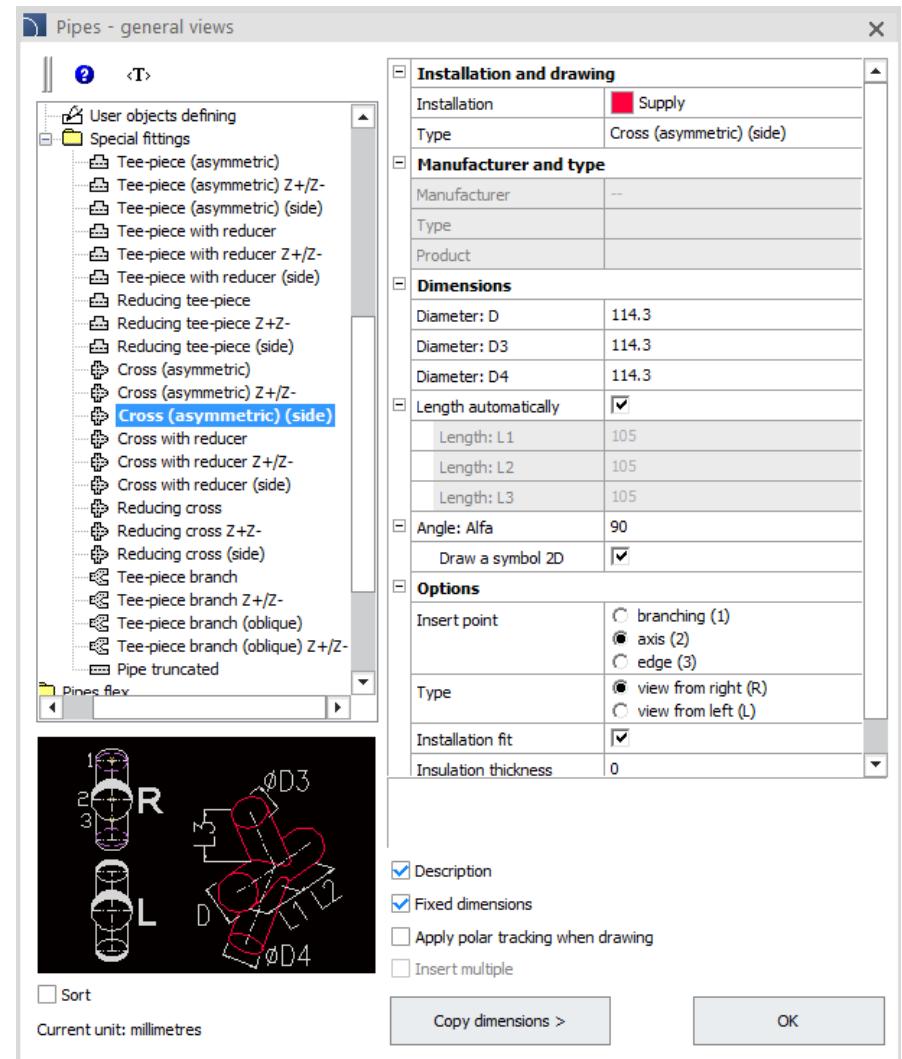
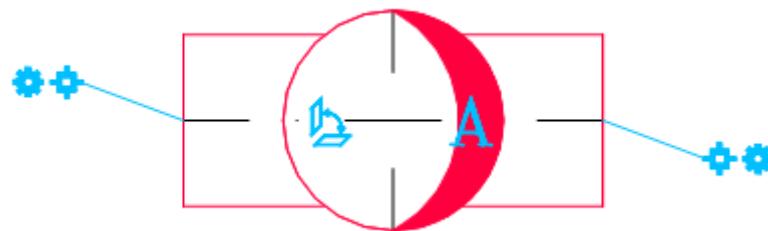
CADprofi 2019.14/15



✓ CADprofi – side views and additional Z+/Z- views for 2D fittings

2D fittings side views for tees and offsets as well as additional views of Z+/Z- for tees and pipe crosses with reducers have been added to the library.

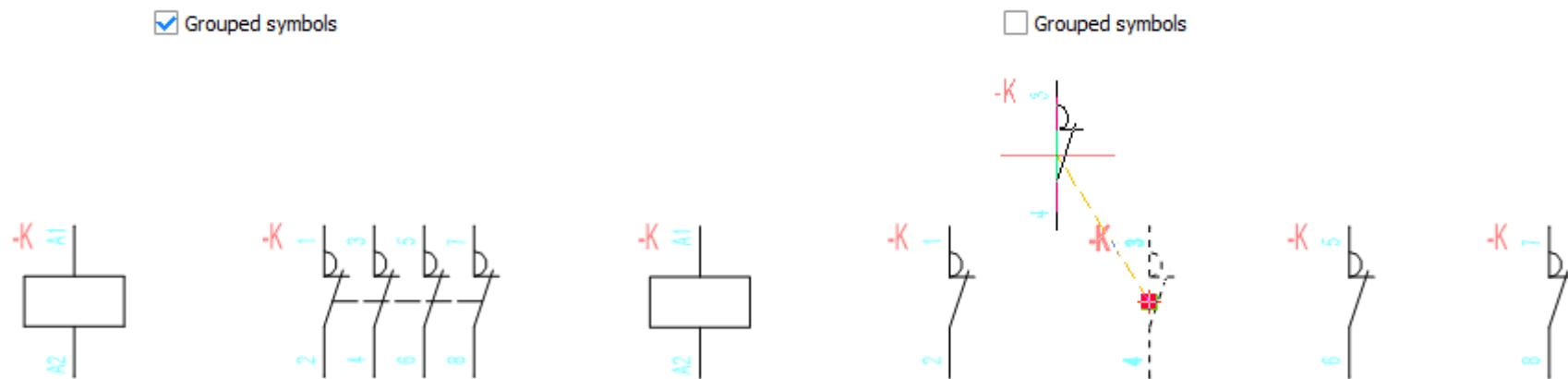
The new fittings are fully editable using the CADprofi program commands.





✓ CADprofi Electrical – extension of the IEC and NFPA complex apparatus

The functionality of complex apparatus available in the CADprofi program has been extended with the possibility of grouping or ungrouping main contacts which significantly improves and accelerates the creation of automation schemes.



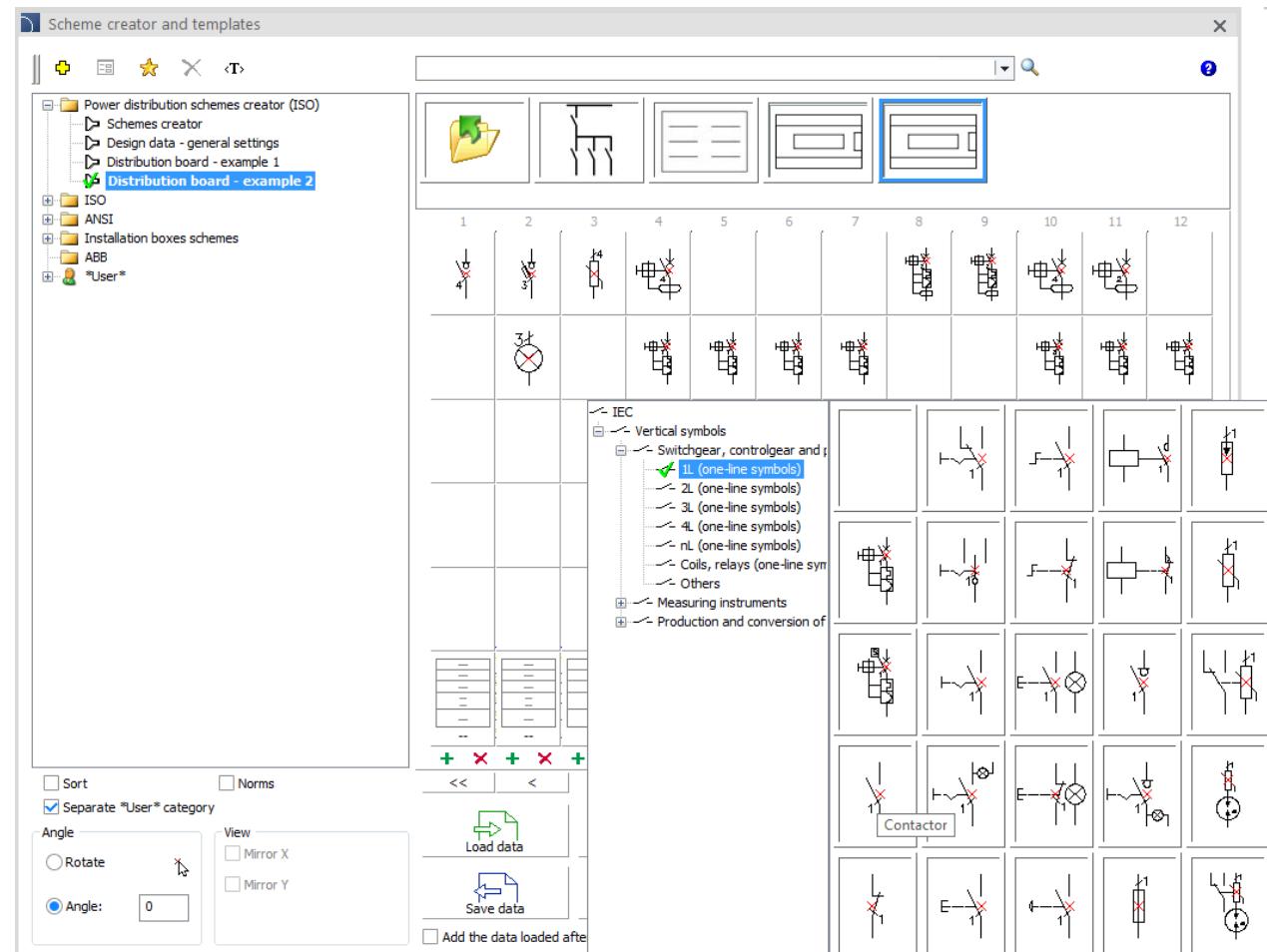
Additionally in complex apparatus it is now possible to add technical and identification data.

<input checked="" type="checkbox"/> Label <input type="text" value="K"/> Characteristics <input type="text"/> <input checked="" type="checkbox"/> Fill pins <input type="text" value="A1 A2 1 2 3 4 5 6 7 8"/>	> Article <input type="text"/> Manufacturer <input type="text"/> Reference <input type="text"/>
---	---



✓ CADprofi Electrical – extension of the symbol library available in the schemes creator

At the users request the symbol library available in the schemes creator have been extended with contractors, circuit breakers and change-over breakers.

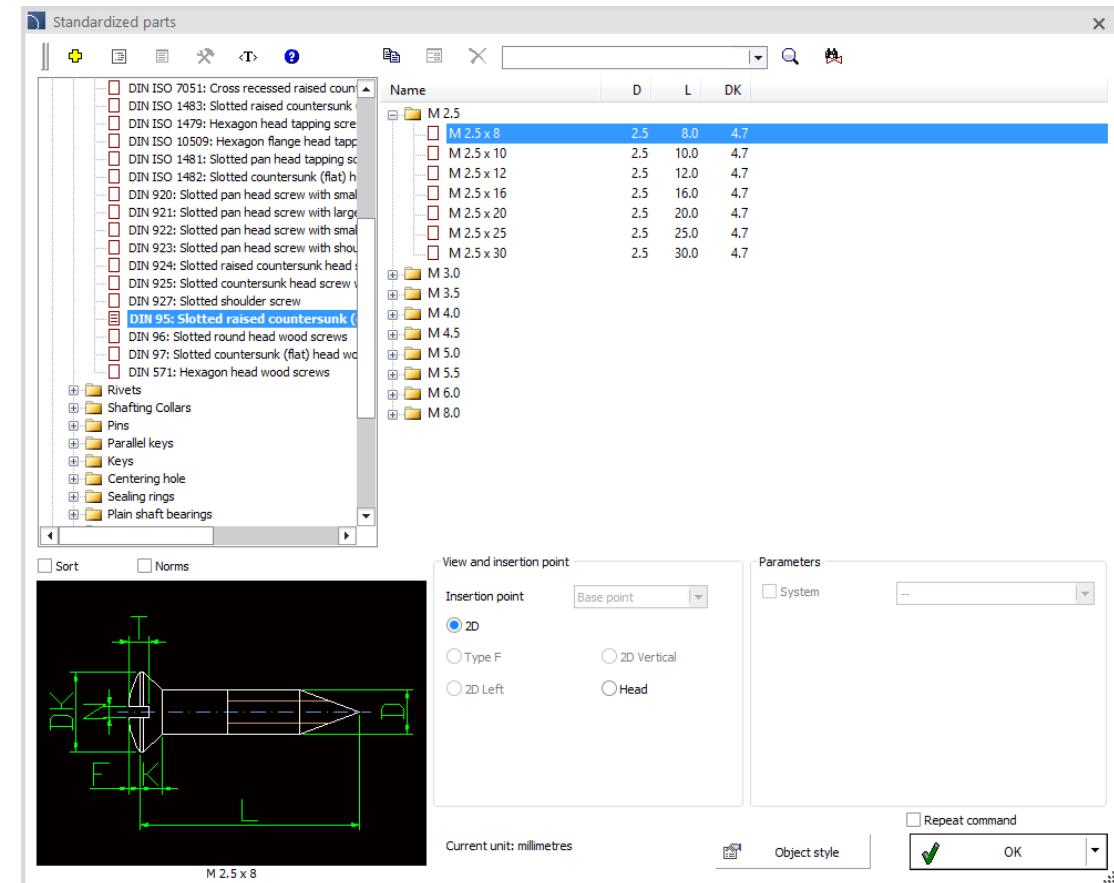




✓ CADprofi Mechanical – additional DIN standards

Additional standardized DIN elements have been added to the program, including:

- Slotted raised countersunk oval head wood screws (DIN 95).
- Slotted round head wood screws (DIN 96).
- Slotted countersunk flat head wood screw (DIN 97).
- Hexagon head wood screws (DIN 571).





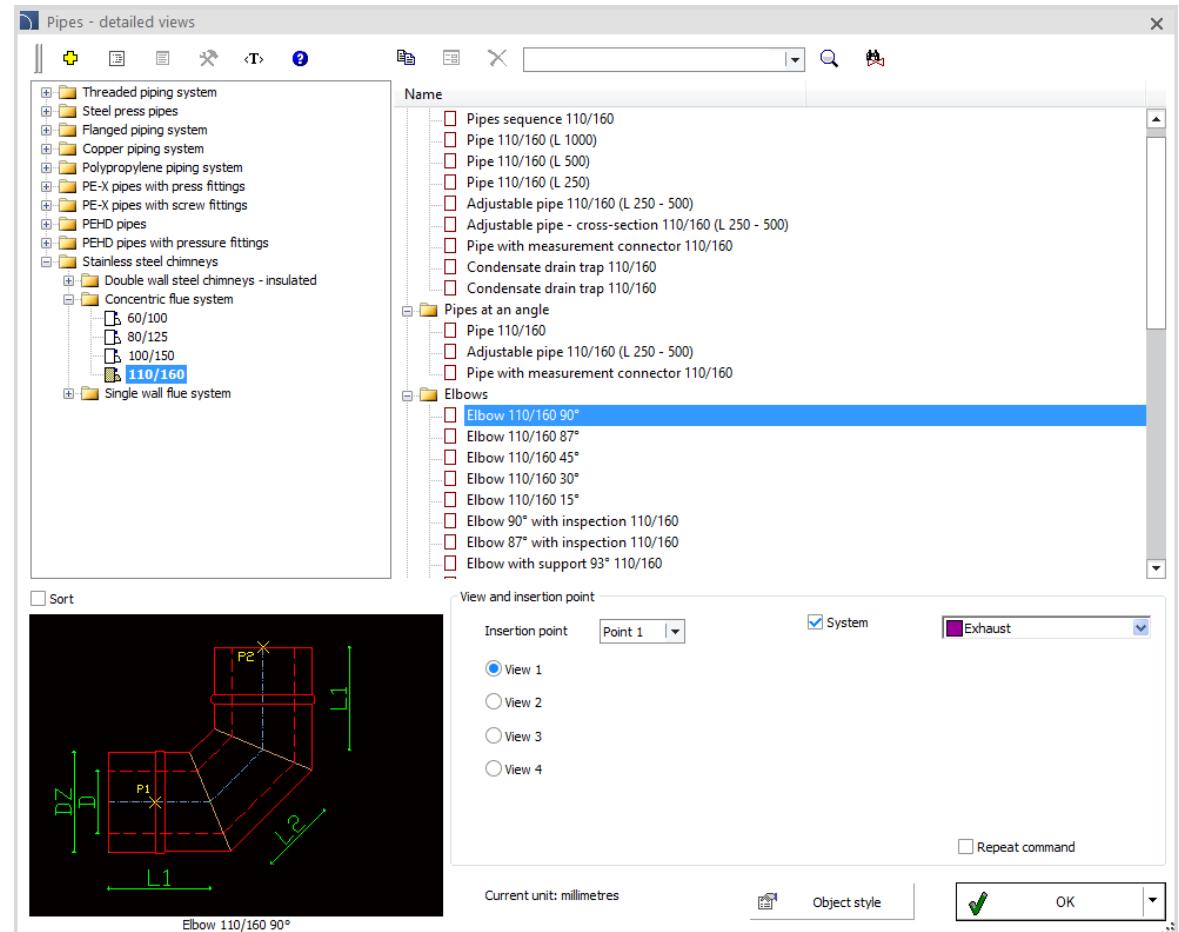
CADprofi

✓ CADprofi HVAC & Piping – single wall insulated and concentric flue chimney systems

A single-walled chimney system and a concentric air and flue system were added to the *Pipes – detailed views* command.



[Watch movie](#)

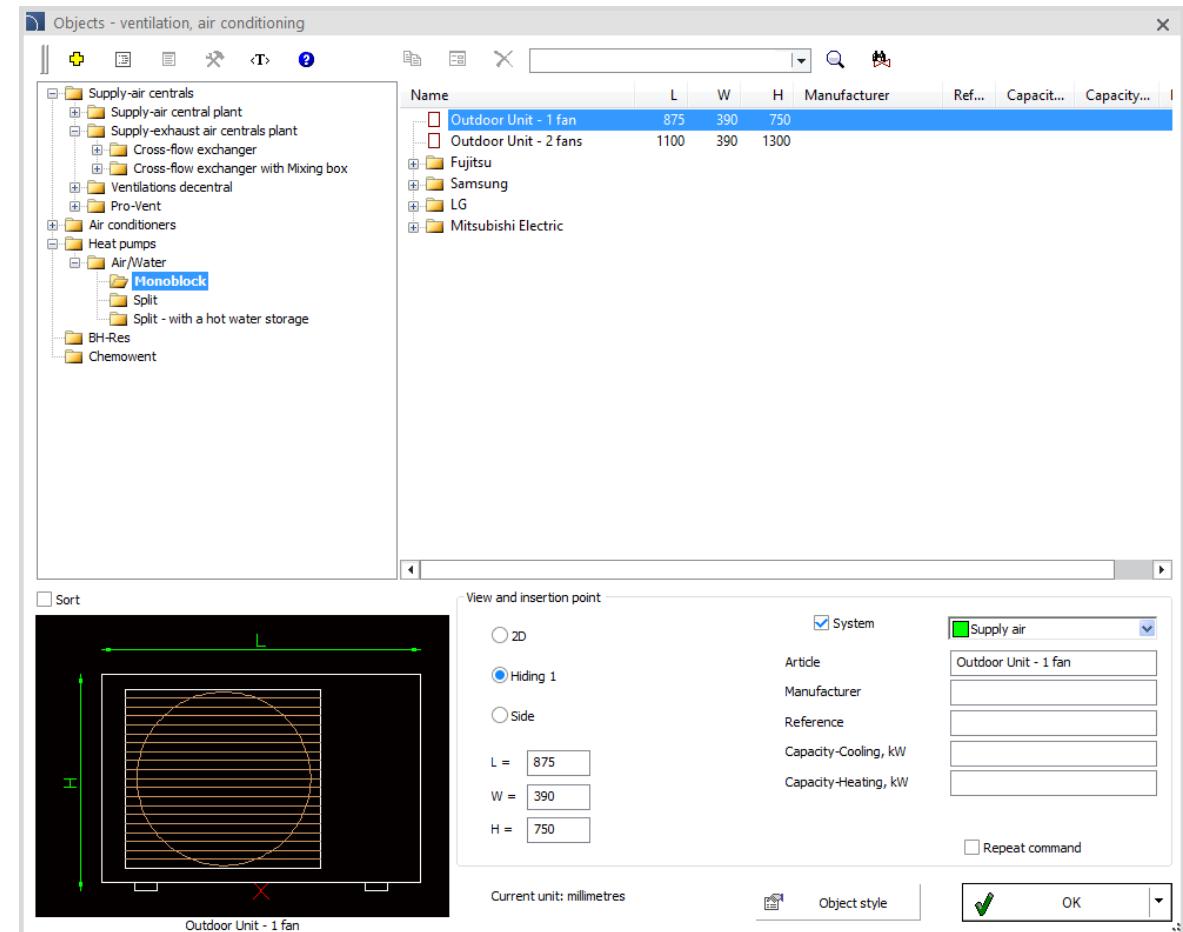




CADprofi

✓ CADprofi HVAC & Piping – heat pumps and supply-exhaust air centrals

Fujitsu, LG, Daikin, Mitsubishi and Samsung (Monoblock, Split, Split with a hot water storage) air/water heat pumps and supply-exhaust air central plants have been added to the *Objects – ventilation, air conditioning* command.





CADprofi

✓ CADprofi HVAC & Piping – LPG containers

The *Parametrical objects* command has been extended with LPG containers, including Gaspol company containers.



Screenshot of the CADprofi software interface showing the Parametrical objects dialog box. The tree view on the left lists various container types, with 'LPG container' selected. The main area displays a table of dimensions for different LPG container sizes, and a preview window shows a 3D model of a 1700 l. LPG container with callouts for its dimensions.

Name	D	L	L1	H	H1
1700 l.	1250	1600	500	1600	1400
2700 l.	1250	2500	800	1600	1400
3600 l.	1250	3200	800	1600	1400
4850 l.	1250	4300	800	1600	1400
6400 l.	1250	5500	800	1600	1400
7000 l.	1250	6050	800	1600	1400
9250 l.	1250	7750	800	1600	1400
10000 l.	1250	8550	800	1600	1400
11500 l.	1250	9550	800	1600	1400
GASPOL					
2700 l.	1250	2500	800	1600	1400
4850 l.	1250	4300	800	1600	1400
6700 l.	1250	5800	800	1600	1400

View and insertion point:

- 2D
- Front
- Side

System: Supply

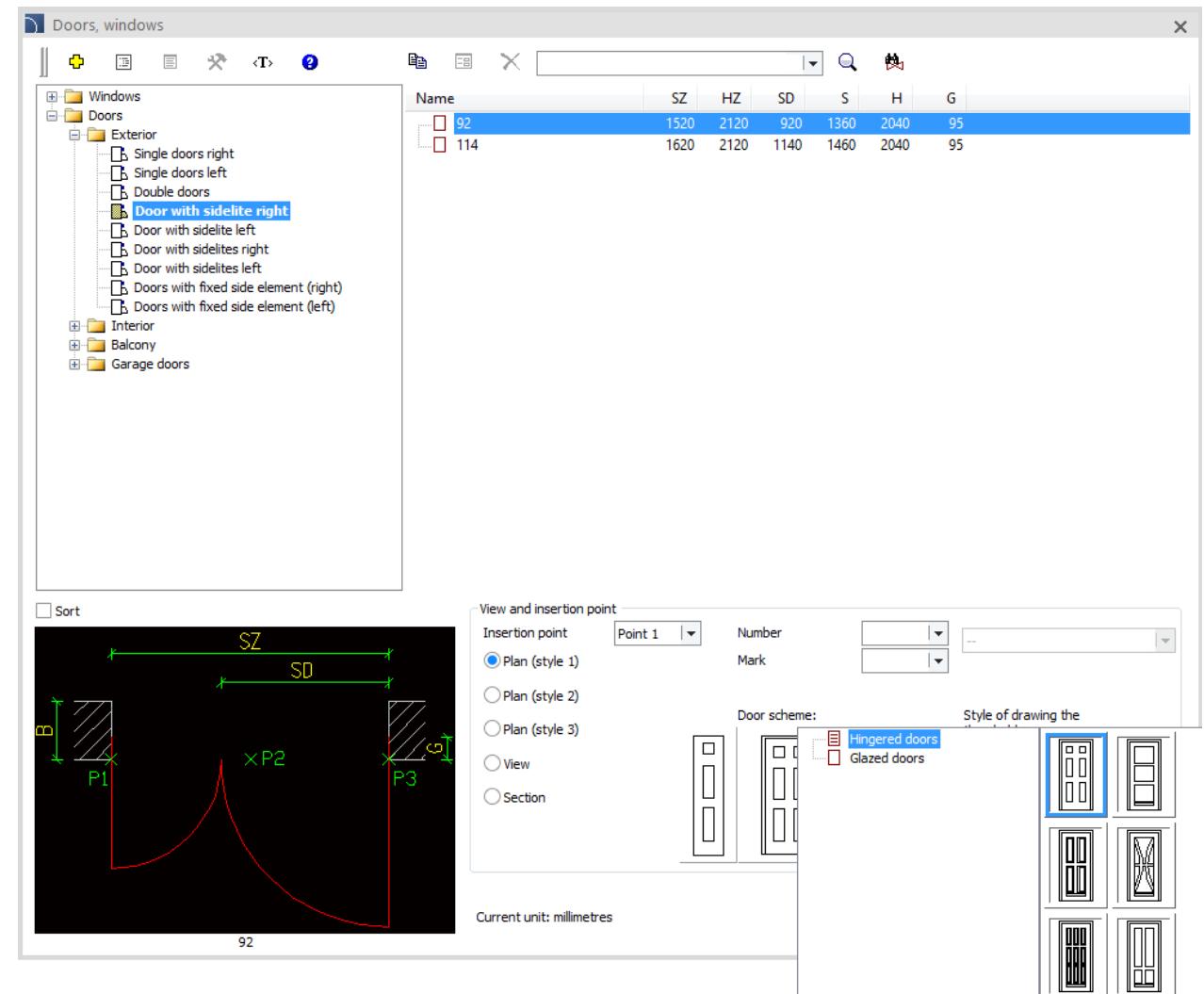
Current unit: millimetres

OK



✓ CADprofi Architectural – Doors and garage doors– functionality extension

The library of doors and gates has been rebuilt and its functionality has been expanded. Program now allows user to visually choose models of door leaves, thanks to which user can choose and insert doors with the desired parameters much faster.





CADprofi

✓ New F&F library

New library that is available in CADprofi program contains F&F products, including domestic and industrial automation.

Library is currently available in Polish language.

-



The screenshot shows the CADprofi software interface with the 'F&F - Domestic and industrial automation' library open. The left pane displays a tree view of product categories, and the right pane lists individual products with their descriptions. A preview window shows a circular component, and a details panel on the right shows a photograph of a physical device labeled 'STR-1'.

Article	Description
CZD	Czujnik deszczu - sonda
CZW	Czujnik wiatru - anemometr
STR-1	Sterownik roletowy, dwuprzyciskowy STR-1
STR-2	Sterownik roletowy, jednoprzyciskowy STR-2
STR-21	Sterownik roletowy, dwuprzyciskowy STR-21
STR-22	Sterownik roletowy, jednoprzyciskowy STR-22
STR-3D	Sterownik roletowy do silników AC 100-265V /
STR-3P	Sterownik roletowy do silników AC 100-265V /
STR-41	Sterownik roletowy, dwuprzyciskowy STR-41
STR-41-24V	Sterownik roletowy, jednoprzyciskowy STR-41-24V
STR-42	Sterownik roletowy, jednoprzyciskowy STR-42
STR-42-24V	Sterownik roletowy, jednoprzyciskowy STR-42-24V
STR-4D	Sterownik rolet do silników DC 10-27V DC
STR-4P	Sterownik rolet do silników DC 10-27V DC
STR-R	Czujnik deszczu zasilanie 100-265V AC
STR-S	Czujnik wstrząsów (sterowanie do markiz)
STR-W	Czujnik siły wiatru zasilanie 100-265V AC



CADprofi

- ✓ Update of manufacturers' libraries:





CADprofi

✓ Adjustment to many base CAD programs

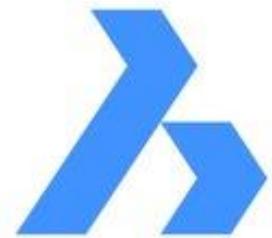
CADprofi 2019.14 has been adjusted to work with latest CAD programs, including: progeCAD 2020 and ZWCAD 2020.

CADprofi 2019 currently works with many base CAD programs including: AutoCAD (since the 2000 version), BricsCAD, GstarCAD, IntelliCAD, progeCAD, ZWCAD, ARES Commander Edition and others.

AutoCAD®

ZWCAD

GstarCAD
An Alternative CAD System

The BricsCAD logo consists of two blue arrows pointing to the right, forming a stylized 'B' shape.
BRICSCAD

The ProgeSoft logo features a blue globe with a yellow 'I' shape in the center.
progeSOFT

The IntelliCAD logo consists of a purple diamond containing a yellow 'I' shape.
IntelliCAD

The ARES Commander logo features a red swoosh graphic.
Gräbert
ARES® Commander



CADprofi



CADprofi 2019.11/12



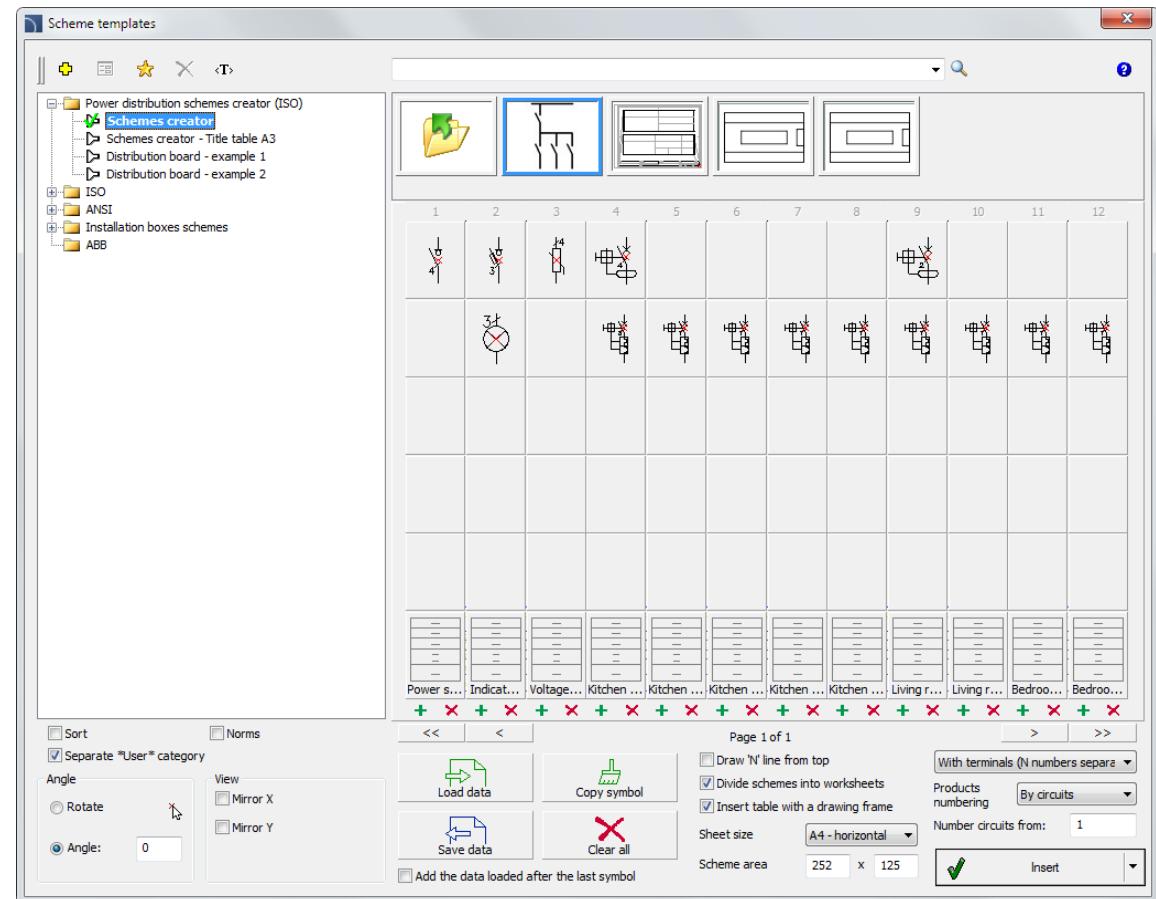
CADprofi

✓ CADprofi Electrical – power distribution schemes creator

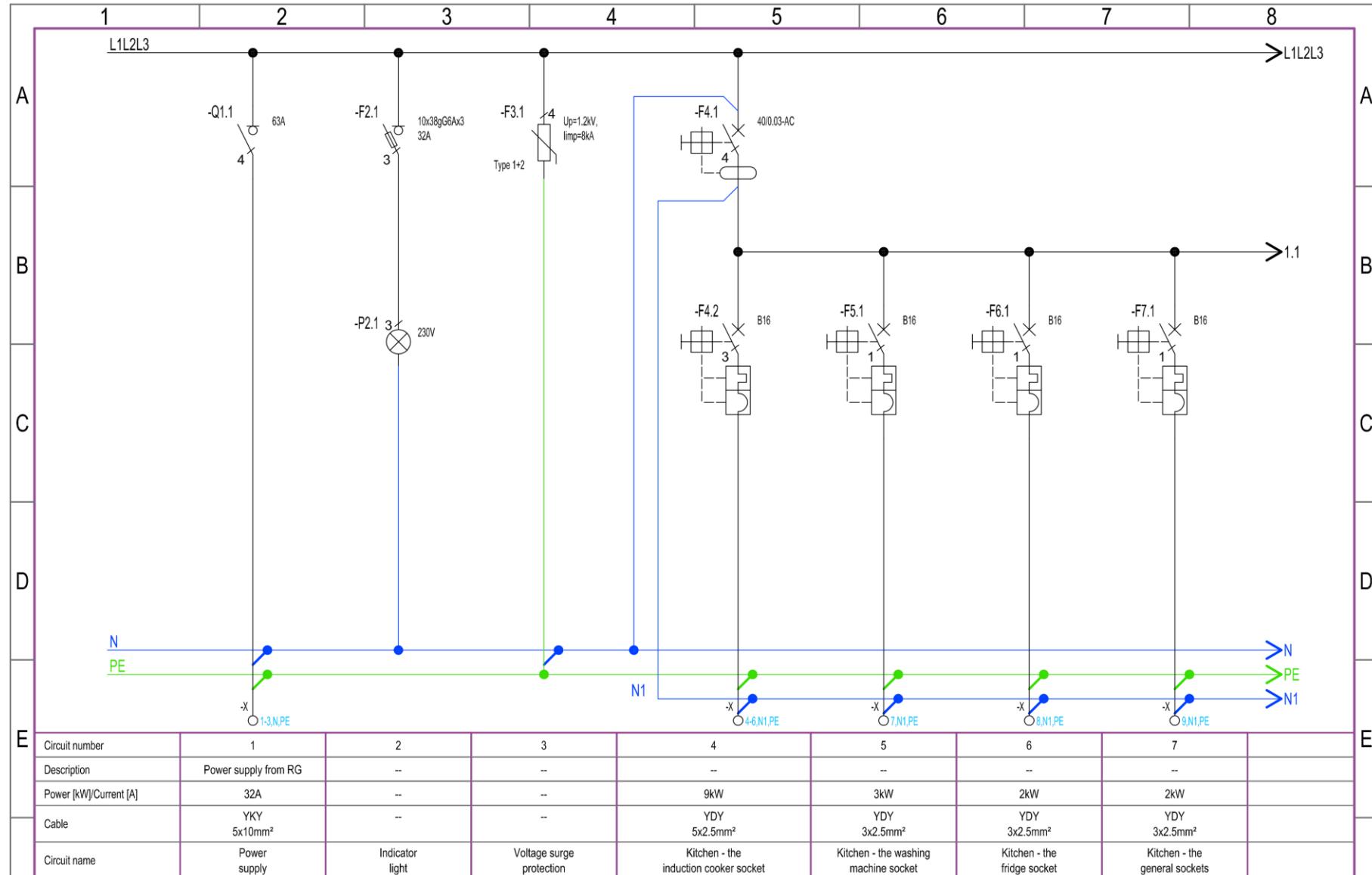
Schemes creator allows user to select products from the modular apparatus library and place them in certain positions in the scheme. This way you can quickly and easily define the logical structure of the whole power distribution by focusing only on the selection of products, rather than draw it manually.



[Watch movie](#)



Example: Switchgear scheme automatically generated by the "Schemes creator" in the CADprofi program





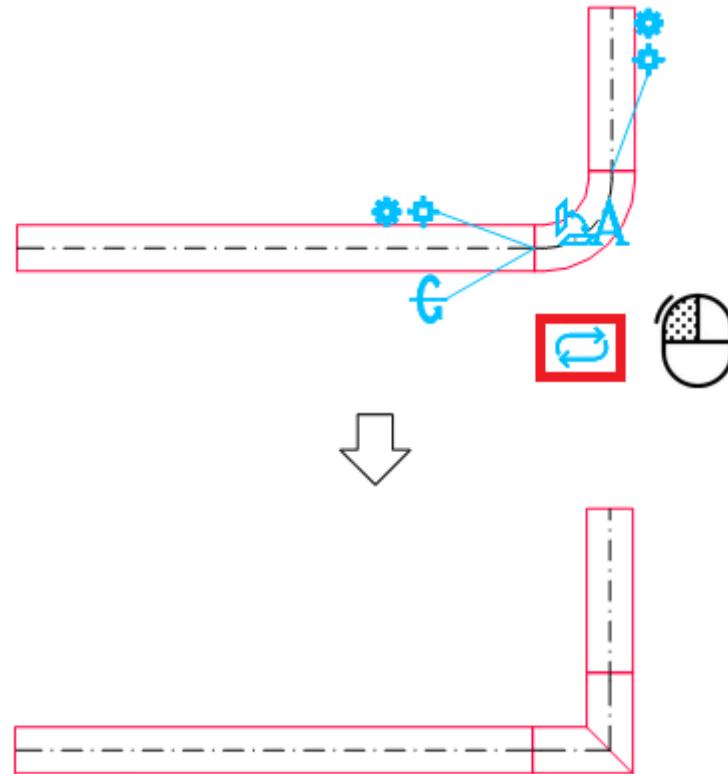
CADprofi

✓ CADprofi – quick change of fitting type

The *Quick Edit* command has been extended with the possibility to quickly change the fitting type .



[Watch movie](#)





CADprofi

✓ CADprofi HVAC & Piping – air conditioners

Fujitsu, LG, Daikin, Mitsubishi and Samsung (Split, Multi, VRF) air conditioners have been added to the *Objects – ventilation, air conditioning* command.

The existing Fujitsu air conditioner library has been completely updated and transferred to the CADprofi HVAC & Piping module.



The screenshot shows the 'Objects - ventilation, air conditioning' dialog box. The left pane is a tree view of objects:

- Supply-air centrals
- Air conditioners
 - Split
 - Wall air conditioner
 - Ducted air conditioner
 - Cassette air conditioner
 - Floor air conditioner
 - Floor/Ceiling air conditioner
 - Ceiling air conditioner
 - Multi
 - VRF
 - BH-Res
 - Chemowent



CADprofi

✓ CADprofi HVAC & Piping – Bosch, Junkers and Immergas boilers

Bosch, Junkers and Immergas boilers have been added to the *Objects* command.

The existing Junkers and Immergas library has been updated and transferred to the CADprofi HVAC & Piping module.

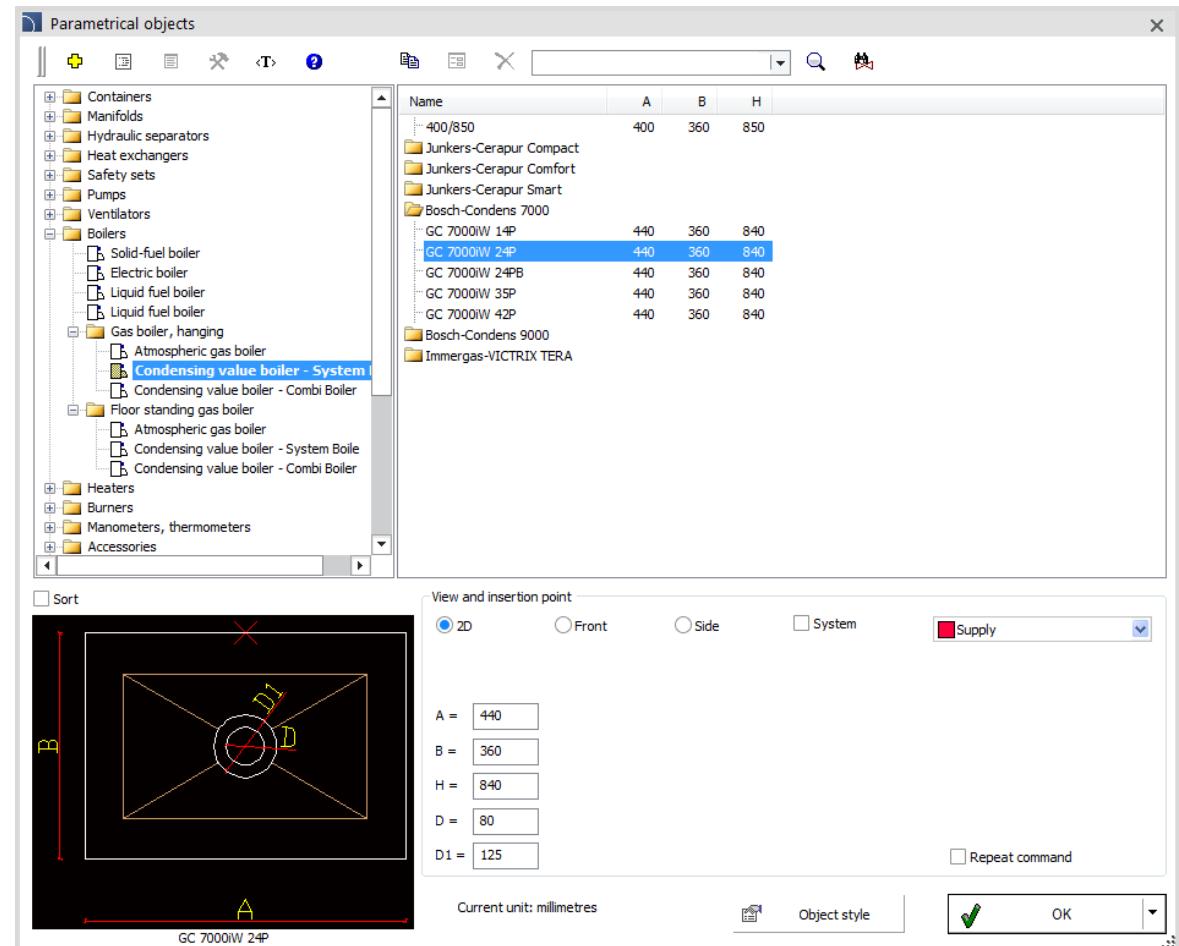


BOSCH



JUNKERS

IMMERGAS

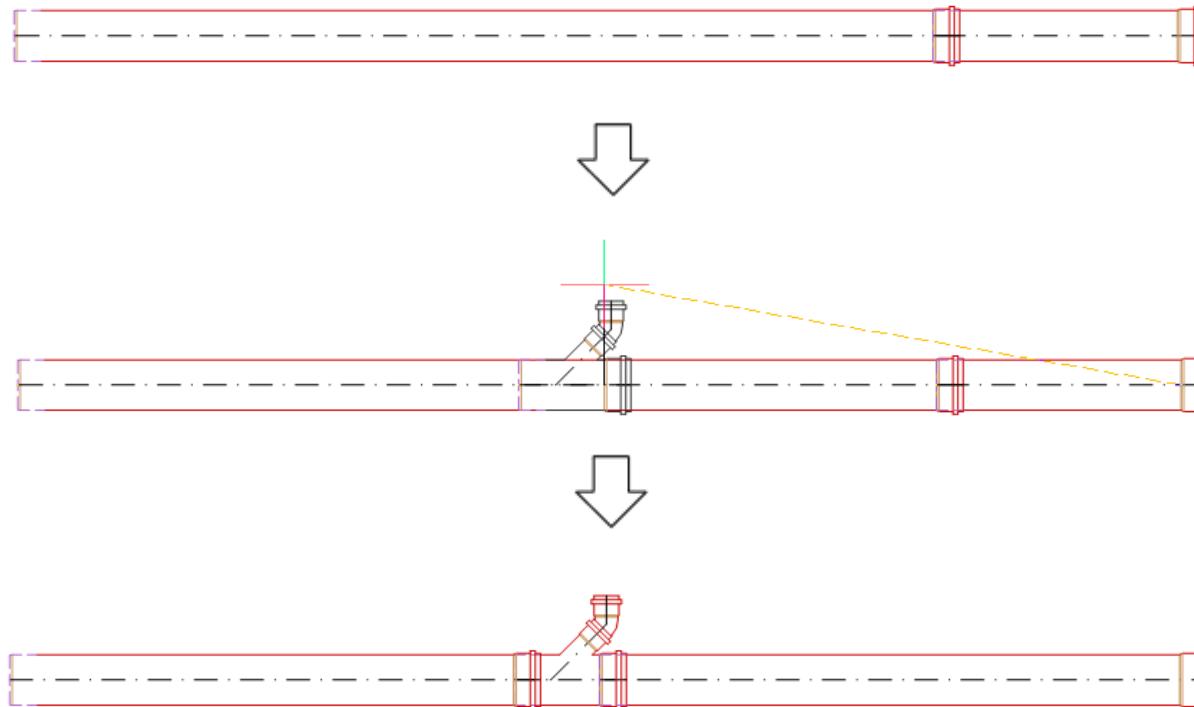




✓ CADprofi HVAC & Piping – inserting objects in bare-socket systems

The possibility to insert objects into sewerage and chimney ducts and other bare-socket systems has been added to the program. The new functionality allows for inserting drains, various fittings, revisions, etc.

Additionally, when inserting T-pieces or cross-pieces, it is possible to automatically connect to them other lines.

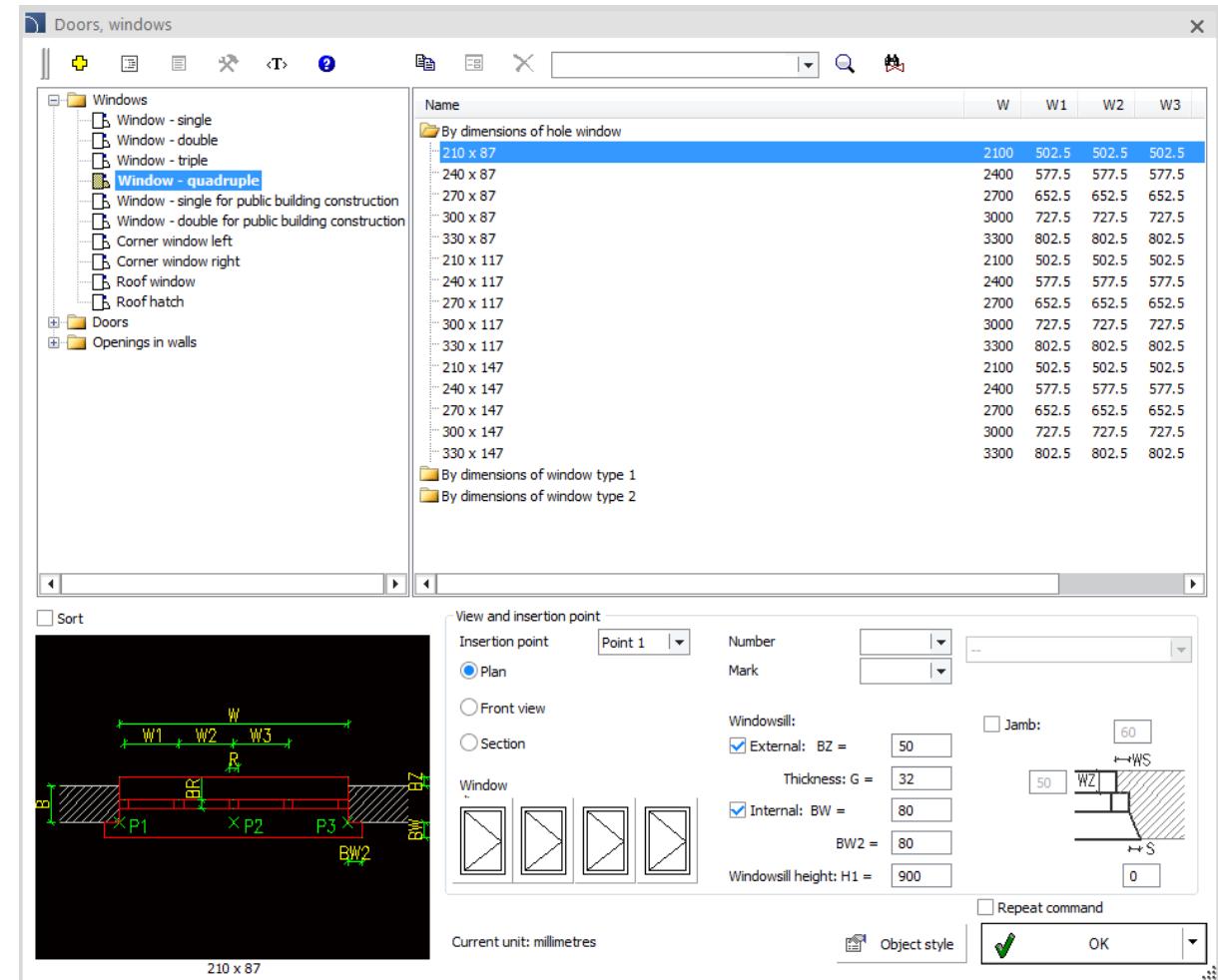
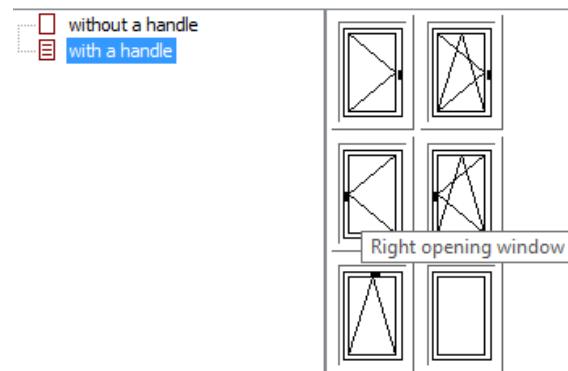




✓ CADprofi Architectural – Windows – functionality extension

Windows available in the *Doors, windows* command have been extended with the possibility of specifying:

- Jamb dimensions, with an additional optional option of determining wall slant,
- windowsill dimensions, with an optional option of turning them off,
- window diagram (direction of opening of window wings).





CADprofi

✓ Update of manufacturers' libraries:



*Library has been moved to
CADprofi HVAC & Piping*



*Library has been moved to
CADprofi HVAC & Piping*



*Library has been moved to
CADprofi HVAC & Piping*



*Product available in
CADprofi HVAC & Piping*



*Product available in
CADprofi HVAC & Piping*



CADprofi

✓ Adjustment to many base CAD programs

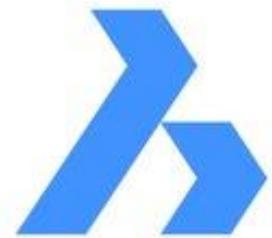
CADprofi 2019.11/12 has been adjusted to work with latest CAD programs, including: AutoCAD 2020 and Ares Standard 2019.

CADprofi 2019 currently works with many base CAD programs including: AutoCAD (since the 2000 version), BricsCAD, GstarCAD, IntelliCAD, progeCAD, ZWCAD, ARES Commander Edition and others.

AutoCAD®

ZWCAD

GstarCAD
An Alternative CAD System

The logo for BricsCAD, featuring a blue stylized 'B' shape.
BRICSCAD

The logo for progeSOFT, featuring a blue globe with a yellow 'I' shape.
progeSOFT

The logo for IntelliCAD, featuring a purple diamond with a yellow 'I' shape.
IntelliCAD

The logo for ARES Commander, featuring a red swoosh graphic.
Gräbert
ARES® Commander



CADprofi



CADprofi 2019.07



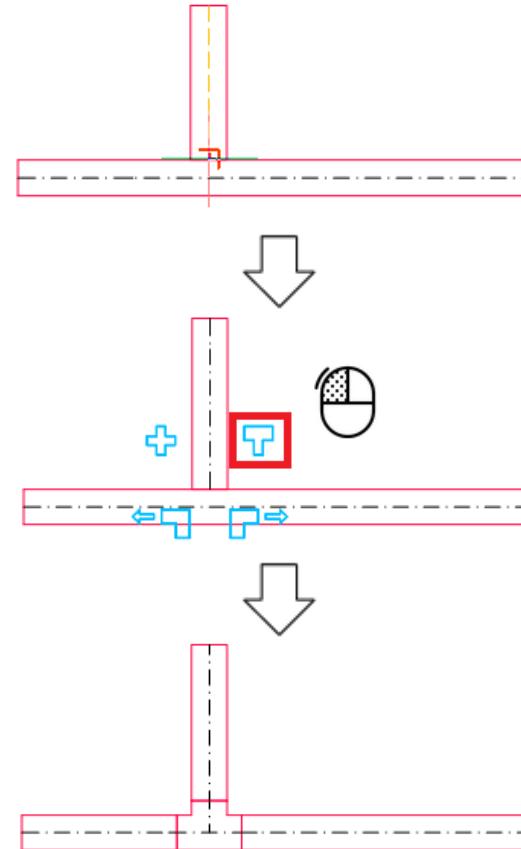
CADprofi

✓ CADprofi – quick 2D connections

When drawing lines / ducts, it is now possible to automatically connect them by using elbows, bends, T-pieces or cross-pieces.



[Watch movie](#)

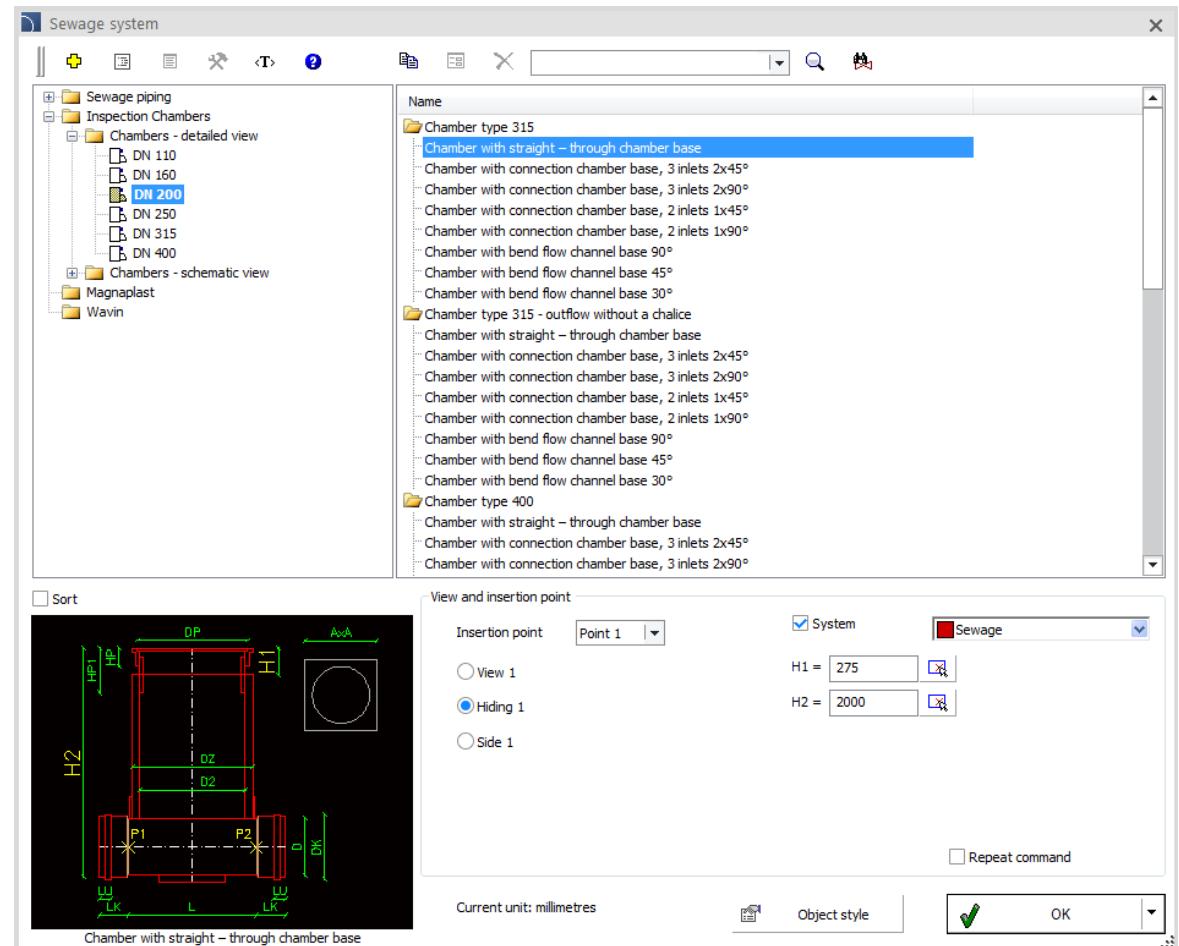




CADprofi

✓ CADprofi HVAC & Piping – inspection chambers

Inspection chambers with detailed and schematic views have been added to the Sewage system command.



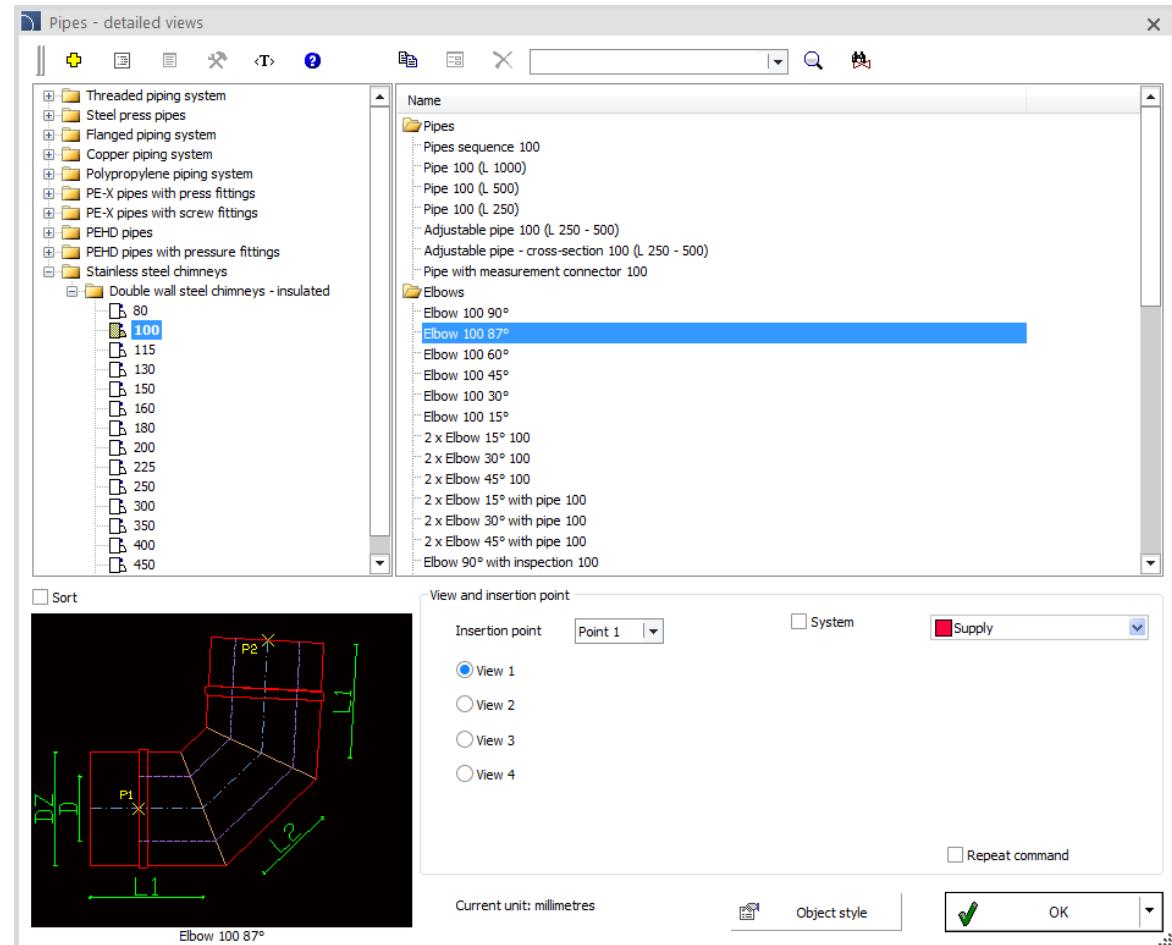


CADprofi

✓ CADprofi HVAC & Piping – chimneys system

Double wall steel insulated chimney system has been added to the *Pipes – detailed view* command.

This system can be used to design chimneys from 80mm to 500mm. Both pipes and fittings (elbows, tees, offsets and inspection doors) are available, as well as, additional accessories (brackets, caps, base plates, roof passages).





CADprofi

✓ Adjustment to many base CAD programs

CADprofi 2019.07 has been adjusted to work with latest CAD programs, including: ARES Commander 2019, IBSCAD 2018.

CADprofi 2019 currently works with many base CAD programs including: AutoCAD (since the 2000 version), BricsCAD, GstarCAD, IntelliCAD, progeCAD, ZWCAD, ARES Commander Edition and others.

AutoCAD®

ZWCAD

GstarCAD
An Alternative CAD System

The BricsCAD logo consists of two blue arrows pointing to the right, forming a stylized 'B' shape.
BRICSCAD

The ProgeSoft logo features a blue globe with a yellow 'I' shape in the center.
progeSOFT

The IntelliCAD logo consists of a purple diamond containing a yellow 'I' shape.
IntelliCAD

The ARES Commander logo features a red swoosh graphic.
Gräbert
ARES® Commander



CADprofi



CADprofi 2019.03

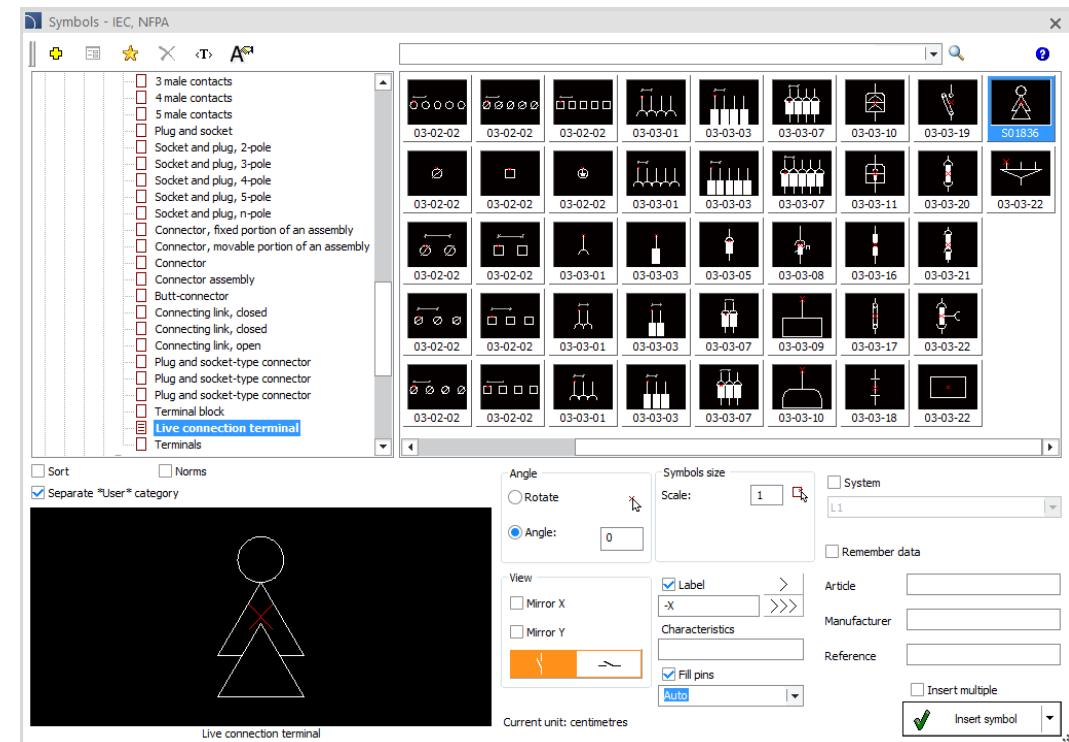


CADprofi

✓ CADprofi Electrical – extension of IEC symbols

Additional symbols were introduced into the program in both vertical and horizontal views based on the IEC 60617:2012 standard.

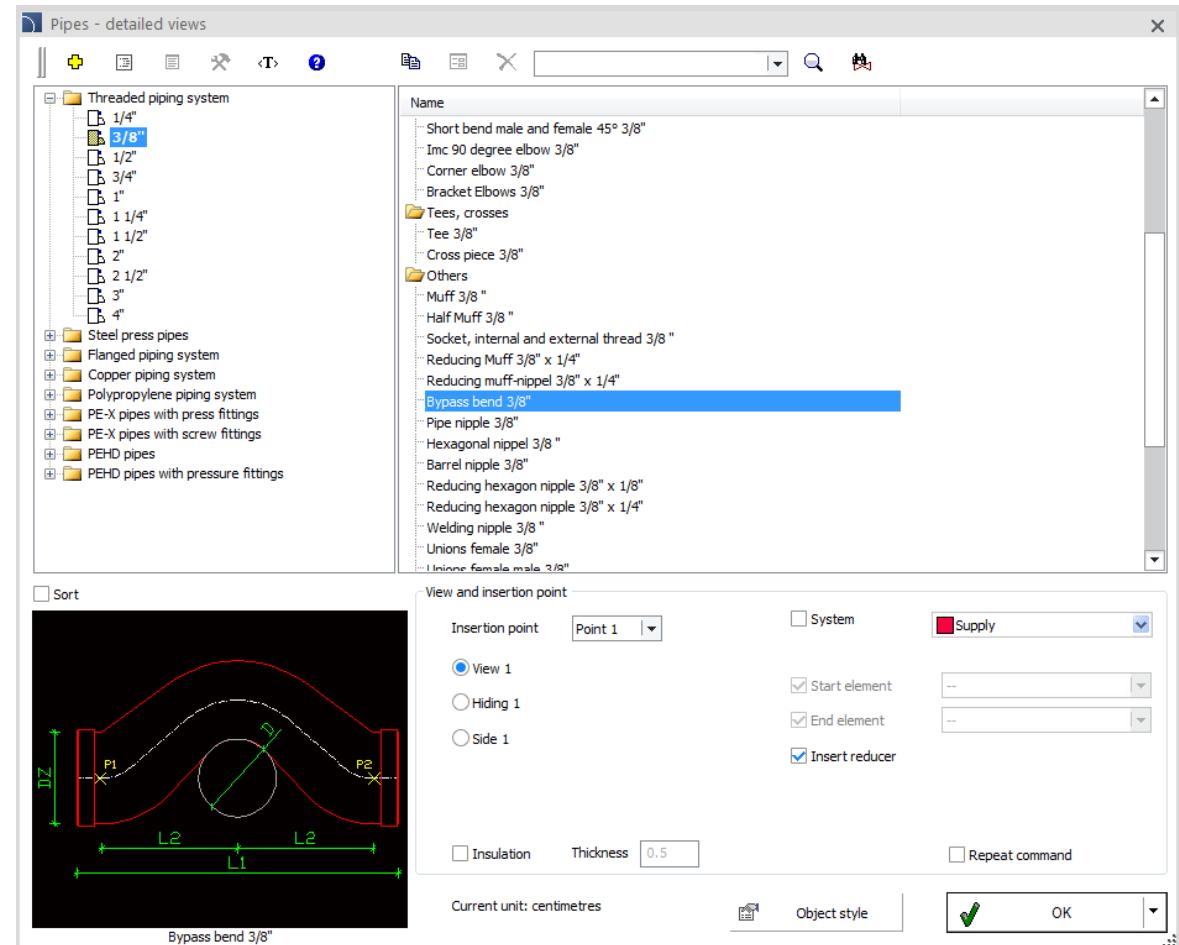
Reference markings were also updated in accordance with the IEC 81246 standard.





✓ CADprofi HVAC & Piping – extension of the threading piping system

The threaded piping system has been extended with additional elements and fittings, including bypass bends, nipples and elbows.

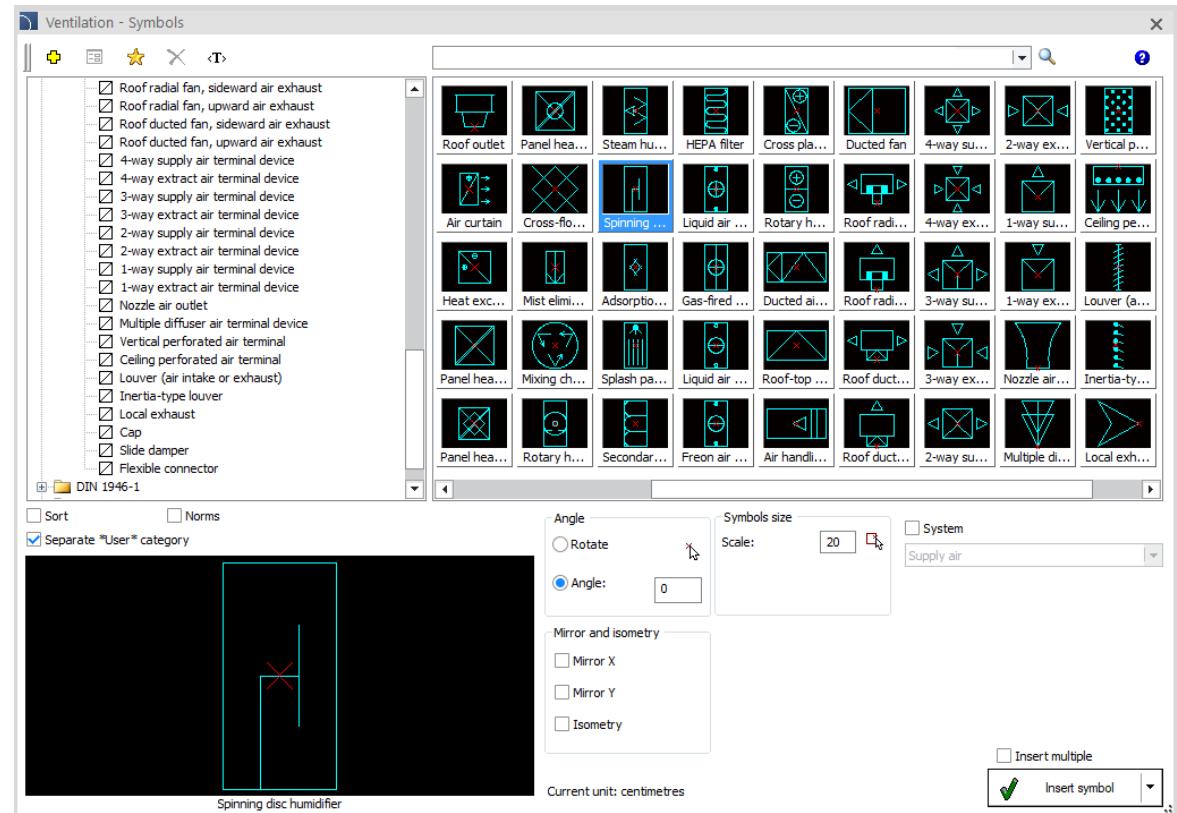




✓ CADprofi HVAC & Piping – extension of ventilation symbol libraries

Additional symbols have been added to the program library, including:

- humidifiers (rotary, steam, spinning disc),
- dehumidifiers,
- filters (secondary, HEPA),
- air heaters (liquid, gas),
- air coolers (liquid, freon),
- air conditioners (duct, roof),
- fans (roof, duct),
- supply and extract air,
- air outlets,
- air terminals,
- louvers,
- caps,
- exhausts.

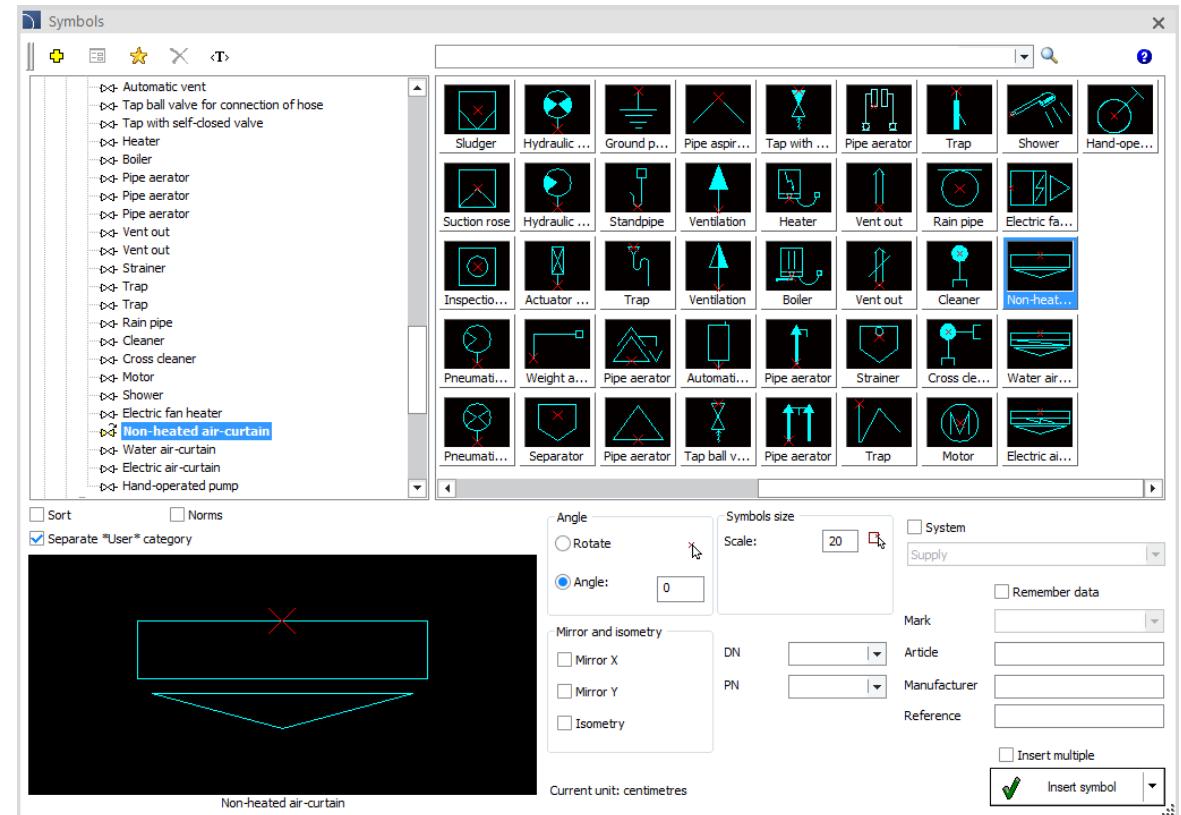




CADprofi

✓ CADprofi HVAC & Piping - extension of sanitary symbol libraries

The sanitary symbol library has been extended with new symbols e.g. air curtains (water, electric), hand operated pumps and fan heaters.





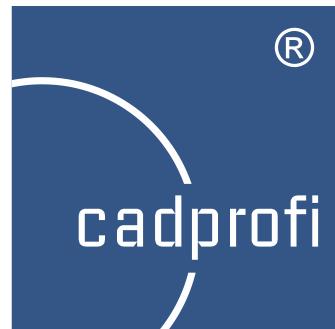
CADprofi

✓ Update of manufacturers' libraries:





CADprofi



CADprofi 2019

Summary of main changes made to the program since the CADprofi 2018.01 version.



CADprofi

Table of contents:

- [General commands \(affects all modules\)](#)
- [CADprofi Architectural](#)
- [CADprofi Electrical](#)
- [CADprofi Mechanical](#)
- [CADprofi HVAC & Piping](#)
- [Manufacturers libraries](#)
- [Adjustment to CAD programs](#)



CADprofi

✓ CADprofi – Open BIM – export of CADprofi projects to the IFC format

CADprofi program allows for object classification and layer management based on Open BIM (IFC classification). The latest version of the program also allows for exporting CADprofi projects to the IFC format with the appropriate BIM attributes.

Export of CADprofi objects to IFC files is currently possible in CAD programs compatible with BIM eg BricsCAD BIM.



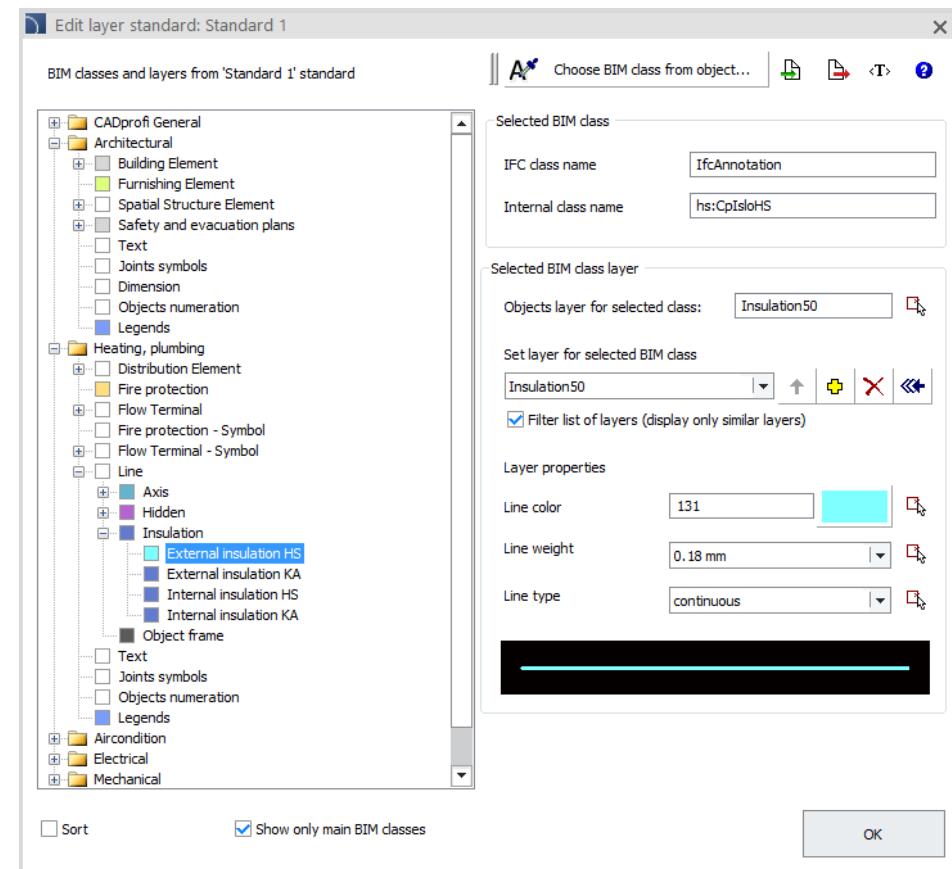
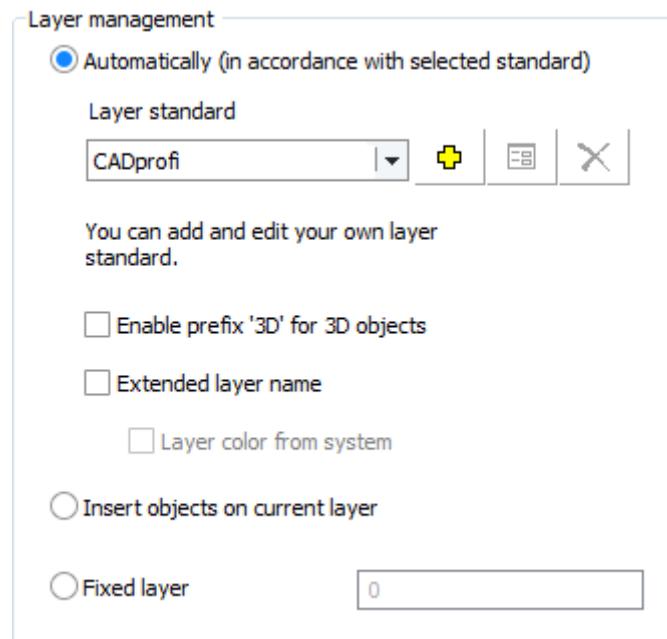
[Watch movie](#)

BIM	
Type	Flow Fitting
Name	Vertical elbow '300+300 mm', RH
Description	Vertical elbow '300+300 mm', RH
Building	
Story	
Composition	
Display composite	Off
GUID	0ZlzcqFijfABBcuynSHIEXU
Distribution Flow Element Common	
Reference	-
Manufacturer Type Information	
Article number	-
Model reference	504x0401
Model label	Vertical elbow '300+300 mm', RH
Manufacturer	Legrand-Zucchini
Production year	File revision: 2018
BIM-Attributes	
Text01	
Text02	
Text03	
Text04	



✓ CADprofi – layer management based on the Open BIM classification

All CADprofi program objects are categorized in accordance with Open BIM (IFC classification). In CADprofi program it is possible to enable automatic layer management. With automatic layer management enabled, objects from individual BIM classes are inserted on the appropriate layer that is specified in the layer standard. User can create new layer standards on his own and adapt them to his needs.

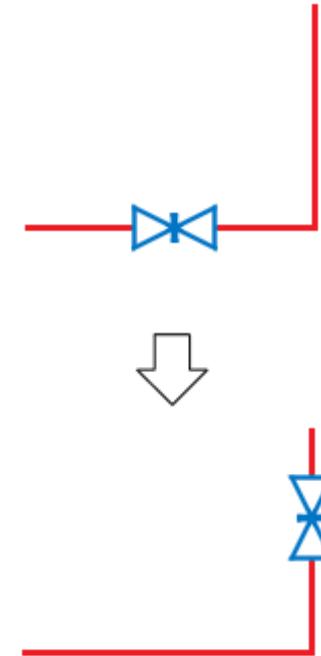




✓ CADprofi – extension of the Quick edit command

The Quucik edit command allows user to perform basic editing operations on symbols and objects using special markers. In the latest version of the program, this command has been extended to allow the symbol to be conveniently moved to a different location in the drawing. If the moved symbol was previously inserted into the line, the program will connect this line automatically.

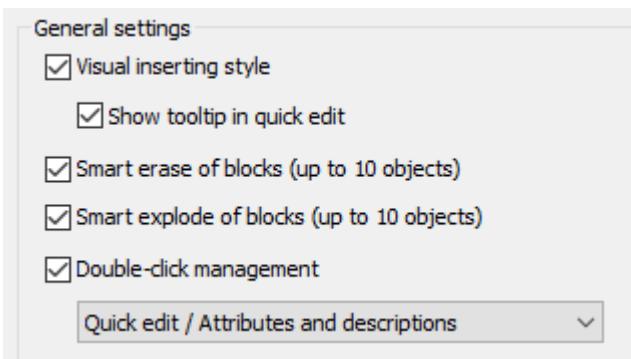
CADprofi has also introduced the possibility of running a quick edition command by double clicking on the edited object.





✓ CADprofi – Explode (extension of the command)

In the CADprofi program, the *CADprofi – Explode* command is available, which allows, for example to explode the selected objects with insertion of 'Infoblocks' that retrieve information from exploded objects. Thanks to this, it is possible to make a graphical edition of the project, while preserving the data for the purpose of creating specifications. In the new version we have introduced the possibility to launch the *CADprofi – Explode command* when selecting the usual *Explode* command from the base CAD program.

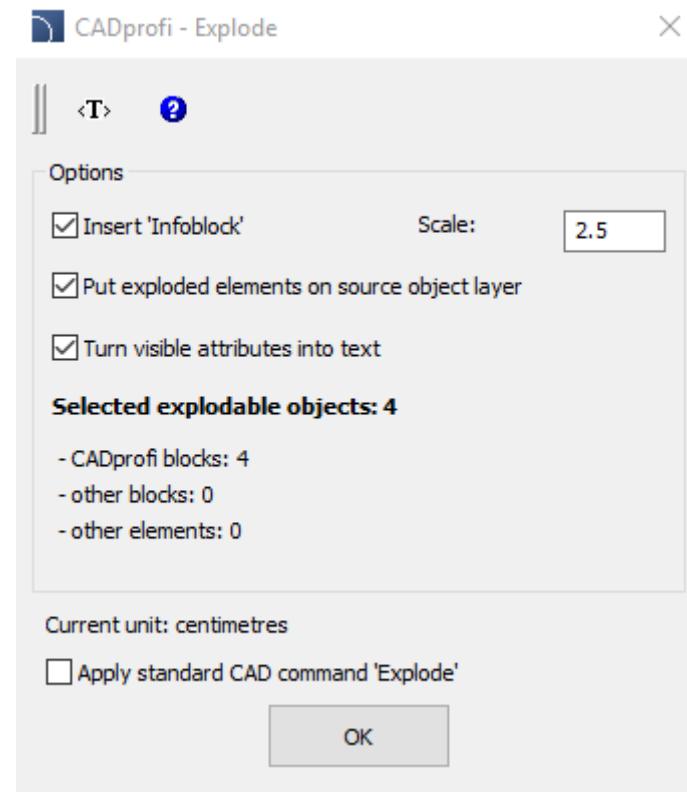


Smart explode of blocks can be activated in CADprofi - Options

Notice:

CADprofi - Explode will be launched, only when user selects blocks (symbols or objects) from CADprofi program.

This command works in selected CAD programs.



CADprofi - Explode command is being described in the online help. [Read more...](#)



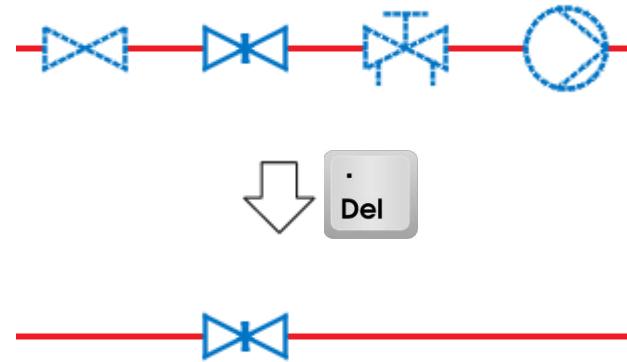
CADprofi

✓ CADprofi – smart erasing of symbols and objects

A convenient erasing of objects by using the **Delete** key have been added to the program. If user removes elements from lines then program will automatically connect these lines.

This command works in selected CAD programs.

Smart erase (up to 10 objects)



[Watch video](#)

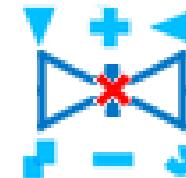
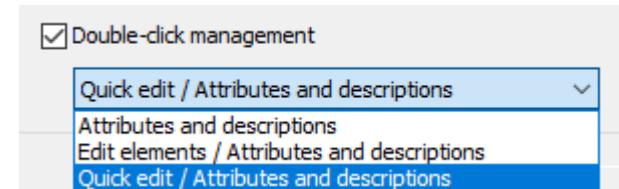


CADprofi

✓ CADprofi – double-click management

New version of CADprofi program have introduced the possibility to manage the action performed by double clicking. Depending on the selected option, double-clicking on the selected object can start the editing of symbols, editing attributes by using the "Attributes and descriptions" dialog window, [quick edit](#) or a standard base CAD program action.

This command works in selected CAD programs.



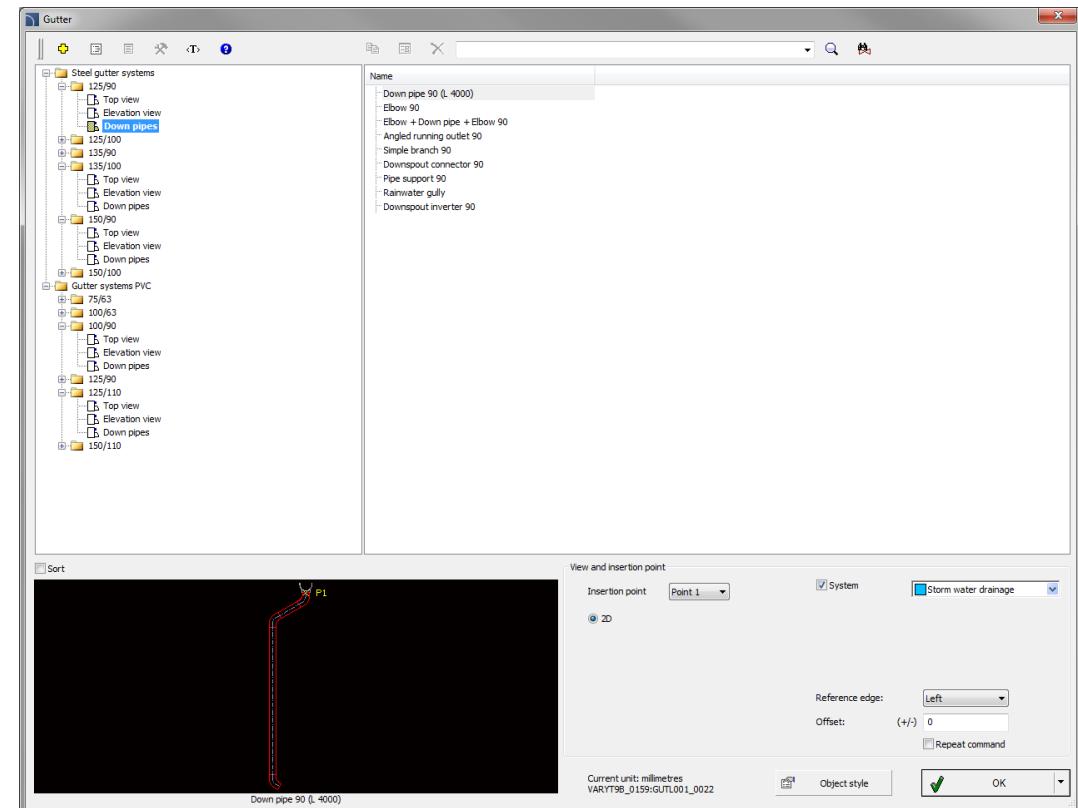
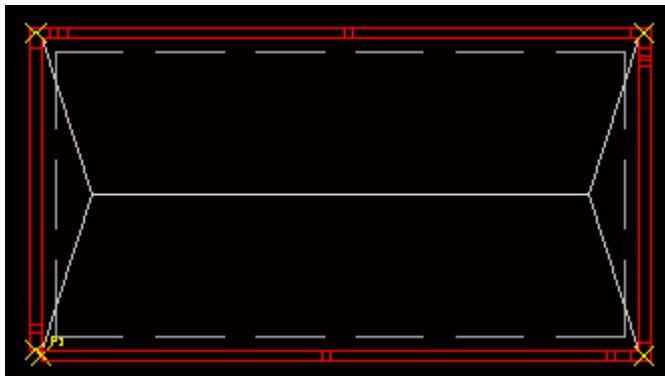


CADprofi

✓ CADprofi Architectural – roof gutter system

A new "Gutters" command has been added to the program.

In this command user can find steel and PVC gutters in both top and elevation views, as well as, pipe drains with equipment.

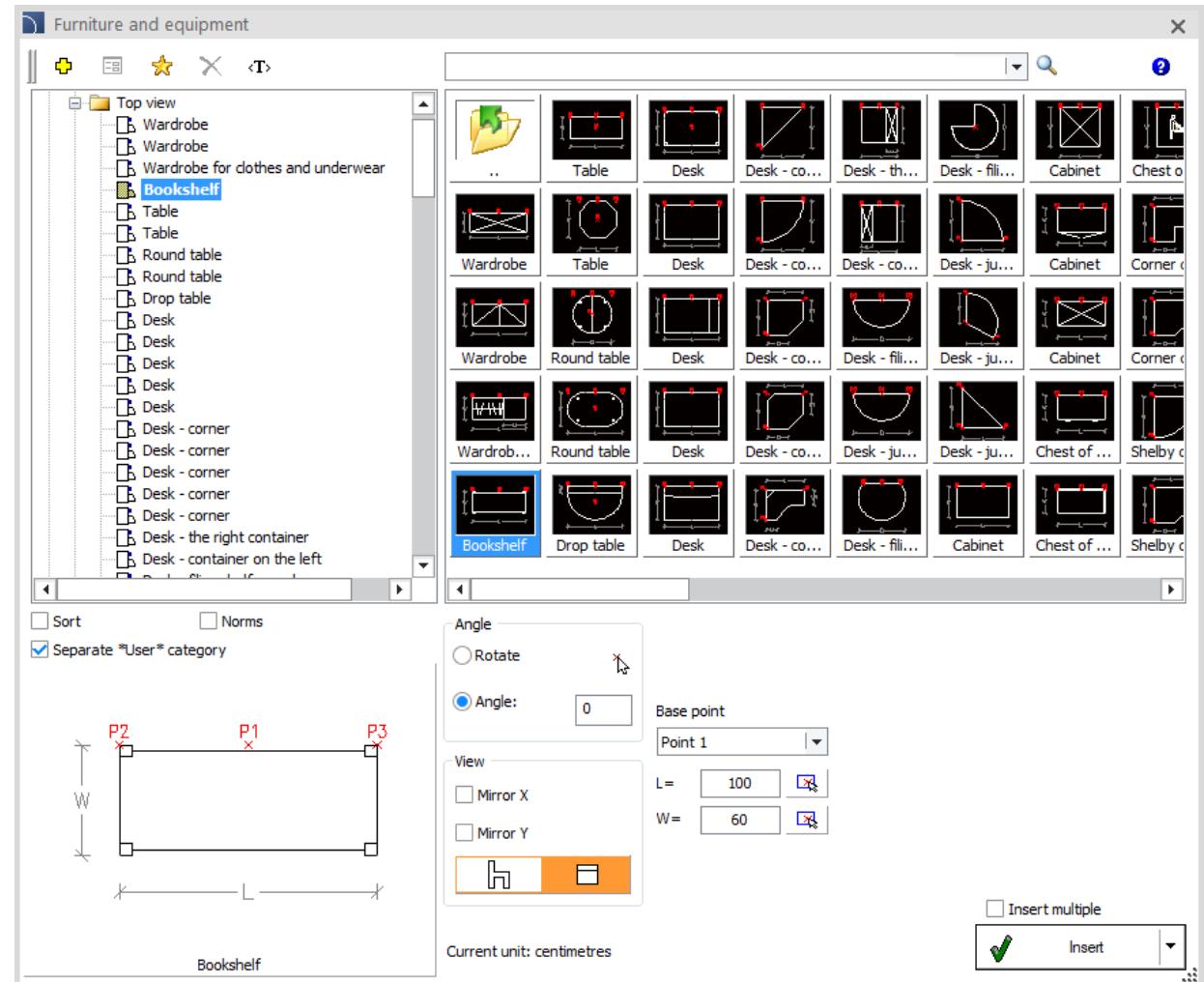
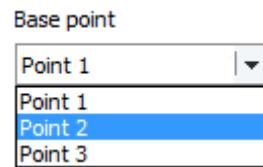




CADprofi

✓ CADprofi Architectural – additional base points

The symbols available in the furniture and equipment library have been extended with the inclusion of several available base points. This change makes it much easier and faster to insert elements into the drawing.

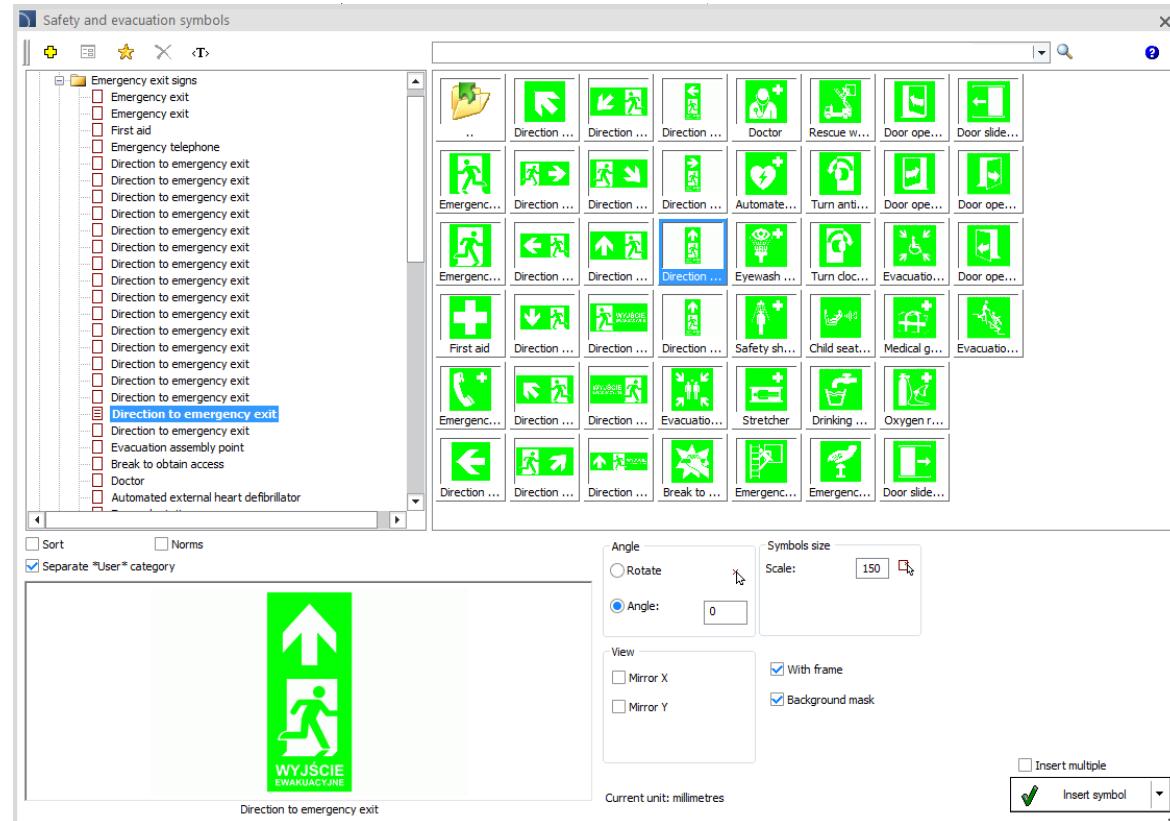




CADprofi

✓ CADprofi Architectural – extension of the evacuation symbols database

Additional symbols prepared in accordance to the ISO 7010 and PN-92/N-01256 standards have been added to the program.





CADprofi

✓ CADprofi Architectural – the possibility to determine the mounting height

Furniture and equipment command has been extended with the possibility to specify the mounting height (H1 dimension) bathroom-kitchen fittings and others (front view).

L=

H=

H1=

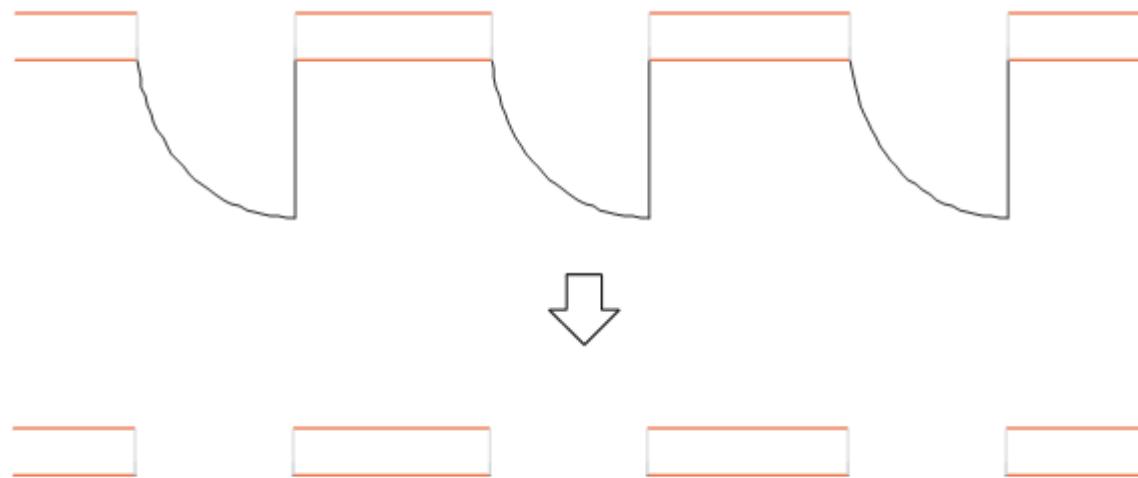




CADprofi

✓ CADprofi Architectural – the ability to hide the door leaf layer

The possibility to hide the door leaf layer (CP_DOORON layer) has been added to the program.
This view allows for easier design of evacuation plans and fire protection installations.

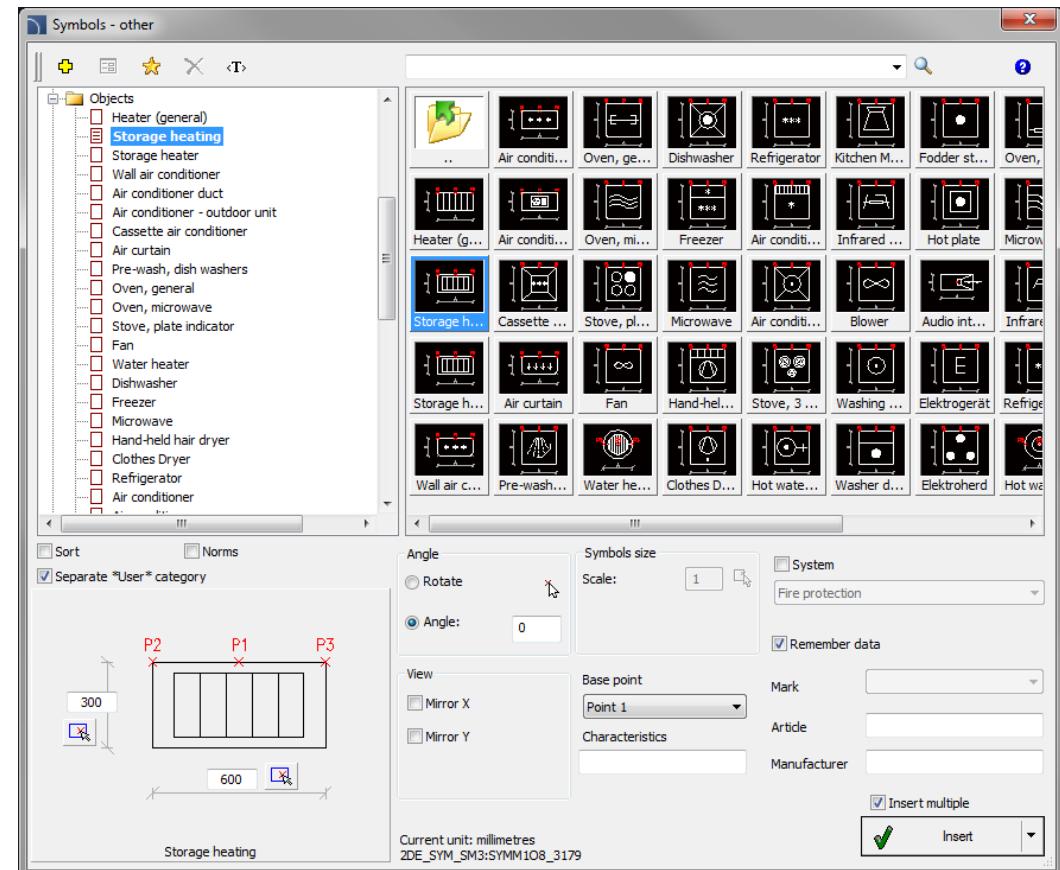




✓ CADprofi Electrical – extension of library of symbols and objects

New parametrical symbols used for designing on building plans has been added to the program, including: heaters, air conditioners, fans, boilers, electric drives, rollers, descriptive symbols and many more.

Additional symbols for connection points have also been added to the program, including wall and ceiling outlets.

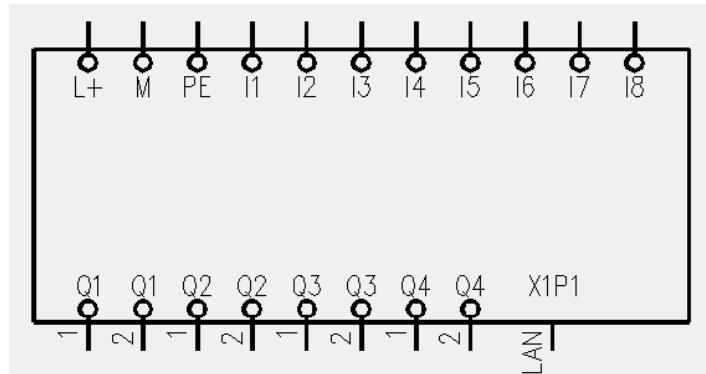




CADprofi

✓ CADprofi Electrical – Siemens PLC controllers

The content of *PLC controllers* and *Modular units* has been expanded with Siemens controllers (LOGO! 8, SIMATIC S7-1200, SIMATIC S7-1500 and operator panels).



Module units

Name	A	L
Digital input modules		
SM 1221, 8DI x 24VDC	4.50	10.0
SM 1221, 16DI x 24VDC	4.50	10.0
SB 1221, 4DI x 5VDC, 200kHz	3.80	6.2
SB 1221, 4DI x 24VDC, 200kHz	3.80	6.2
Digital output modules		
SM 1222, 8DO x 24VDC	4.50	10.0
SM 1222, 16DO x 24VDC	4.50	10.0
SM 1222, 8DO x Relay	4.50	10.0
SM 1222, 16DO x Relay	4.50	10.0
SM 1222, 8DO x Relay Changeover	7.00	10.0
SB 1222, 4DO x 5VDC, 200kHz	3.80	6.2
SB 1222, 4DO x 24VDC, 200kHz	3.80	6.2
Digital I/O modules		
SM 1223, 8DI x 24VDC/8DO x 24VDC	4.50	10.0
SM 1223, 16DI x 24VDC/16DO x 24VDC	7.00	10.0
SM 1223, 8DI x 24VDC/8DO x Relay	4.50	10.0
SM 1223, 16DI x 24VDC/16DO x Relay	7.00	10.0
SM 1223, 8DI x 120/230VAC/8DO x 24VDC	4.50	10.0
SB 1223, 2DI x 24VDC/2DO x 24VDC	3.80	6.2
SB 1223, 2DI x 5VDC/2DO x 5VDC, 200kHz	3.80	6.2
SR 1223, 9PIR x 24VDC/2PIR x 24VDC	3.80	6.2

Objects to insert

Name L

Sort

View and insertion point

2D

Symbol

Symbol (horizontal)

Symbol (one line)

Symbol (one line horizontal)

Label

K > >> Object style

Current unit: centimetres

Repeat the command

OK

SIMATIC S7-1200 Digital inputs module

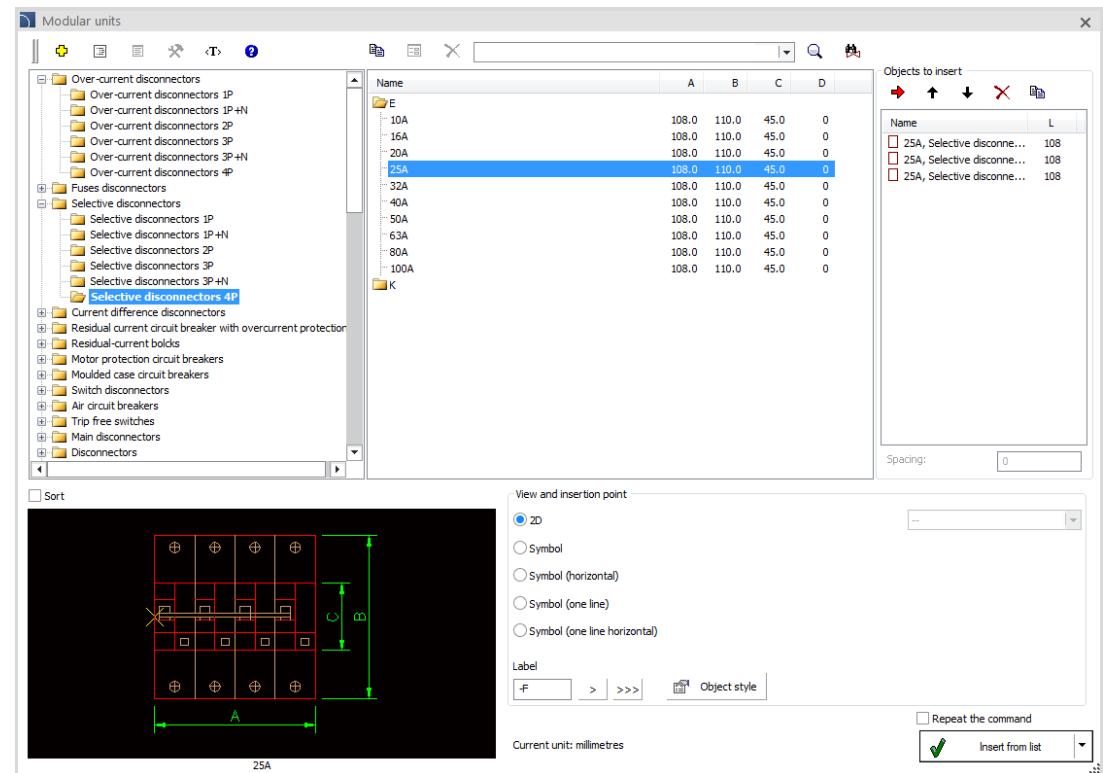


CADprofi

✓ CADprofi Electrical – extension of the modular apparatus library

Additional symbols including modular apparatus have been added to the program, including:

- Over-current disconnectors 4P.
- Selective disconnectors 2P.
- Selective disconnectors 4P.

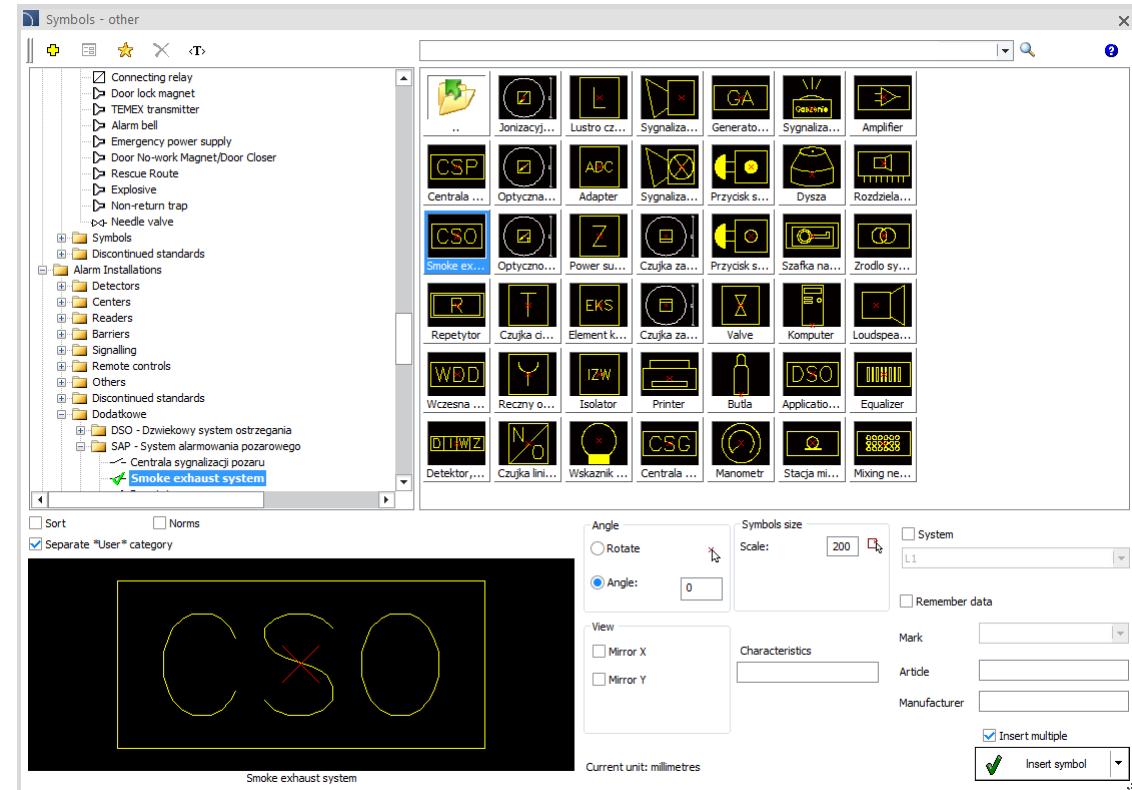




✓ CADprofi Electrical – extension of the fire protection symbols

Additional fire protection symbols (e.g. smoke exhaust system, smoke extraction button, ventilation switch and multisensor detectors) have been added to the program.

Mark	Multisensor smoke and flar
	Multisensor smoke and flame detector
Article	F - multisensor alarm with flasher So - multisensor alarm with sounder Sp - multisensor alarm with sounder and speech messages FSp - multisensor alarm with flasher, sounder and speech messages
Manufacturer	



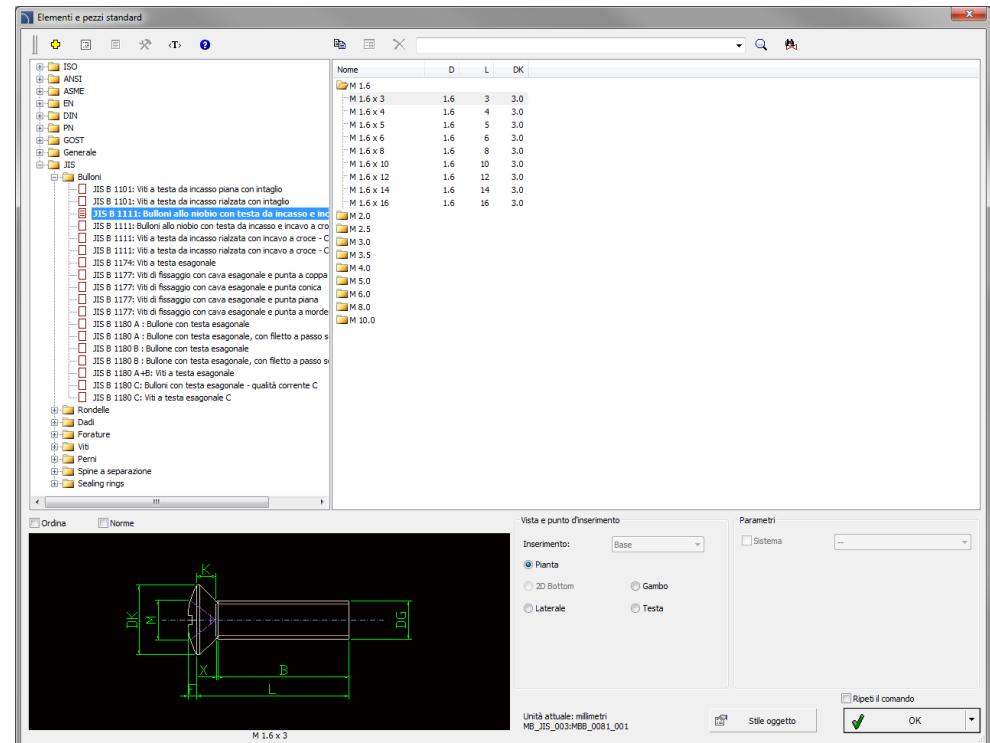


CADprofi

✓ CADprofi Mechanical – additional JIS standards

Additional standardized JIS elements have been added to the program, including:

- Bolts (JIS 1101, JIS 1111, JIS 1174, JIS 1177, JIS 1180).
- Washers (JIS 1256, JIS 1251).
- Nuts (JIS 1181).
- Taped holes (JIS 0205, JIS 0206).
- Screws (JIS 1101, JIS 1115, JIS 1122, JIS 1123).
- Pins (JIS 1354, JIS 1355, JIS 1358, JIS 1359-1, JIS 1359-2A, JIS 2808).
- Split pins (JIS 1351).
- Sealing rings (JIS 2401-1, JIS 2402-1, JIS 2402-4).
- L-shape equal angles, L-shape unequal angles, U-shape (rolled), T-shape (Hot rolled) (JIS G 3192)
- L-shape unequal angles (JIS G 3192-1).
- L-shape unequal angles (JIS G 3192-2).
- Z-shape (JIS G 3350B).
- H-shape (Hot rolled wide-flange steel beams - Dimensions) (JIS G 3192 H).
- I-shape (Hot rolled) (JIS G 3192 I).
- Welded square/rectangular structural tubing (For precision applications) (JIS G-3466).
- Round steel rod (JIS G 3191A).
- Square steel rod (JIS G 3191 B).
- Rectangular steel rod (JIS 3194).
- Hexagon steel rod (JIS 3191C).

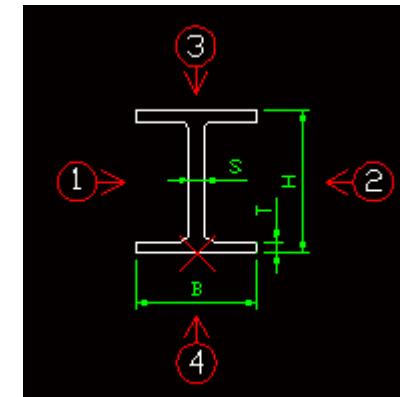
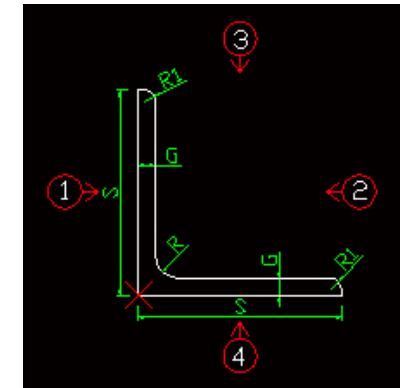




✓ CADprofi Mechanical – additional ISO standards

Additional standardized ISO elements have been added to the program, including:

- Flat steel bar (Hot rolled) (ISO 1035-3).
- L-shape equal angles (ISO 657-1).
- L-shape unequal angles (ISO 657-2).
- U-shape (rolled) (ISO 657-11).
- T-shape (Hot rolled) (ISO 657-21).
- I-shape (Hot rolled) (ISO 657-15).
- Welded round/square/rectangular structural tubing (Cold formed welded structural hollow sections) (ISO 10799-2).
- Welded round/square/rectangular structural tubing.
- Round stainless steel bar (Hot rolled).
- Square steel bar (Hot rolled).





✓ CADprofi HVAC & Piping – calculations of air velocity in ventilation ducts

An option to calculate air flow rate for selected duct size have been added to *Ducts – general views* and *Ducts sequences – general views* commands.

When selecting rectangular ducts, the program also calculates the substitute diameter of the circular duct. In addition, it is possible to check the speed flow rate when selecting the standard diameters of the substitute duct.

Air speed

Dimensions A x B [mm]	Speed flow [m/s]
100 x 500	2.78
150 x 500	1.85 *
200 x 500	1.39
250 x 500	1.11
300 x 500	0.93
400 x 500	0.69
500 x 500	0.56
600 x 500	0.46
800 x 500	0.35
1000 x 500	0.28
1200 x 500	0.23
1400 x 500	0.20

Dimensions A x B [mm] Speed flow [m/s]
150 X 500 -> 1.85

Section area [m²] Substitute diameter [mm]
0.0750 315 - = +

Speed: 1.78 [m/s]

Calculate using dimensions in mm

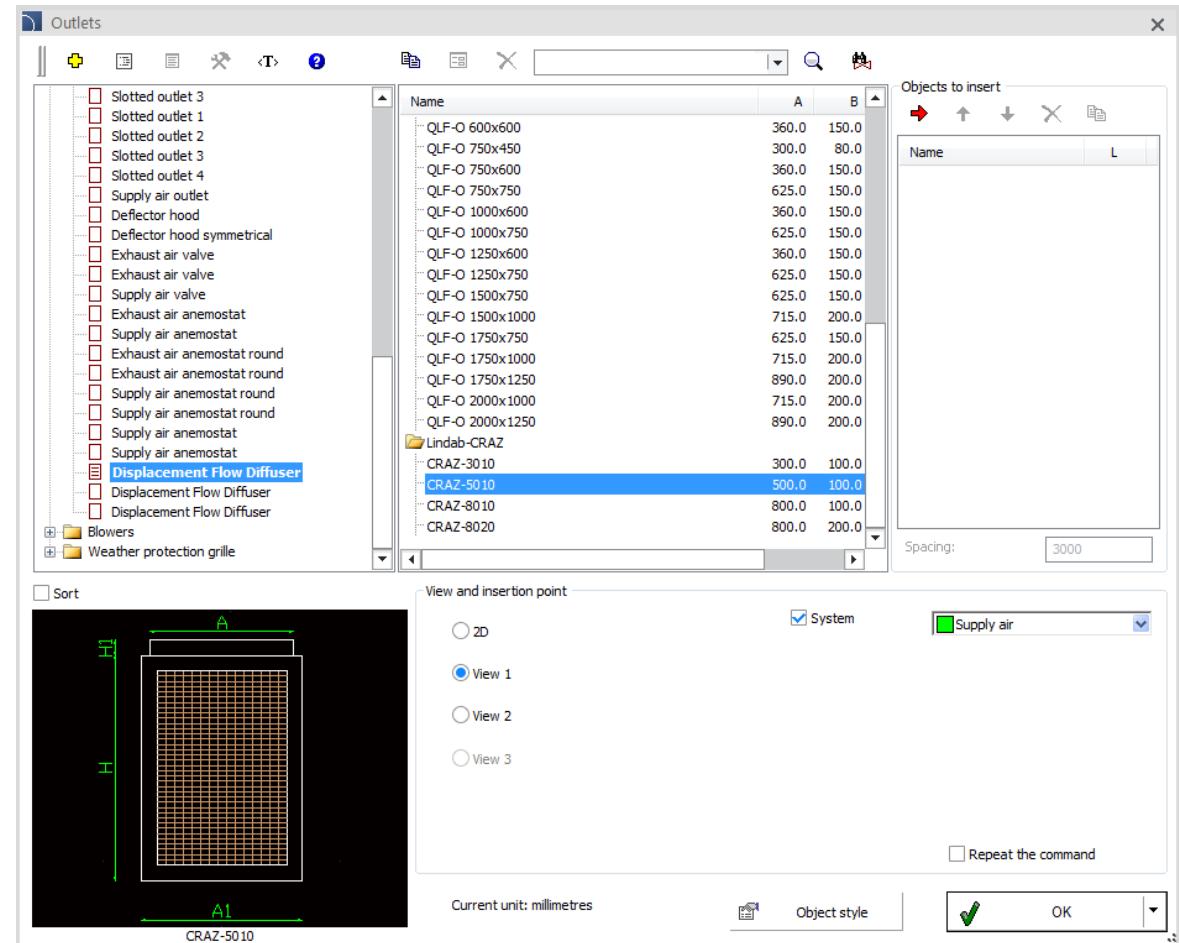
Copy dimensions



✓ CADprofi HVAC & Piping – extension of ventilation system libraries

Additional objects have been added to the program's library, including:

- roof air intake units (WDO-C; WDP-B; WDP-A; K; HN),
- wall air intakes (KWO-AL),
- expansion boxes (SR-HB40),
- displacement flow diffusers (CRAZ; CKA; CEA),
- roof bases (PD; PD-S; PD-ST),
- air grilles (YGC; WLS, WLS; AD; AE),
- air nozzles (DAD).
- Solar protection vessel
- Air separator
- Protective louvre
- Additional ground air grille
- Additional exhaust and supply air outlets
- Slotted outlets
- Wall and ceiling fans
- Venture Industries roof blowers.

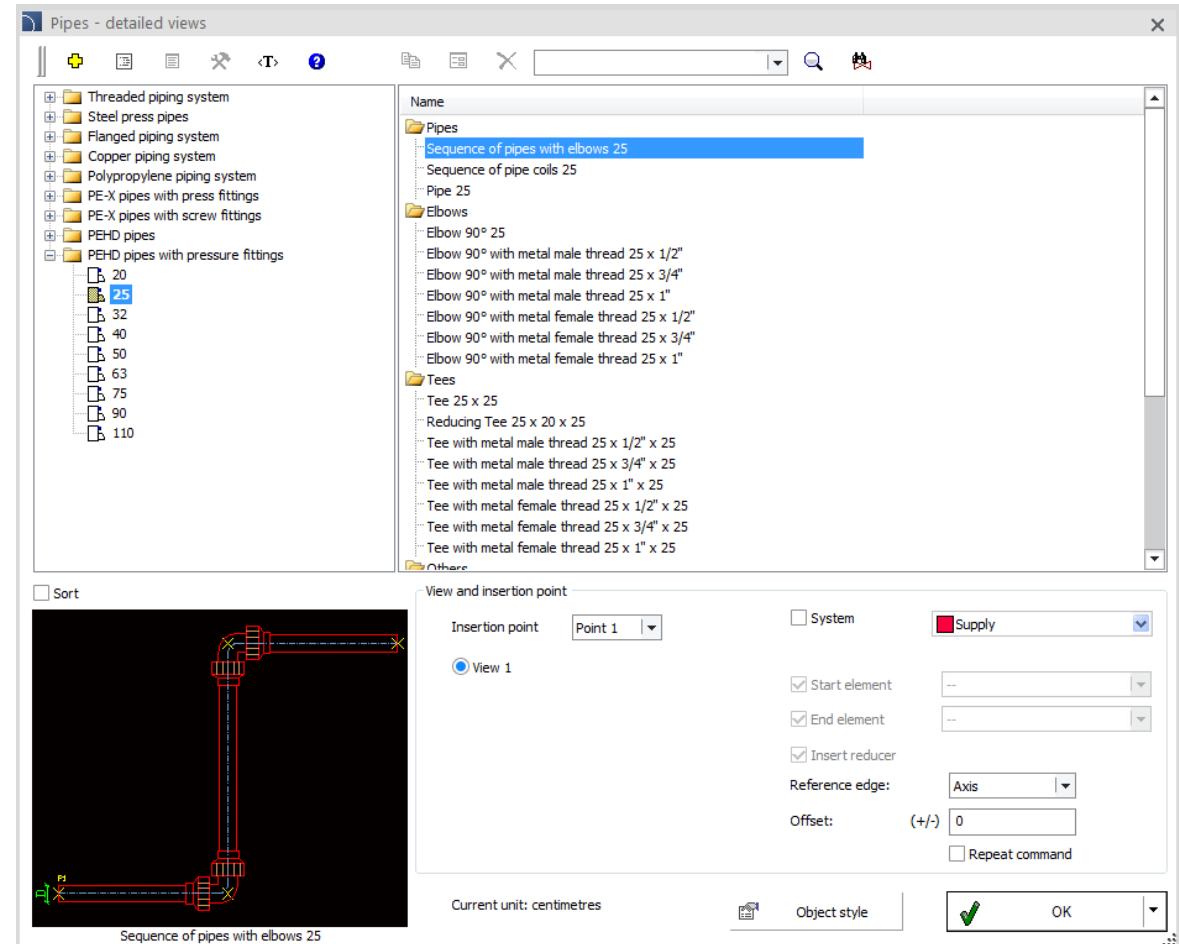




✓ CADprofi HVAC & Piping – HDPE pipe system

The HDPE pipes system used for drinking water, liquid technological media, sewage and also used as protection pipes was added to the *Pipes – detailed views*.

The HDPE pipe system is available with welded connections and with pressure fittings.

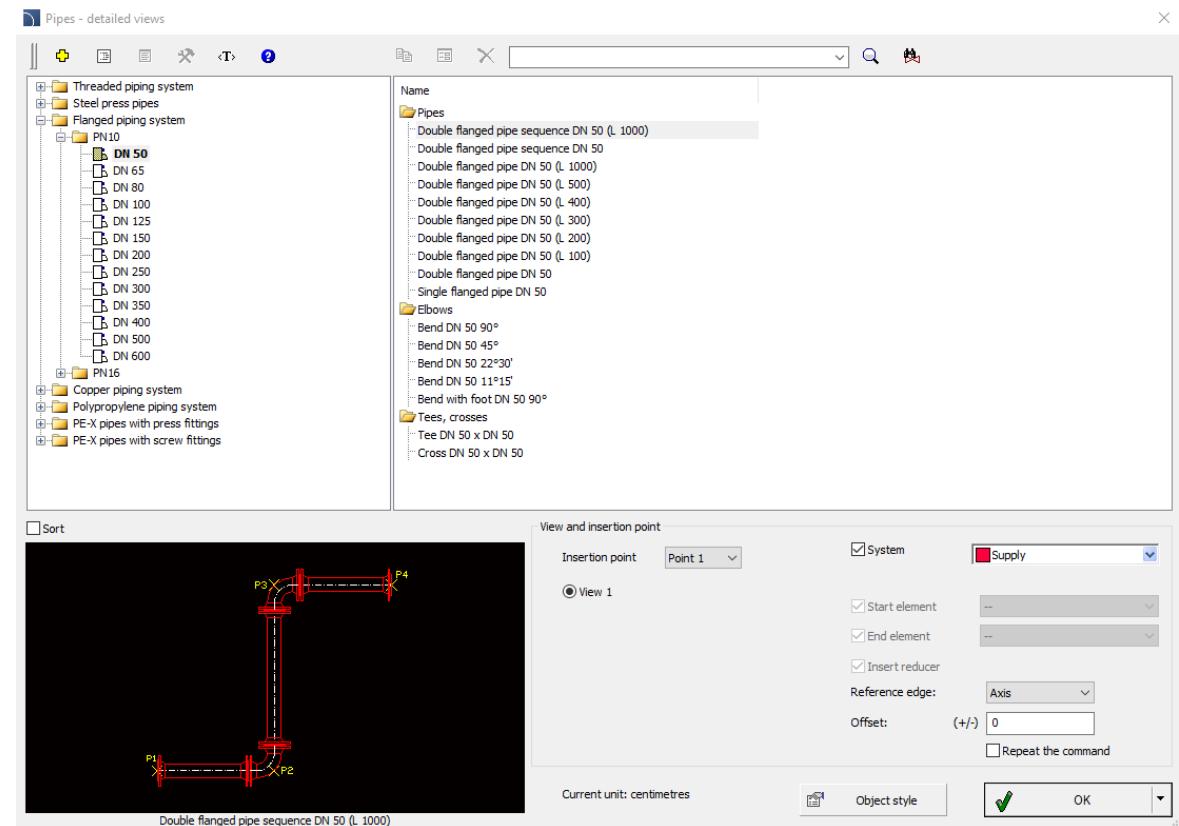




CADprofi

✓ CADprofi HVAC & Piping – flanged piping system

A flanged piping system has been added to the *Pipes – detailed view* command.

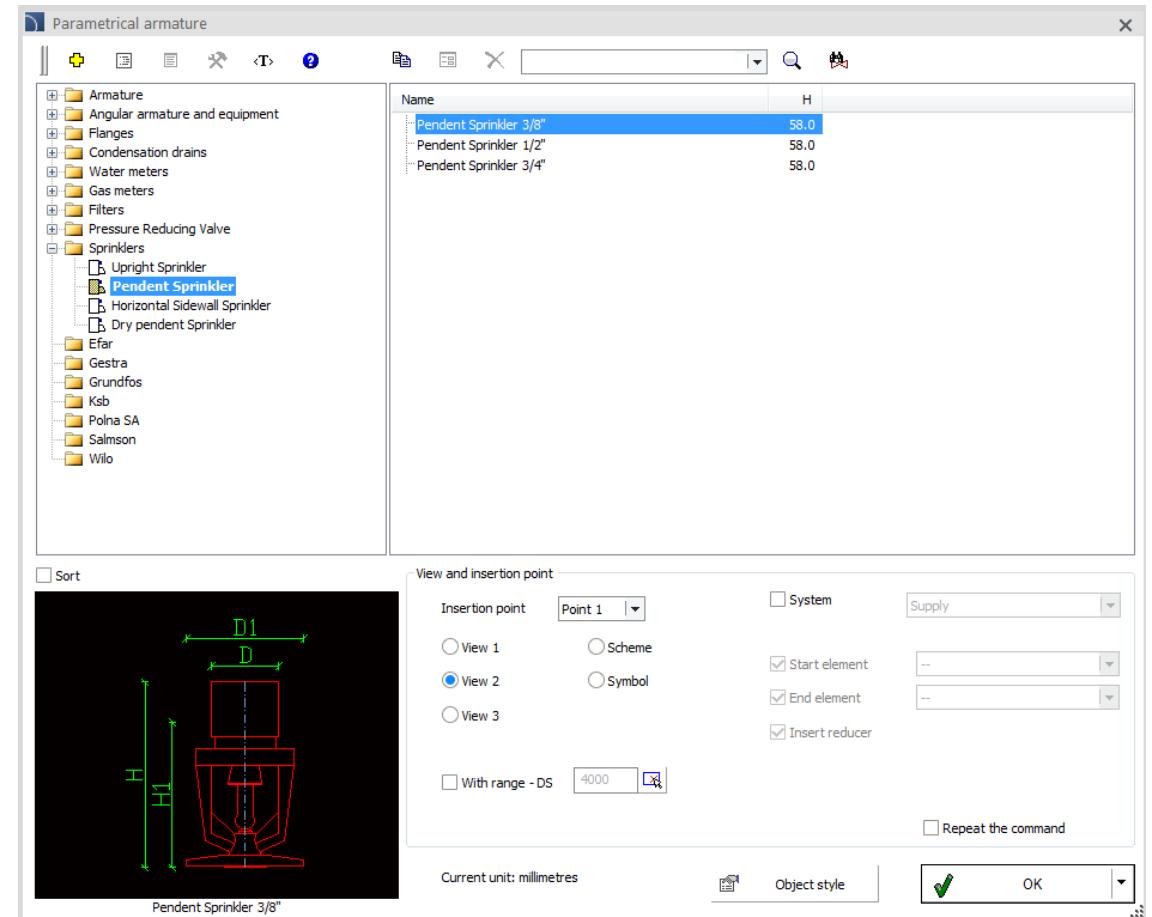




✓ CADprofi HVAC & Piping – extension of the armature library

To the library that contains armature views and other devices additional products have been introduced:

- water meter console,
- diaphragm/bellows meters,
- gas meter bars,
- gas pressure regulators,
- gas filters.
- upright, pendent, horizontal sidewall and dry pendent sprinklers,
- rectangular and round water meter chambers

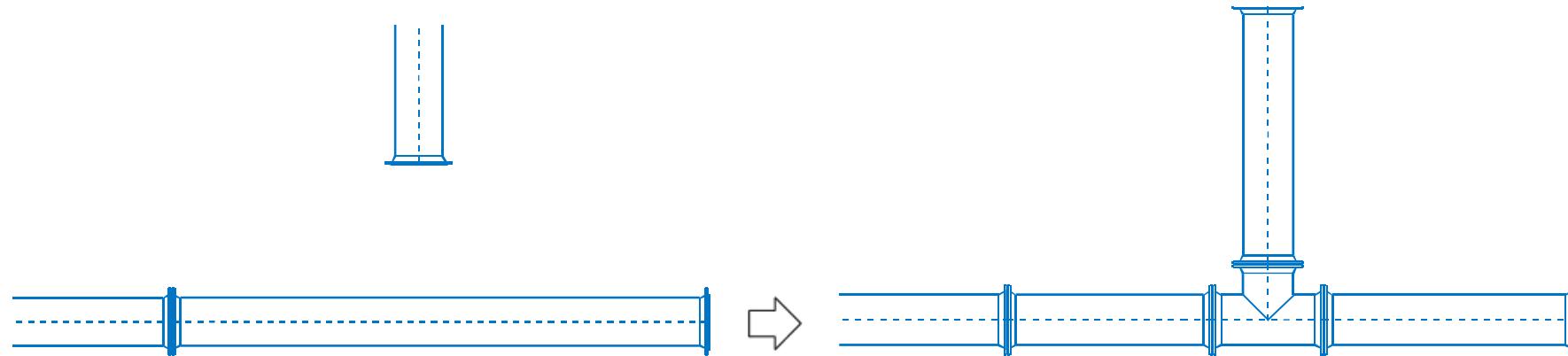




CADprofi

✓ CADprofi HVAC & Piping – inserting fittings into pipelines

An ability to insert fittings into any pipe sequence in detailed views have been added to the program. Additionally, when inserting T-pieces or cross-pieces, it is possible to automatically connect to them other pipelines.





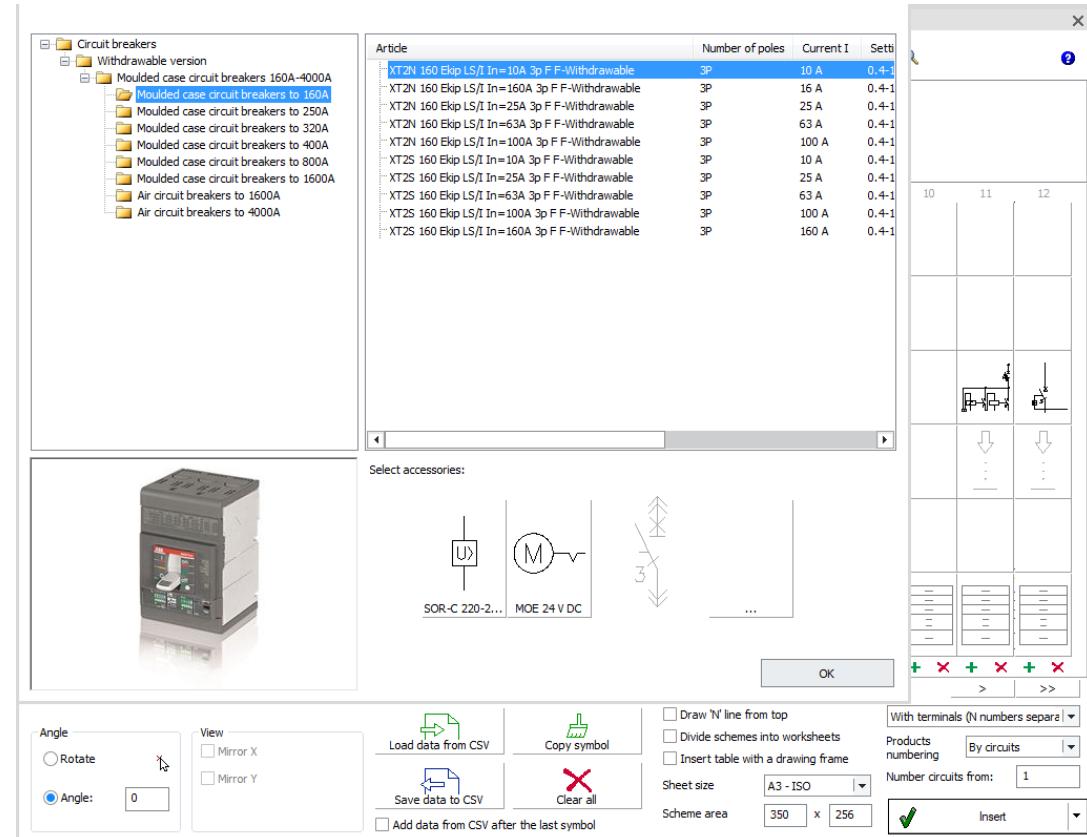
✓ Update of ABB library

The ABB product database has been updated and new product groups have been added:

- Compact/air circuit breakers (withdrawable version).
- F-ATI and F-ARI residual current devices.
- Fuse links (E 9F Gg, E 9F gPV, D0 ..., NH ...).

The power distribution schemes creator has been extended with additional functions that accelerate design work:

- N line guidance from the top.
- Drawing electric circuits with automatic insertion and numbering of terminals.
- Additional apparatus numbering options.
- Predefined templates of commonly used automation systems, ie control systems, measurement and fire protection shutdown.
- Function of selecting additional accessories, eg triggers, auxiliary contacts, drives of communication devices, fuse links, etc.



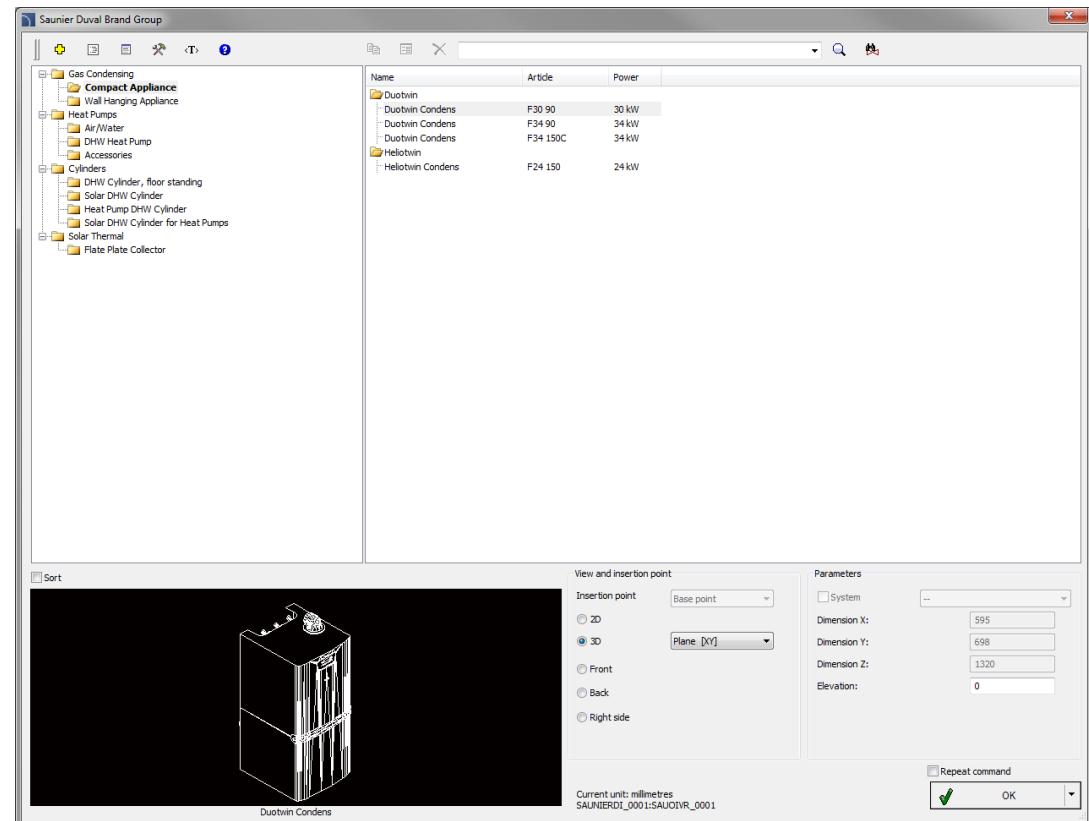


CADprofi

✓ New Saunier Duval library

New library that is available in CADprofi program contains Saunier Duval products, including:

- Gas condensing (compact and wall hanging appliance).
- Heat pumps.
- Cylinders.
- Solar thermal.



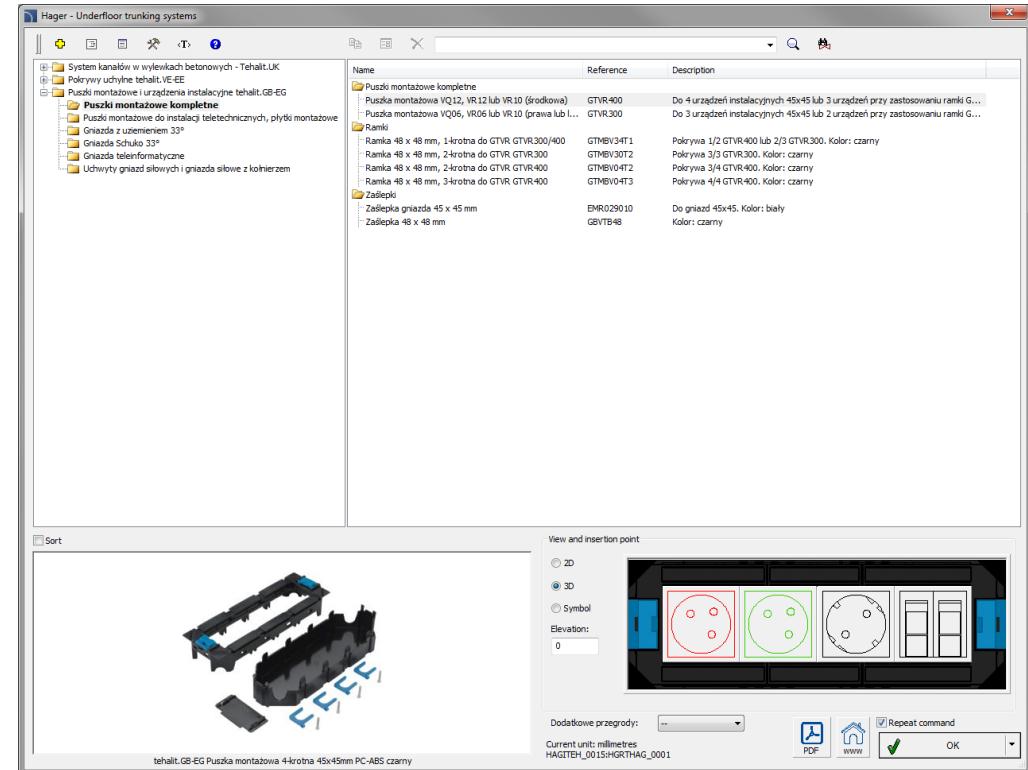
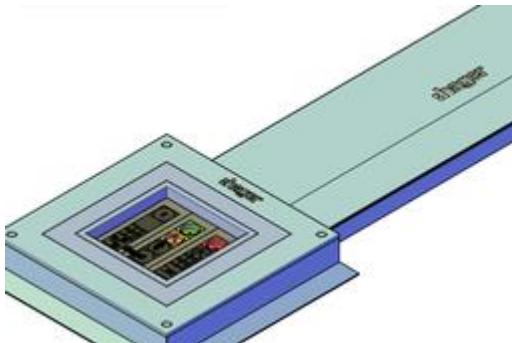


CADprofi

✓ New library: designing hager underfloor trunking systems

New hager Tehalit library allows user to design installation systems in concrete floor screed in a simple and intuitive way. This library allows to easily draw floor ducts, quickly insert steel boxes, covers and installation accessories in 2D views, 3D models and schematic views.

Hager library is available in Polish language (with more languages coming soon) but thanks to our translation system user can easily change necessary translations and adapt the library to his own native language. [Watch translation video.](#)



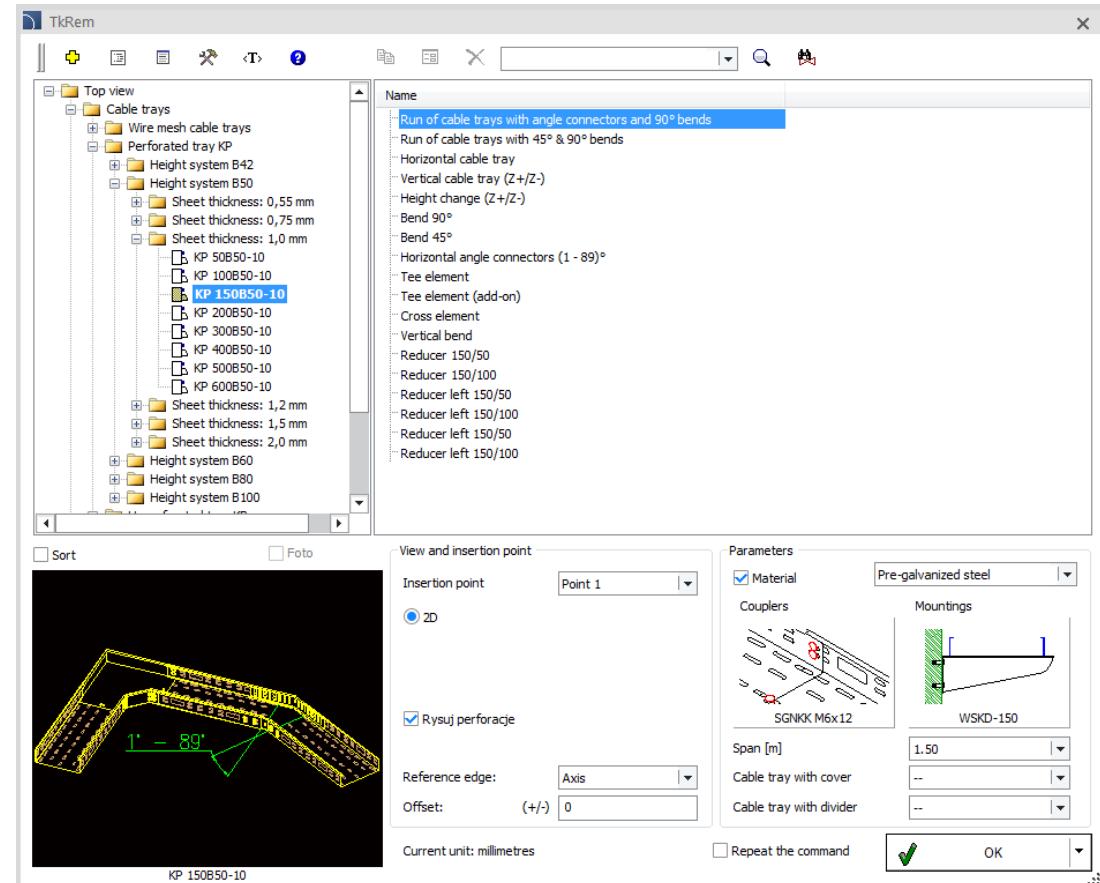


CADprofi

✓ New TKRem library

New library that is available in CADprofi program contains TKRem products, including:

- Cable trays (mesh, KP perforated, KB unperforated, heavy KC and KLC).
- Cable ladders (DUK, DKN).
- E90 system (KP cable trays, DUK cable ladders).
- Underfloor channels (B28, B38, B48 height system).





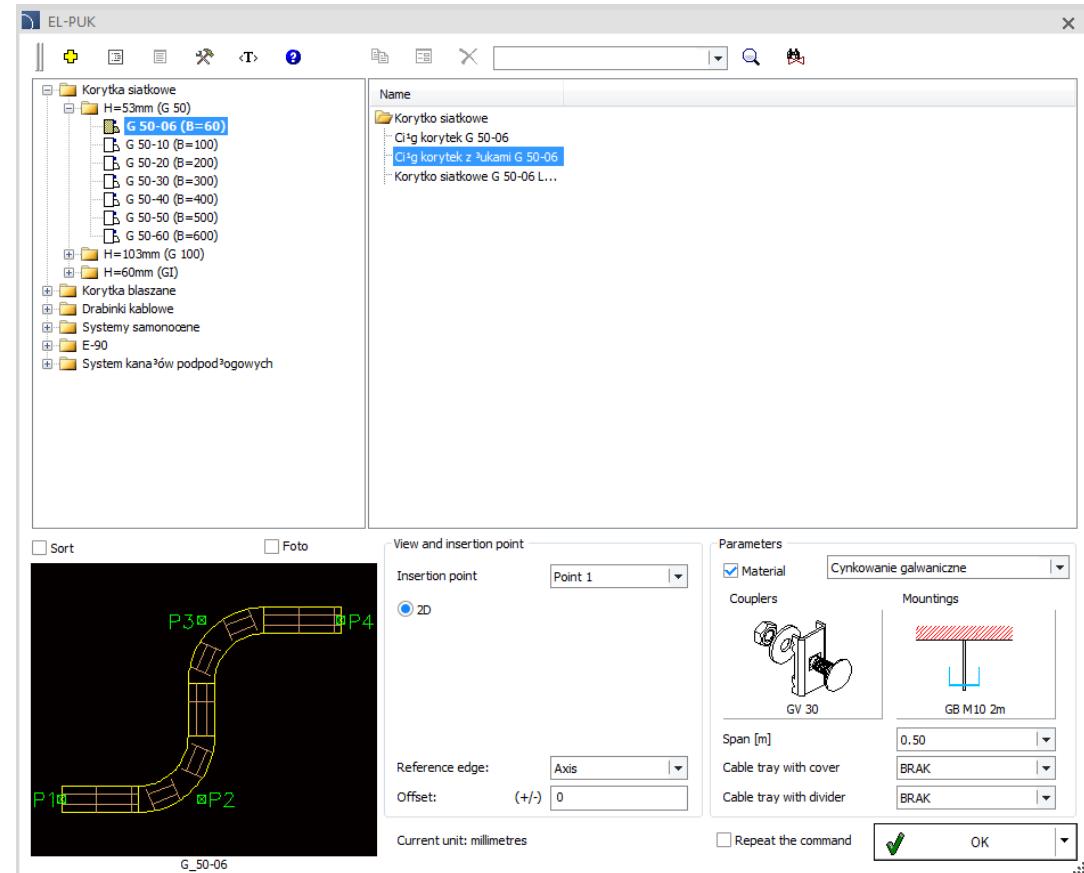
CADprofi

✓ New EL-PUK library

New library that is available in CADprofi program contains EL-PUK products, including:

- Mesh cable trays.
- Sheet metal trays (full, perforated).
- Cable ladders.
- Self-supporting systems.
- E-90 system.
- Underfloor channels.

Library is currently available in Polish language.





CADprofi

✓ Update of manufacturers' libraries:





CADprofi

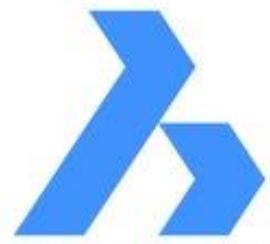
✓ Adjustment to many base CAD programs

CADprofi 2019 has been adjusted to work with latest CAD programs, including: 4MCAD 19, ActCAD 2019, ArCADia 10.4 (64bit), ARES Commander 2018 SP2, AutoCAD 2019, BricsCAD V19, CADMate 2018, CMS IntelliCAD 8.4, GstarCAD 2019, progeCAD 2019, ZWCAD 2019.

AutoCAD®

ZWCAD

GstarCAD
An Alternative CAD System

The BricsCAD logo consists of three blue arrows pointing upwards and to the right, forming a stylized 'A' shape.
BRICSCAD

The ProgeSoft logo features a blue globe with a yellow 'I' shape in the center.
progeSOFT

The IntelliCAD logo shows a yellow 'I' shape inside a purple diamond with a trademark symbol.
IntelliCAD

The ARES Commander logo features a red swoosh graphic.
Gräbert
ARES® Commander