



**CADprofi 2018.15/17**

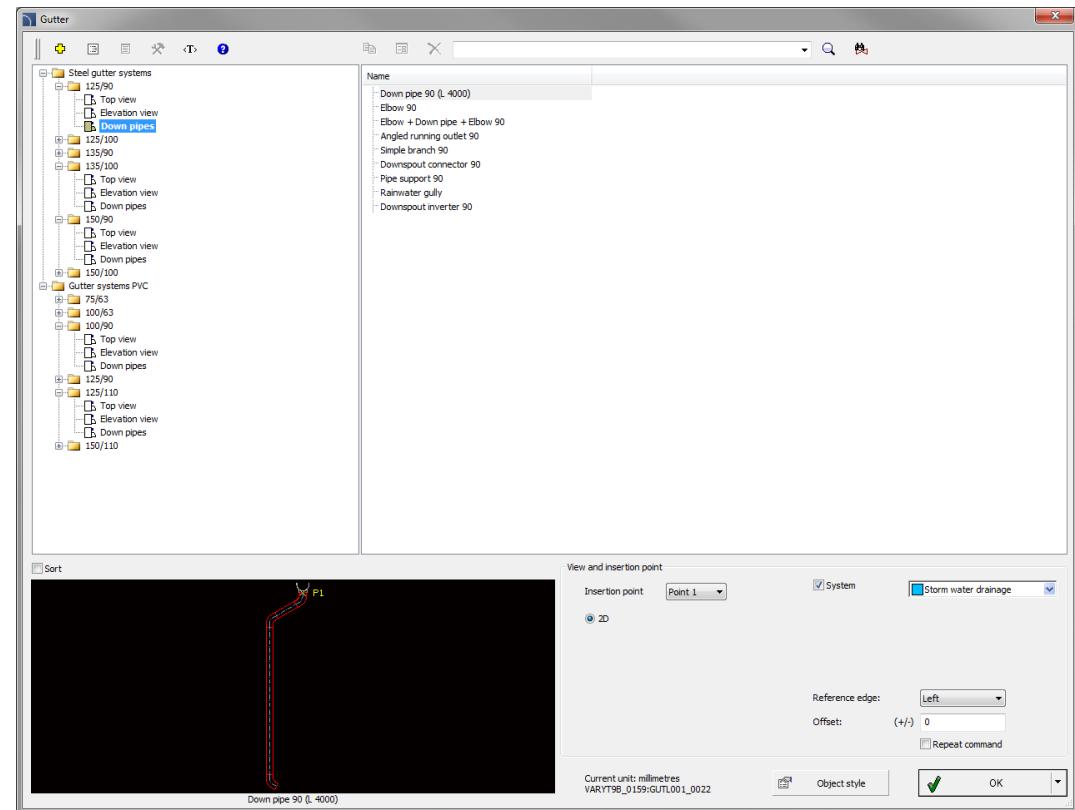
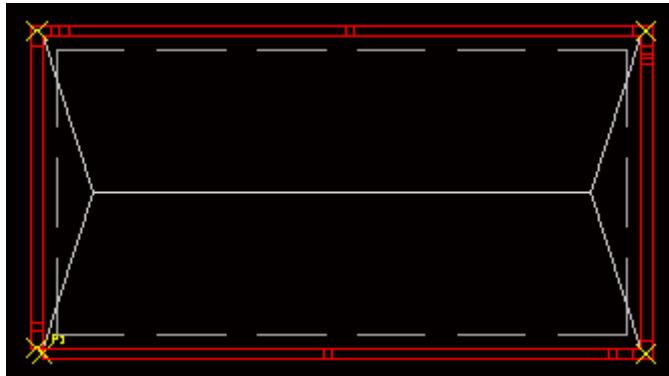


# CADprofi

## ✓ CADprofi Architectural – 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.

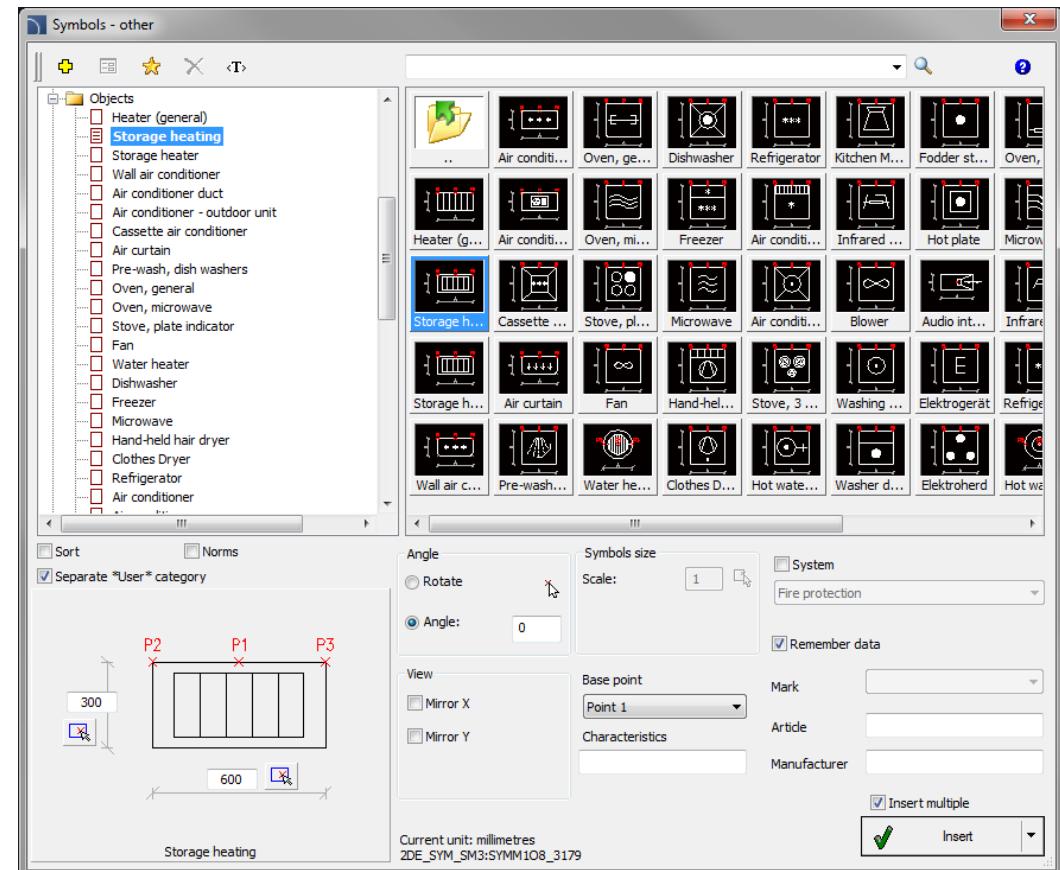




## ✓ CADprofi Electrical – extension of library of symbols and objects

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 HVAC & Piping – calculations of air velocity (command extension)

The command used to calculate the air speed has been extended with additional options:

- Limiting the air velocity in the duct with automatic duct selection with optimum cross-section.
- 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

| Air flow |                   |
|----------|-------------------|
| 500      | m <sup>3</sup> /h |

Speed limit [m/s] 2

| Dimensions A x B | 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      Speed flow [m/s]

|     |   |     |   |      |
|-----|---|-----|---|------|
| 150 | X | 500 | → | 1.85 |
|-----|---|-----|---|------|

Section area [m<sup>2</sup>]      Substitute diameter [mm]

|        |     |   |   |   |
|--------|-----|---|---|---|
| 0.0750 | 315 | - | = | + |
|--------|-----|---|---|---|

Speed: 1.78 [m/s]

Current unit: millimetres

Copy dimensions

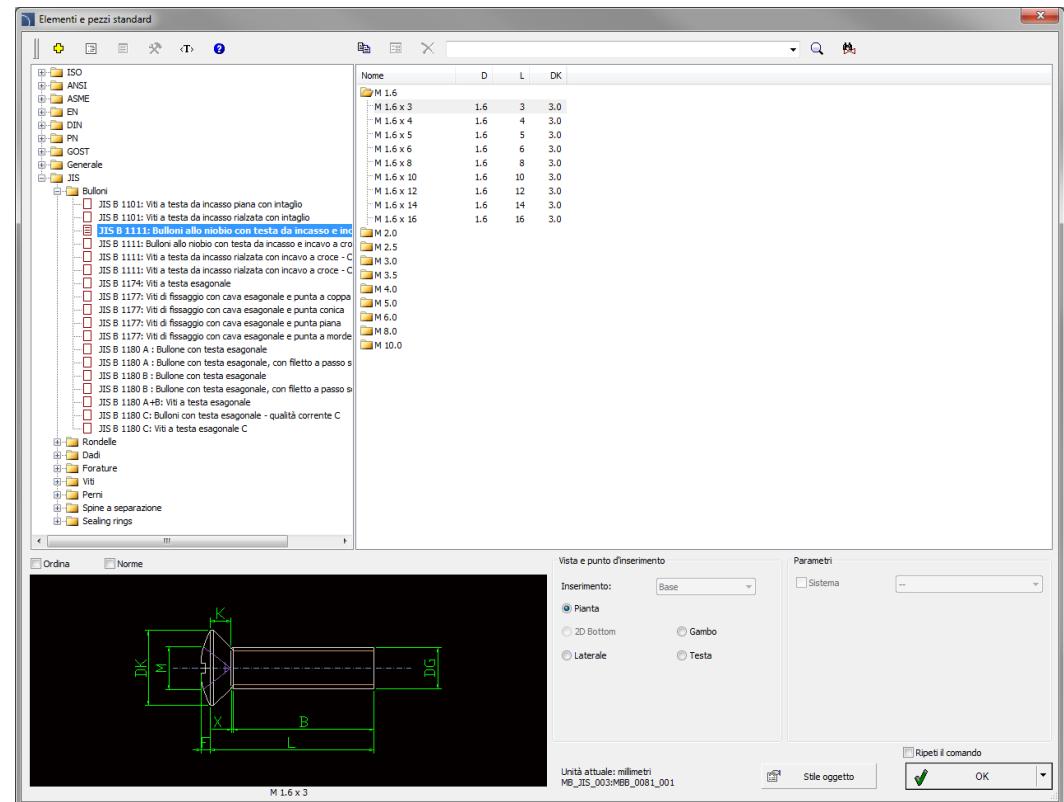


# CADprofi

## ✓ CADprofi Mechanical – additional JIS standards

New standardized 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).



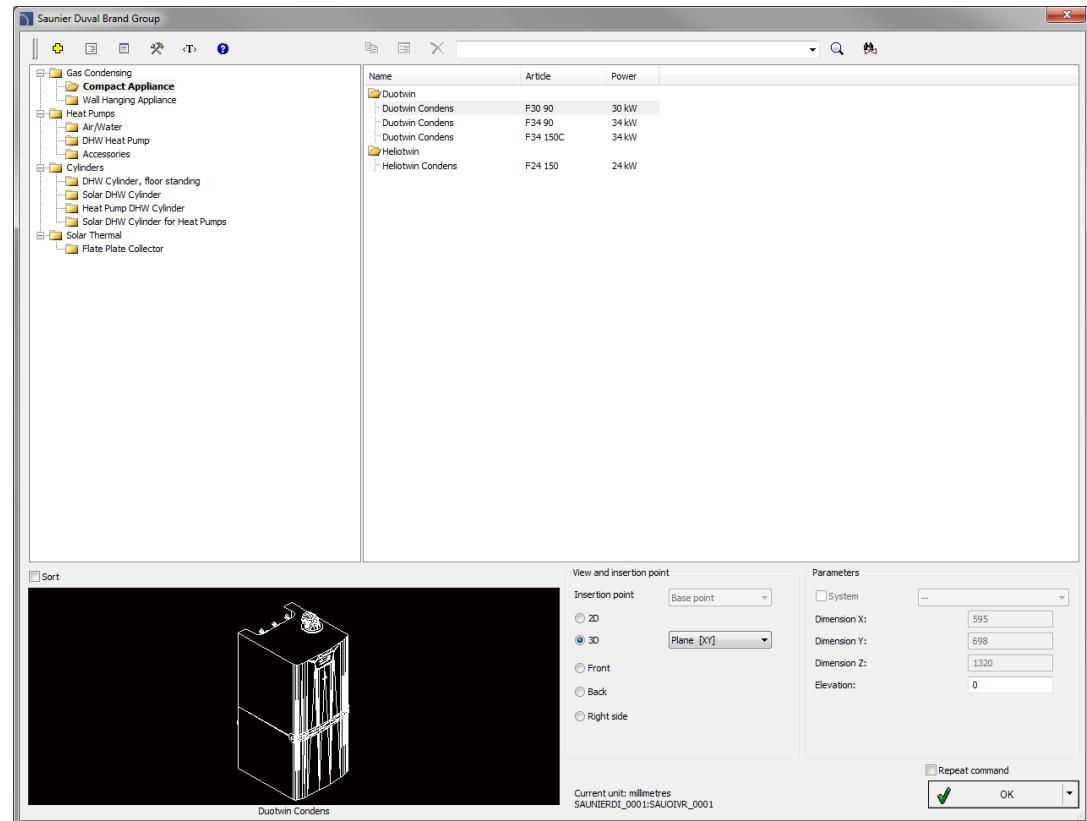


# CADprofi

## ✓ 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.

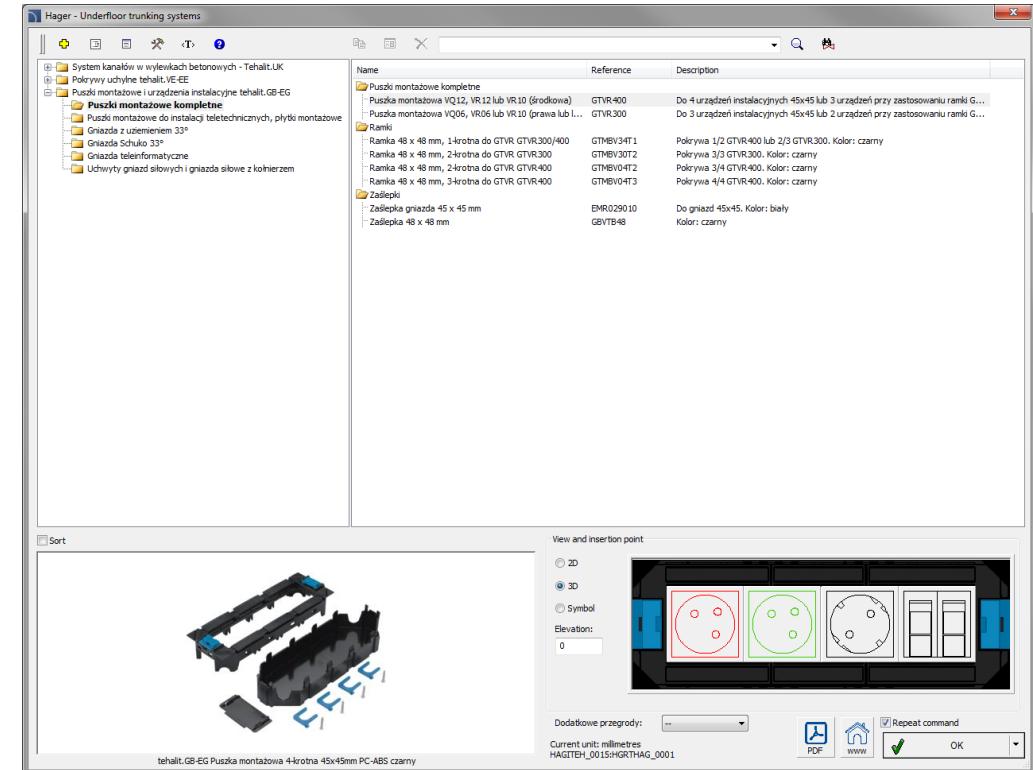
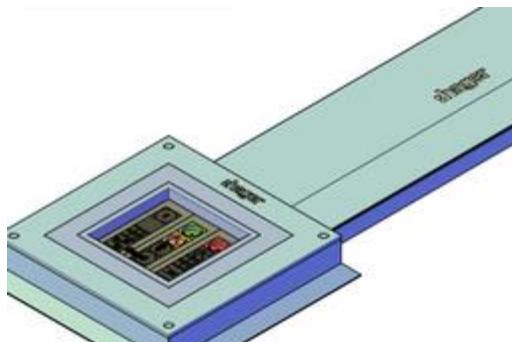




## ✓ New library: designing hager underfloor trunking systems

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**

- ✓ Update of manufacturers' libraries





# CADprofi

## ✓ Adjustment to many base CAD programs

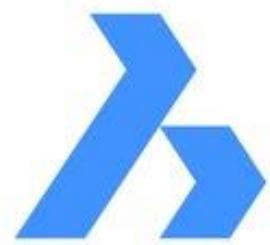
CADprofi 2018.15/17 has been adjusted to work with latest CAD programs, including: GstarCAD 2019 and ARES Commander 2018 SP2.

CADprofi 2018 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 yellow stylized 'I' shape with a grid pattern behind it.  
**progeSOFT**

The logo for IntelliCAD, featuring a yellow stylized 'I' shape with a purple diamond shape behind it.  
**IntelliCAD**

The logo for ARES Commander, featuring a red stylized 'A' shape composed of several curved lines.  
**Gräbert  
ARES® Commander**



CADprofi



**CADprofi 2018.13**



# CADprofi

## ✓ 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.

Air speed

Air speed

Air flow

|     |                   |
|-----|-------------------|
| 500 | m <sup>3</sup> /h |
|-----|-------------------|

| Dimensions A x B | 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             |
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| 600 x 500        | 0.46             |
| 800 x 500        | 0.35             |
| 1000 x 500       | 0.28             |
| 1200 x 500       | 0.23             |

Dimensions A x B      Speed flow (m/s)

|     |   |     |   |      |
|-----|---|-----|---|------|
| 100 | X | 500 | → | 2.78 |
|-----|---|-----|---|------|

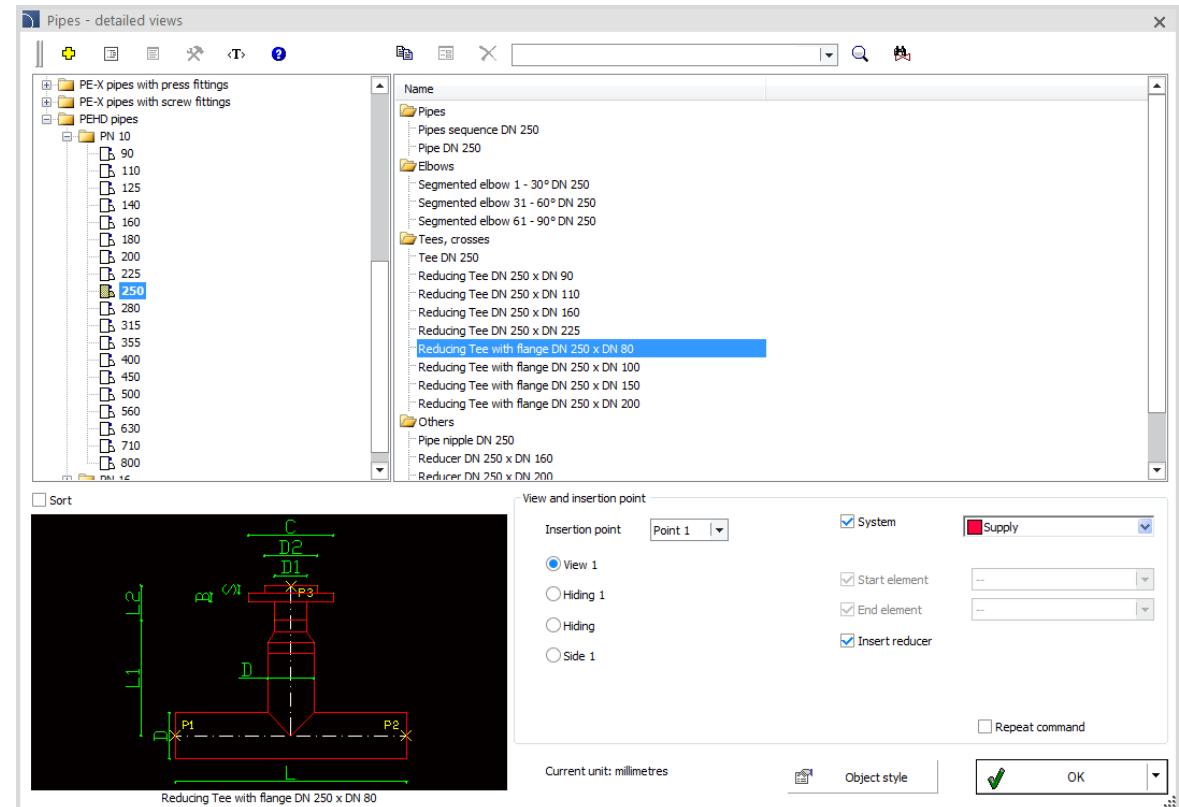
Current unit: millimetres



# CADprofi

## ✓ CADprofi HVAC & Piping –PEHD 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*.

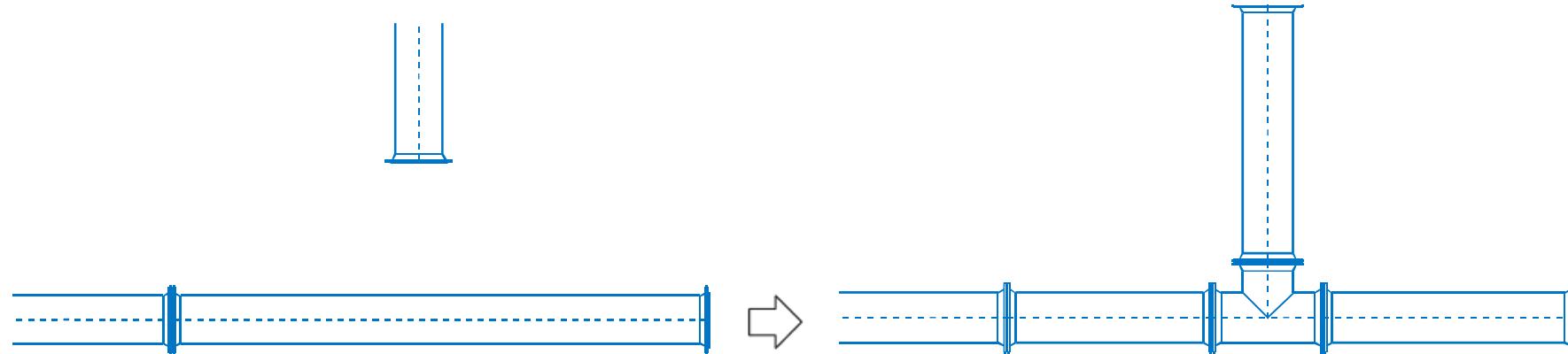




# CADprofi

## ✓ 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.



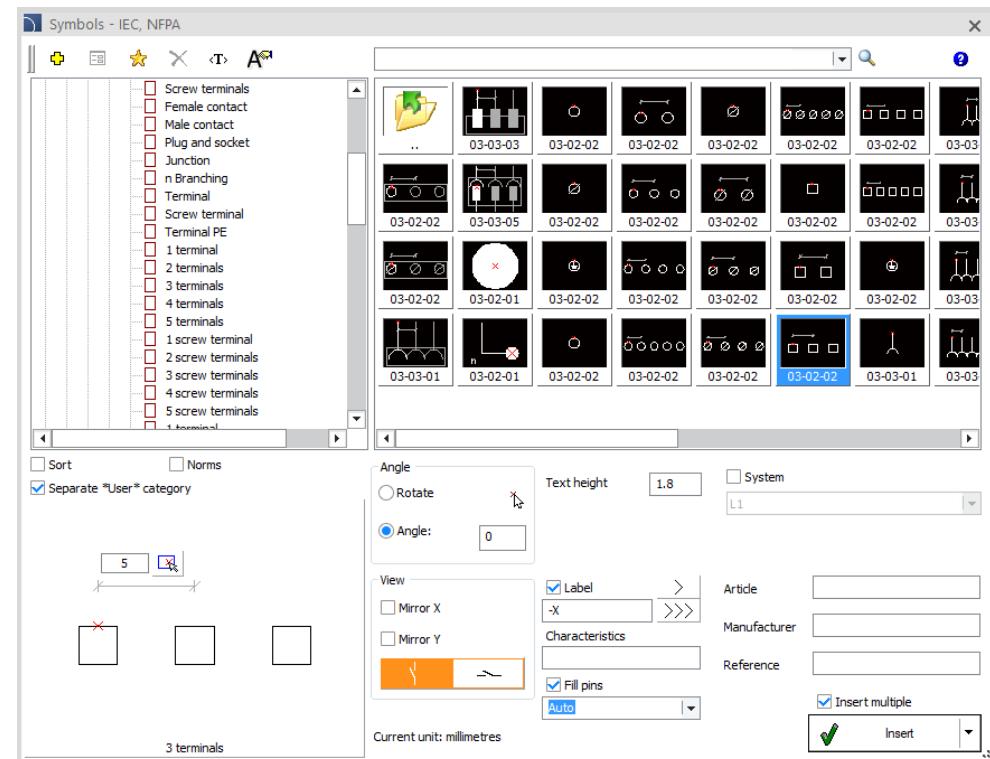


# CADprofi

## ✓ CADprofi Electrical – extension of symbols and objects libraries

Additional terminal symbols have been added to the program in both vertical and horizontal views.

The Siemens PLC library and the modular apparatus library were also updated.





# CADprofi

✓ Update of manufacturers' libraries:





# CADprofi

## ✓ Adjustment to many base CAD programs

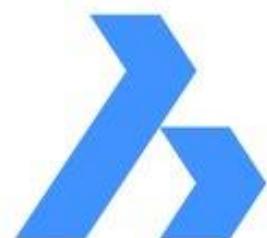
CADprofi 2018.13 has been adjusted to work with latest CAD programs, including: ActCAD 2019, AVICAD 2019, progeCAD 2019, ZWCAD 2019.

CADprofi 2018 currently works with many base CAD programs including: AutoCAD (since the 2000 version), BricsCAD, GstarCAD, IntelliCAD, progeCAD, ZWCAD, ARES Commander Edition and others.

**AutoCAD®**

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**CADprofi**



**CADprofi 2018.09/10**



# 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 BricsCAD Platinum V18.2 with the BricsCAD BIM license.



[Watch movie](#)

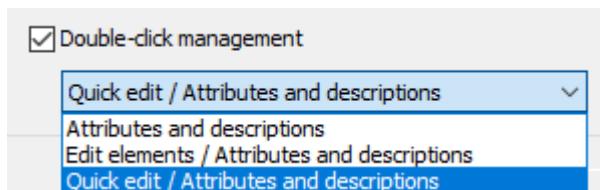
| BIM                              |                                 |
|----------------------------------|---------------------------------|
| Type                             | Flow Fitting                    |
| Name                             | Vertical elbow '300+300 mm', RH |
| Description                      | Vertical elbow '300+300 mm', RH |
| Building                         |                                 |
| Story                            |                                 |
| Composition                      |                                 |
| Display compositi                | Off                             |
| GUID                             | 0ZlzcFijfA8cuyn5HIEXU           |
| 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 – extended management of double-click action

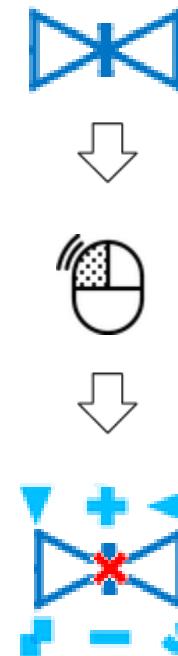
In the *CADprofi - Options* an additional possibility of running the [Quick edit](#) command has been added when performing the double-click action.

The *Quick edit* command allows to perform basic editing operations on symbols and objects by using editing markers. By running this command by double-clicking, the user can instantly edit selected symbols or objects without having to run the command from the toolbar or command line.



*CADprofi - Options: Selection of action performed during a double click*

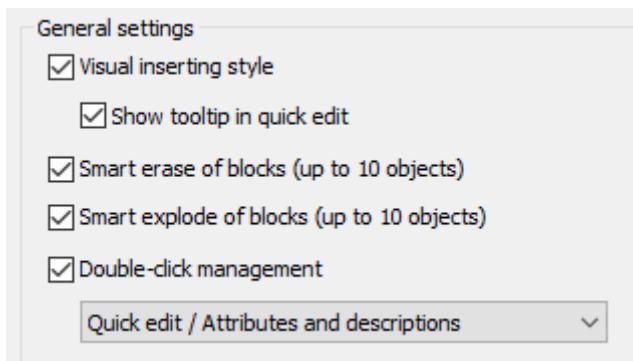
This command works in selected CAD programs.





## ✓ 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.

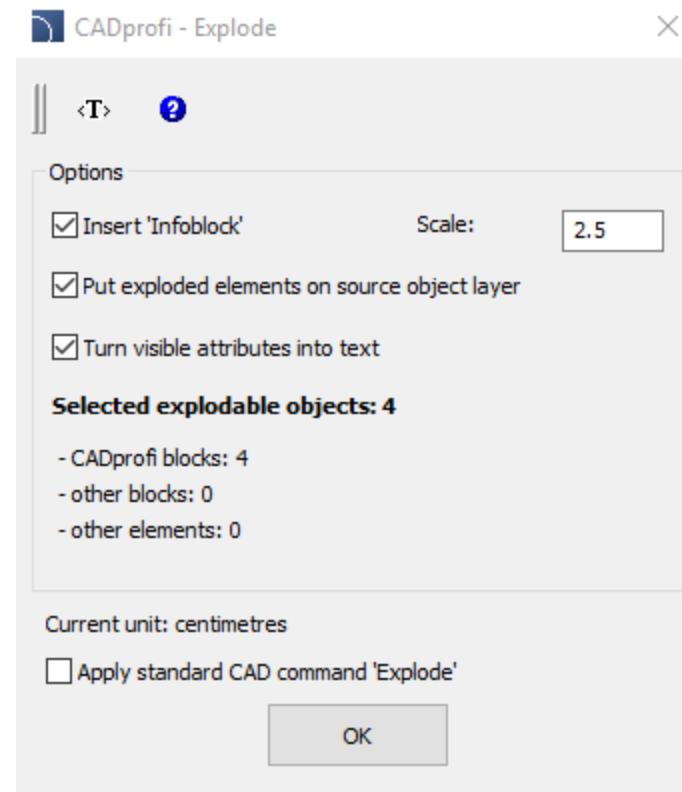


*Smart explode of blocks can be activated in CADprofi - Options*

Notice:

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

This command works in selected CAD programs.



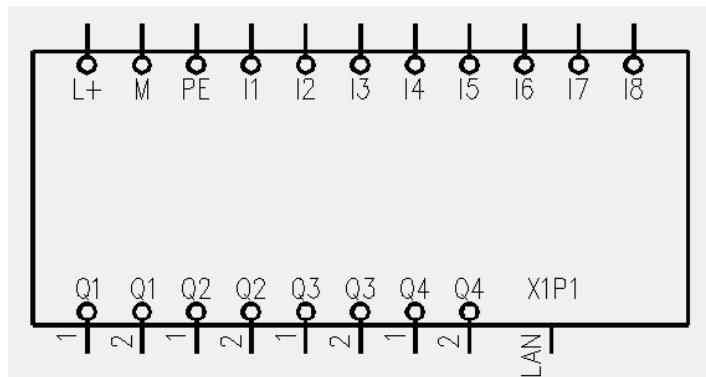
*CADprofi - Explode* command is being described in the online help. [Read more...](#)



# CADprofi

## ✓ CADprofi 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).



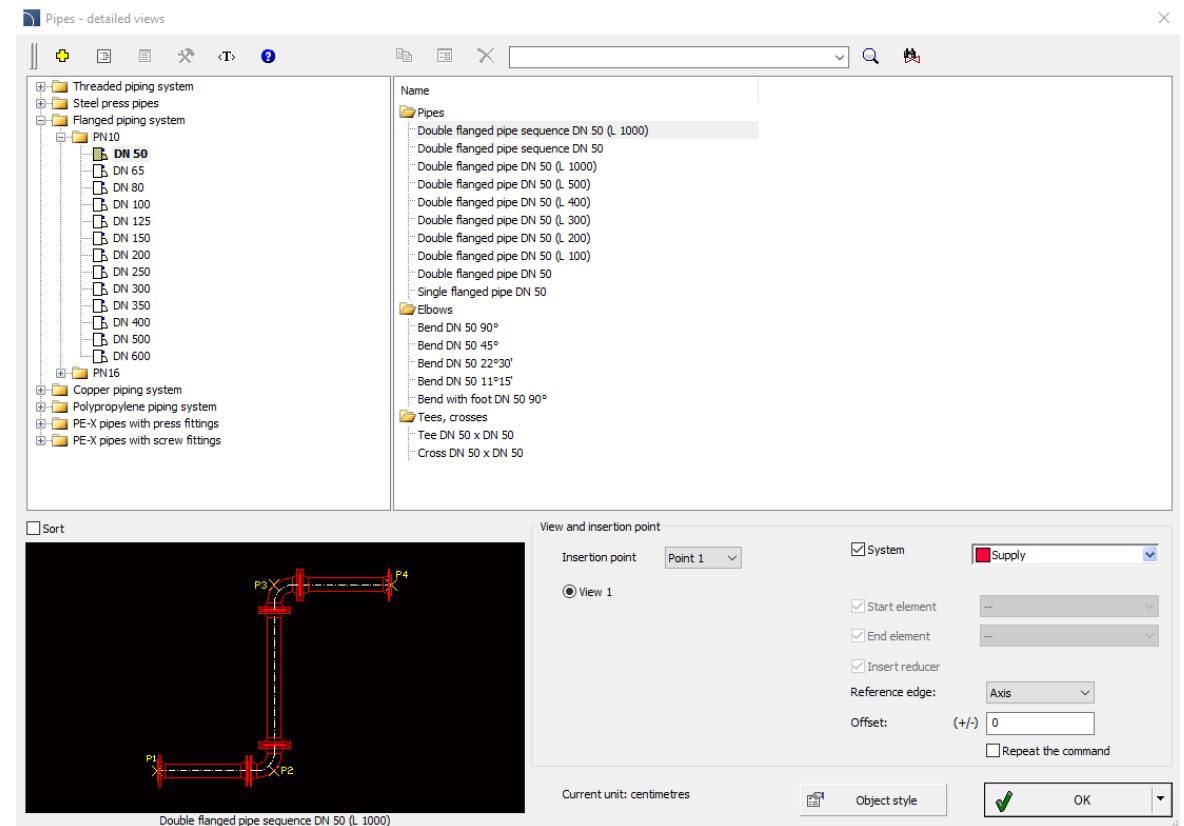
The screenshot shows the CADprofi software interface with the 'Modular units' catalog open. The left pane displays a tree view of available components, including Fans, Pushbuttons, Indicator lights, Mounting rails, Busbars, Additional accessories, PLC Controllers (with sub-options for Siemens, LOGO!, SIMATIC S7-1200, SIMATIC S7-1500, and Operator panels), and brands like ABB and Dehn. The right pane lists specific modules under the 'Digital input modules' category, such as SM 1221, 8DI x 24VDC and SB 1221, 4DI x 5VDC, 200kHz. A detailed 3D model of a SIMATIC S7-1200 Digital inputs module is shown at the bottom, with dimensions A=10.0 and B=6.2 indicated. The software interface includes various toolbars, a search bar, and a status bar indicating 'Current unit: centimetres'.



# CADprofi

## ✓ CADprofi HVAC & Piping – flanged piping system

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





# CADprofi

✓ **Update of manufacturers' libraries:**





CADprofi



**CADprofi 2018.07**



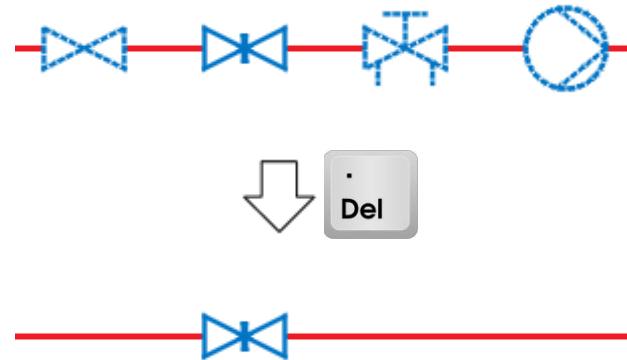
# CADprofi

## ✓ 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)



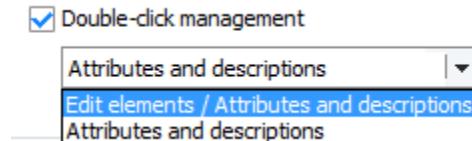
[Watch video](#)



# 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 or a standard base CAD program action.



This command works in selected CAD programs.



[Watch video](#)

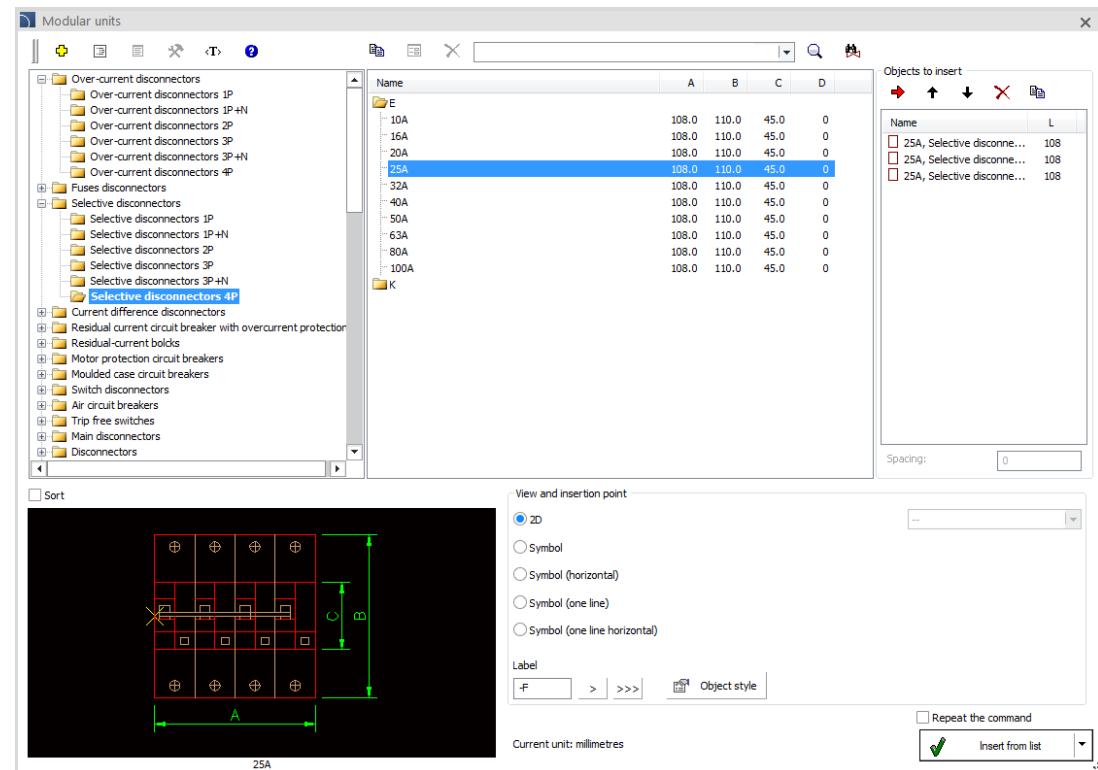


## ✓ CADprofi Electrical – extension of the modular apparatus library

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

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

Additional IEC symbols have been also added to the program.

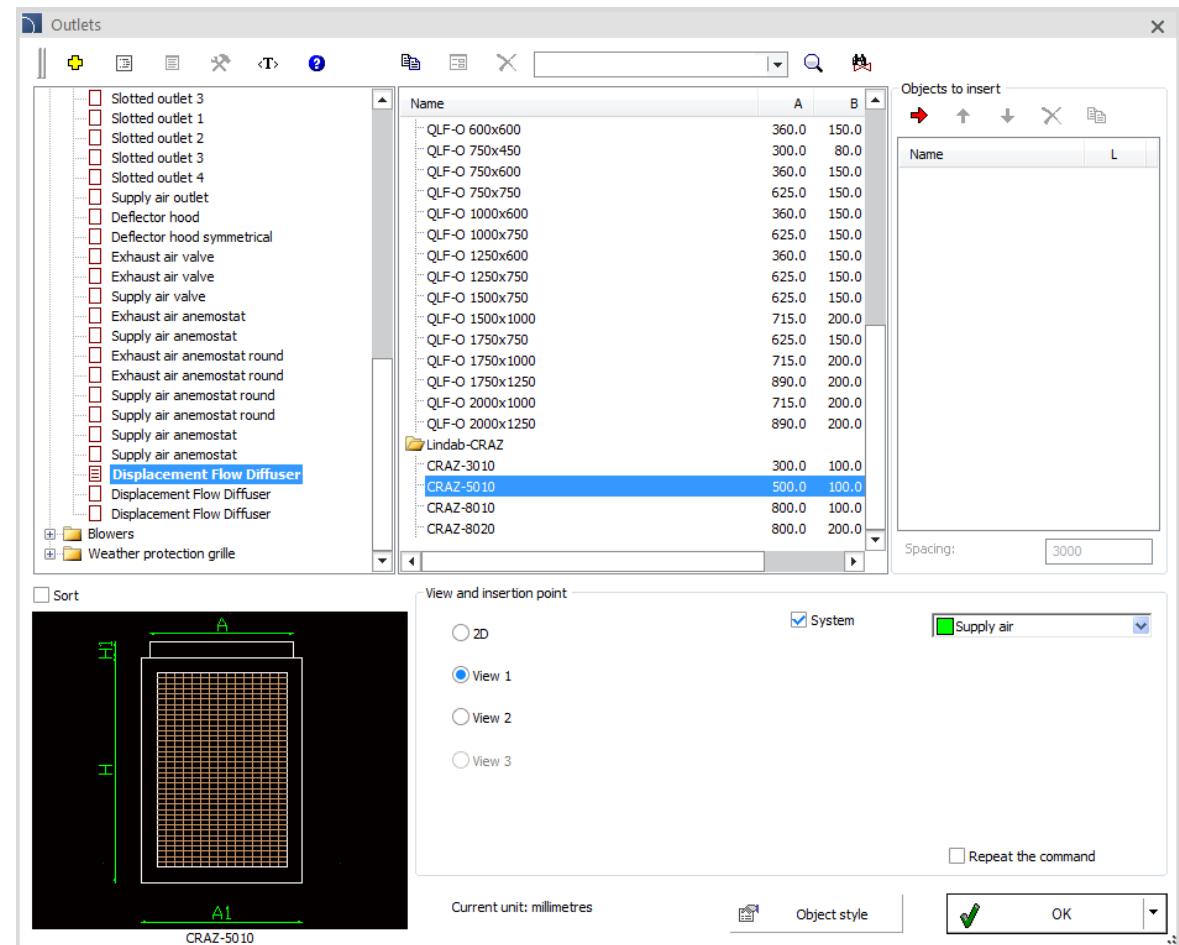




## ✓ CADprofi HVAC & Piping – extension of the program library

Lindab company products have been added to the program, 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).

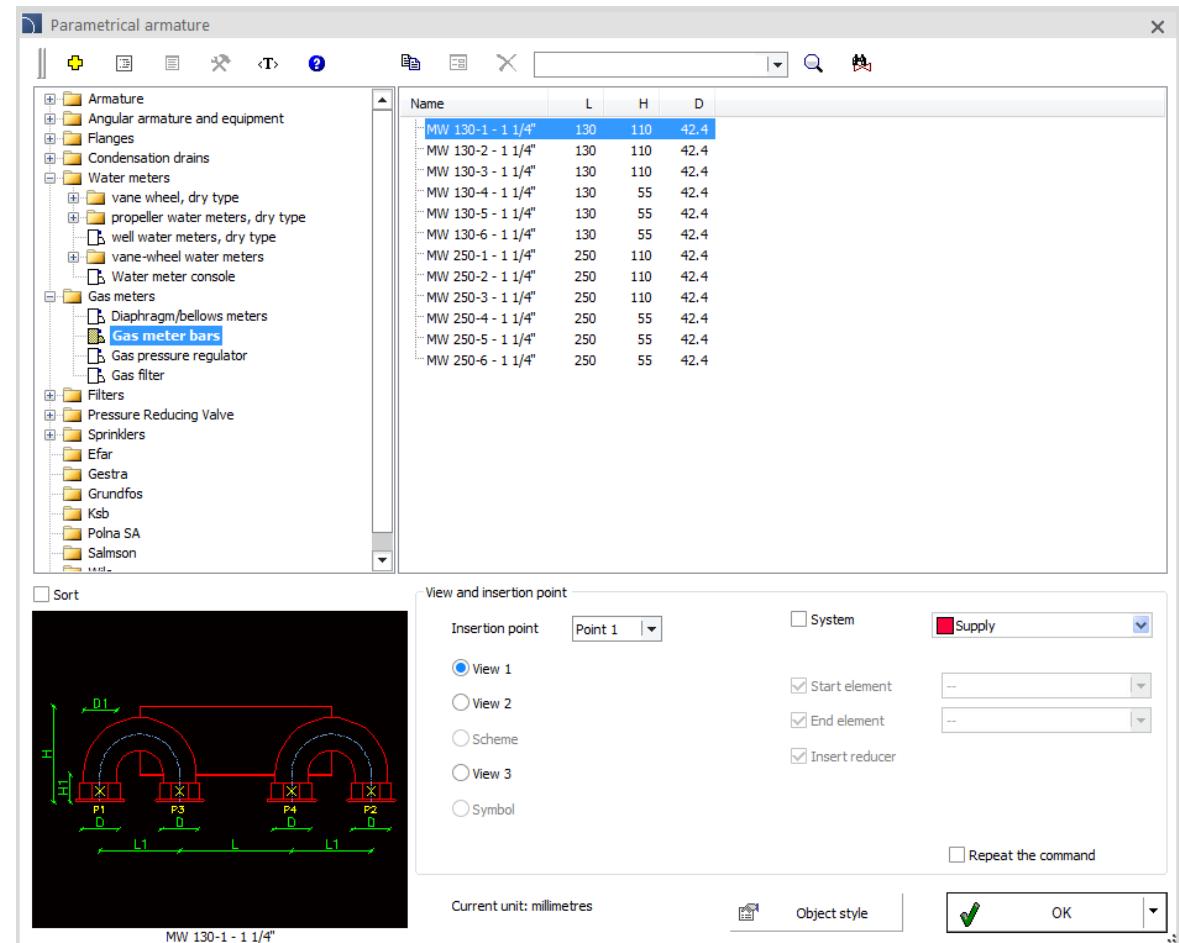




## ✓ CADprofi HVAC & Piping – extension of the armature library

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.



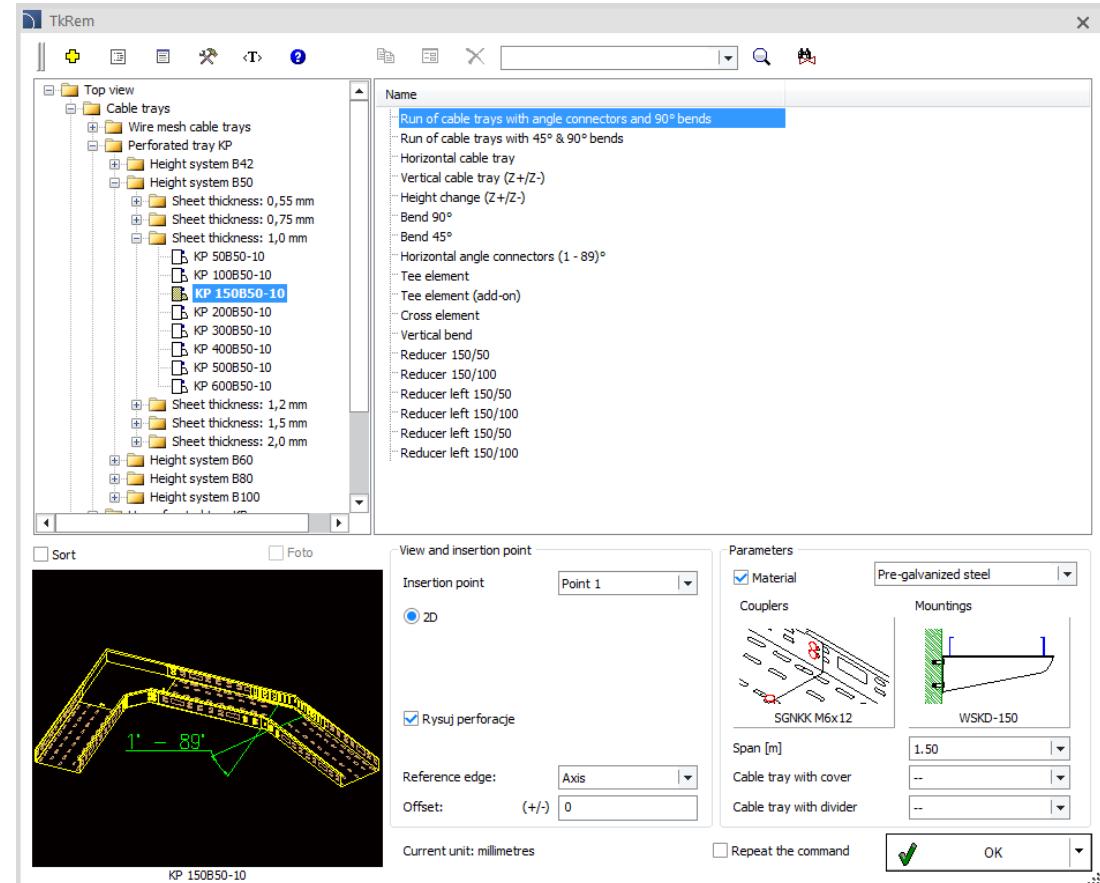


# CADprofi

## ✓ 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).





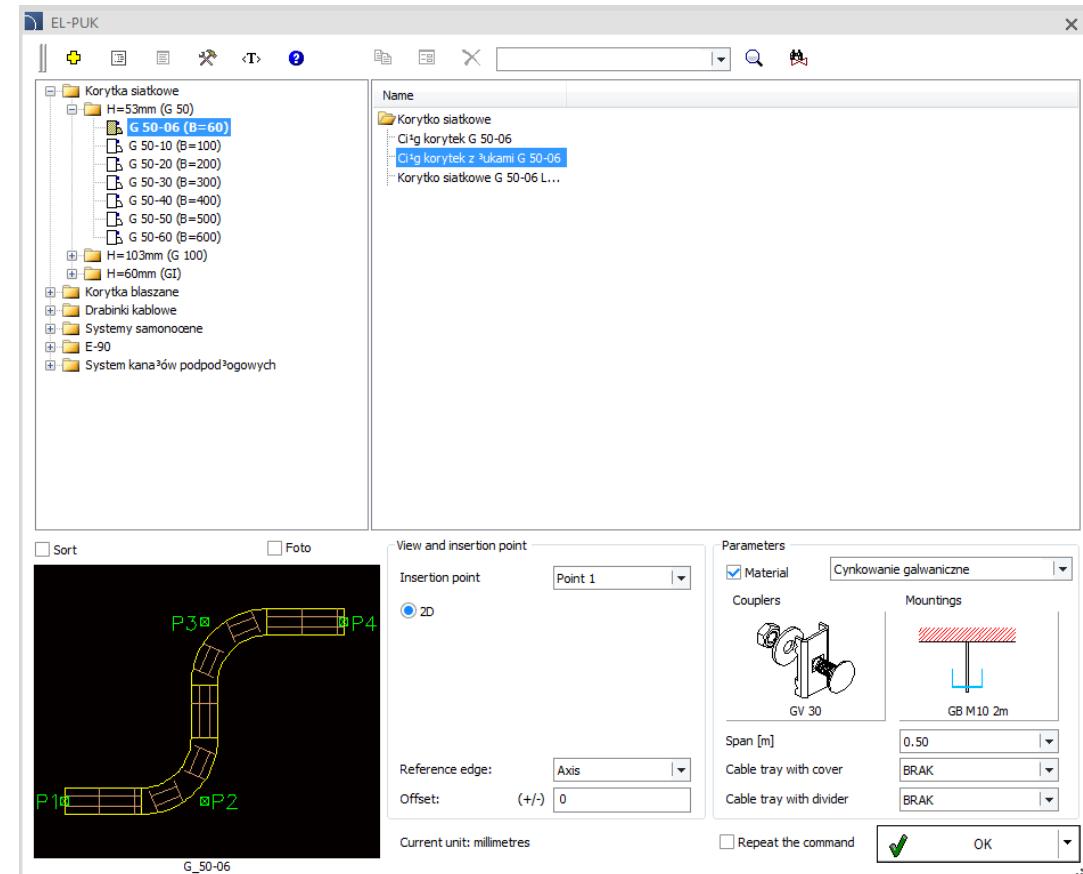
# CADprofi

## ✓ 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

### ✓ Adjustment to many base CAD programs

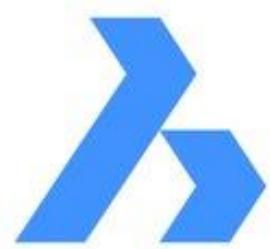
CADprofi 2018.07 has been adjusted to work with latest CAD programs, including: AutoCAD 2019, BricsCAD V18.2, CADMate 2018, CMS IntelliCAD 8.4, ArCADia 10.4 (64bit).

CADprofi 2018 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**

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An Alternative CAD System

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The logo for ARES Commander, featuring a red stylized 'A' shape.  
Gräbert  
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CADprofi



**CADprofi 2018.05**

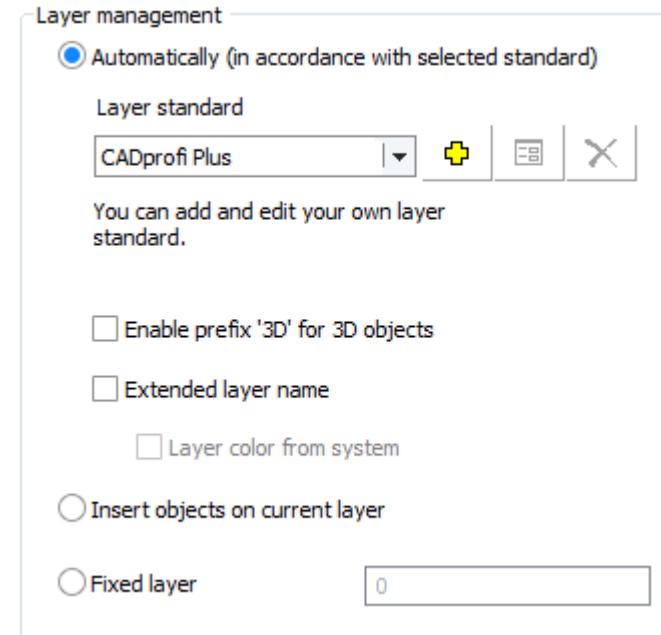


## ✓ CADprofi – layer management based on the Open BIM classification

At the request of users, an additional layer standard "CADprofi Plus", was introduced. In this standard objects and symbols are inserted on separate layers.

Examples of layers in the HVAC module:

- 2DH\_OBJ – layer for objects
- 2DH\_SYM – layer for symbols

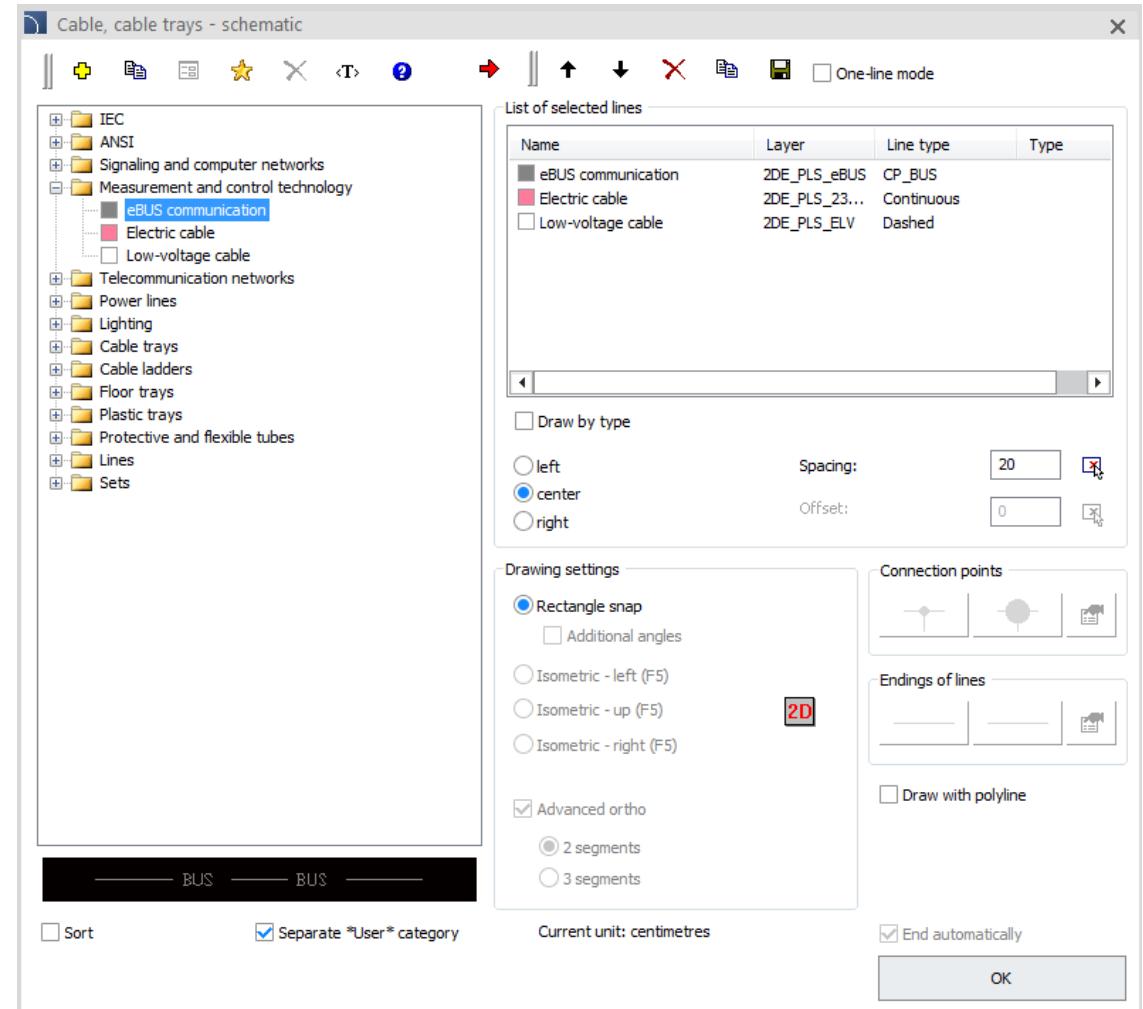




## ✓ CADprofi Electrical – new line category

New line category – *Measurement and control technology* has been added to the *Cable, cable trays – schematic* command, including:

- eBUS communication.
- Electric cable.
- Low-voltage cable.

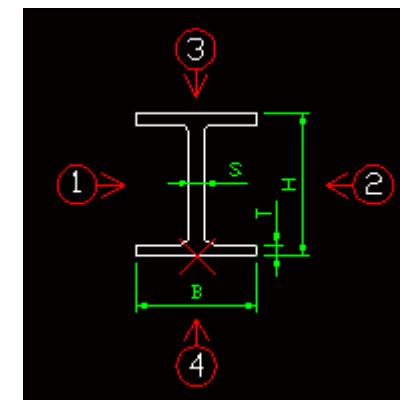
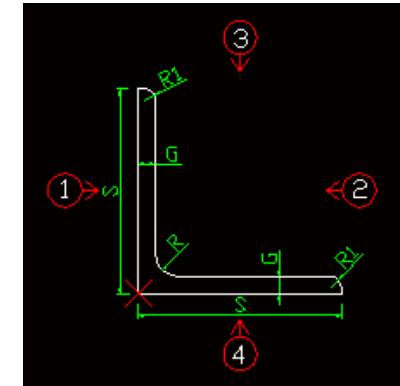




## ✓ CADprofi Mechanical – additional JIS and ISO standards

New standardized elements have been added to the program, including:

- JIS G 3192 – L-shape equal angles, L-shape unequal angles, U-shape (rolled), T-shape (hot rolled).
- JIS G 3192-1 - L-shape unequal angles.
- JIS G 3192-2 – L-shape unequal angles.
- JIS G 3350B – Z-shape.
- JIS G 3192 H – H-shape (Hot rolled wide-flange steel beams - Dimensions).
- JIS G 3192 I – I-shape (Hot rolled).
- JIS G-3466 – Welded square/rectangular structural tubing  
(For precision applications).
- JIS G 3191A – Round steel rod.
- JIS G 3191 B – Square steel rod.
- JIS 3194 – Rectangular steel rod.
- JIS 3191C – Hexagon steel rod.
- ISO 1035-3 – Flat steel bar (Hot rolled).
- ISO 657-1 – L-shape equal angles.
- ISO 657-2 – L-shape unequal angles.
- ISO 657-11 – U-shape (rolled).
- ISO 657-21 – T-shape (hot rolled).
- ISO 657-15 – I-shape (Hot rolled).
- ISO 10799-2 – Welded round/square/rectangular structural tubing  
(Cold formed welded structural hollow sections).
- ISO 12633-2 – Welded round/square/rectangular structural tubing.
- ISO 1035-1 – Round stainless steel bar (Hot rolled).
- ISO 1035-2 – Square steel bar (Hot rolled).

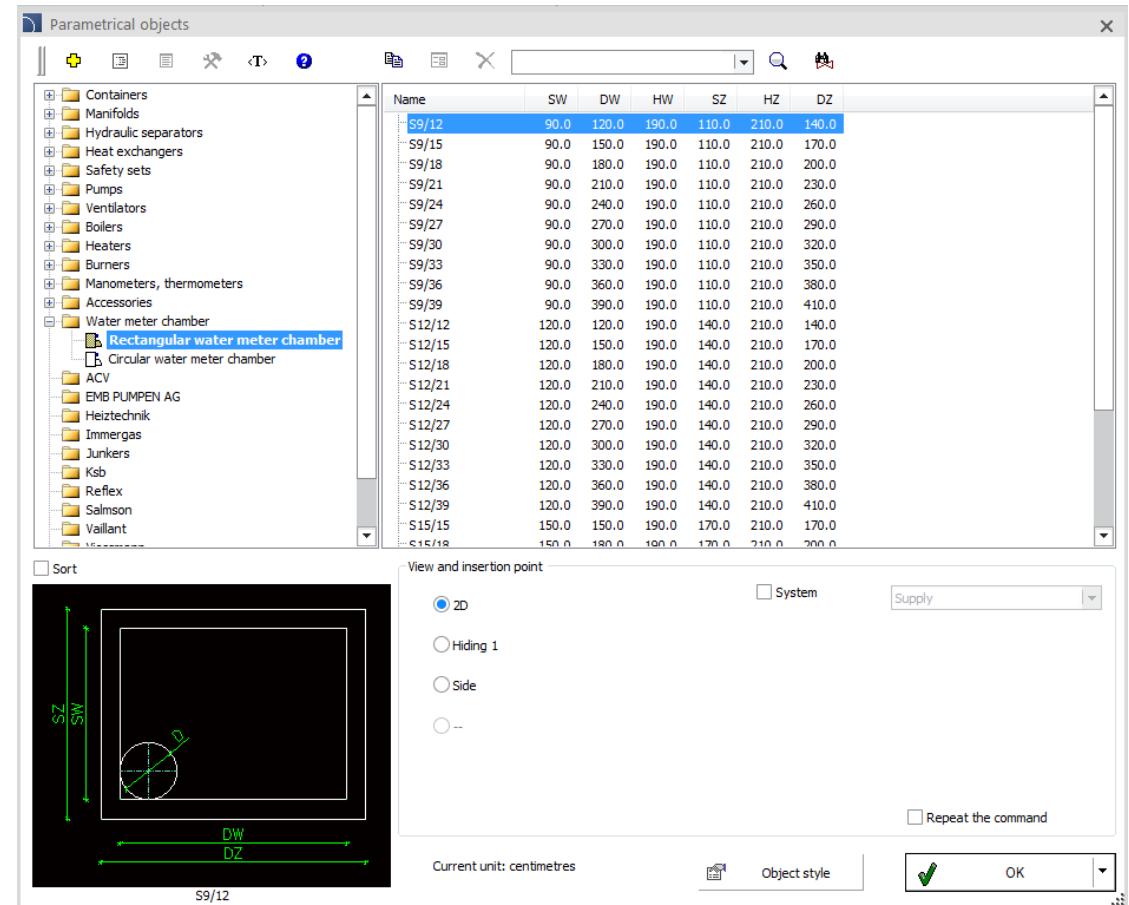




# CADprofi

## ✓ CADprofi HVAC & Piping – addition of water meter chambers to the program

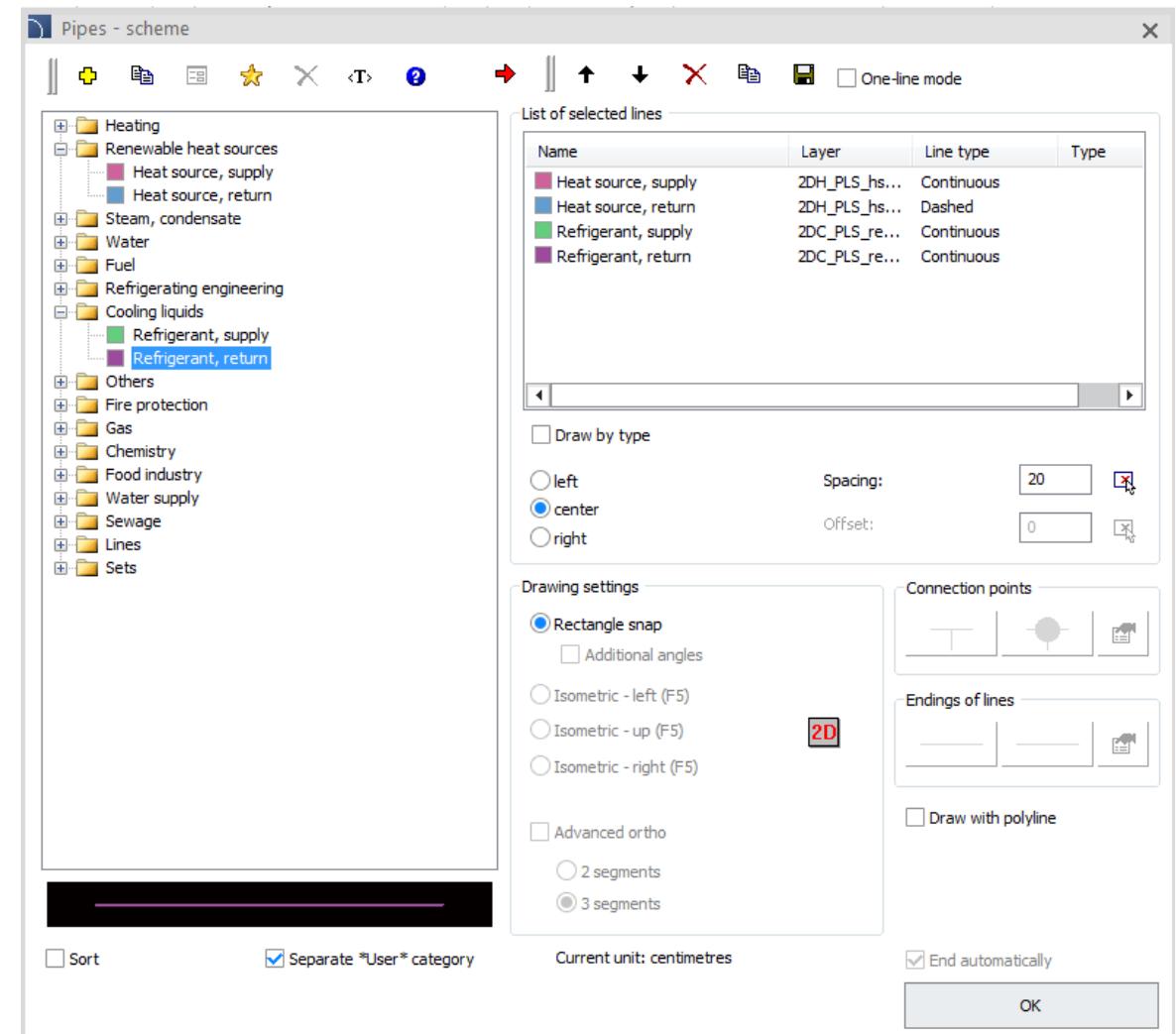
Rectangular and round water meter chambers have been added to the program.





## ✓ CADprofi HVAC & Piping – new lines categories

New line categories – *Renewable heat sources* and *Cooling liquids* has been added to the *Pipes – scheme* command.

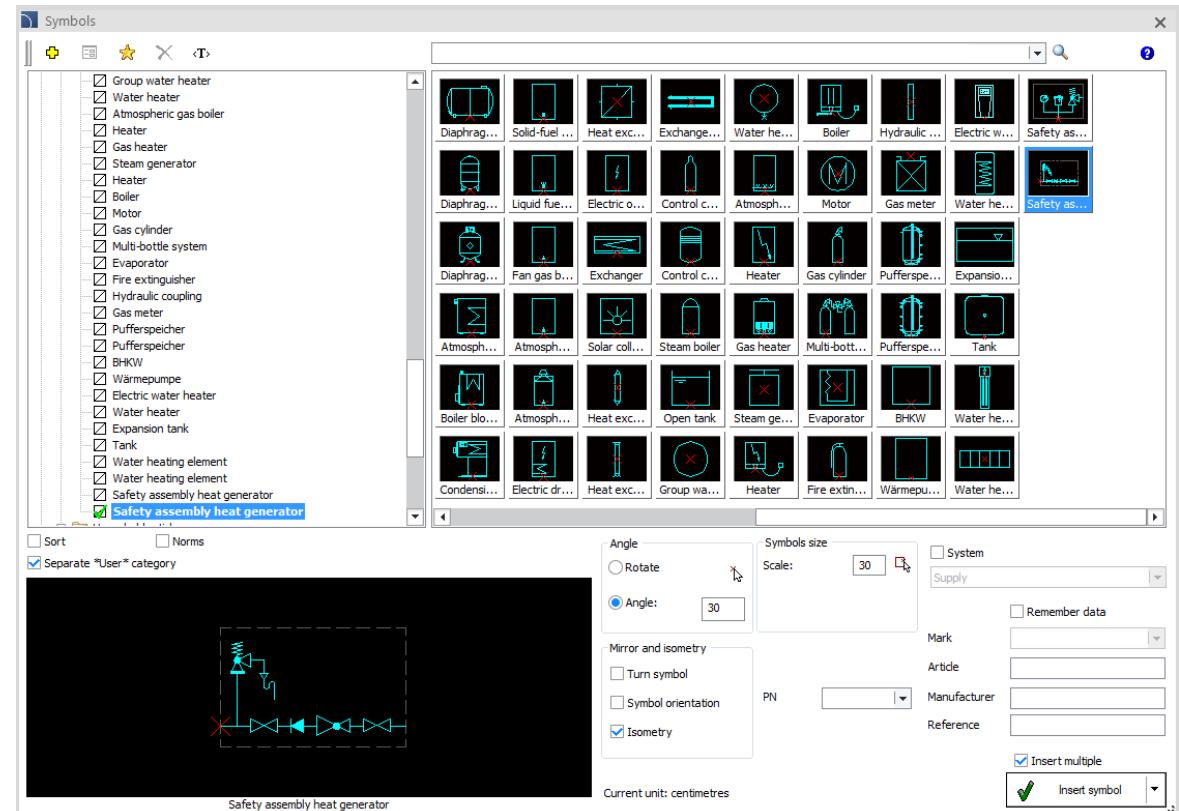




## ✓ CADprofi HVAC & Piping – extension of the program library

Additional symbols and object have been added to the program, including:

- Filtre
- Shower
- Water heating element
- Pipe break
- Safety assembly heat generator
- Three-way thermostatic valve
- Safety assembly heat generator
- Solar protection vessel
- Air separator
- Additional wall and ceiling fans
- Protective louvre
- Additional ground air grille
- Additional exhaust and supply air outlets
- Slotted outlets





# CADprofi

- ✓ Update of manufacturers' libraries:





**CADprofi**



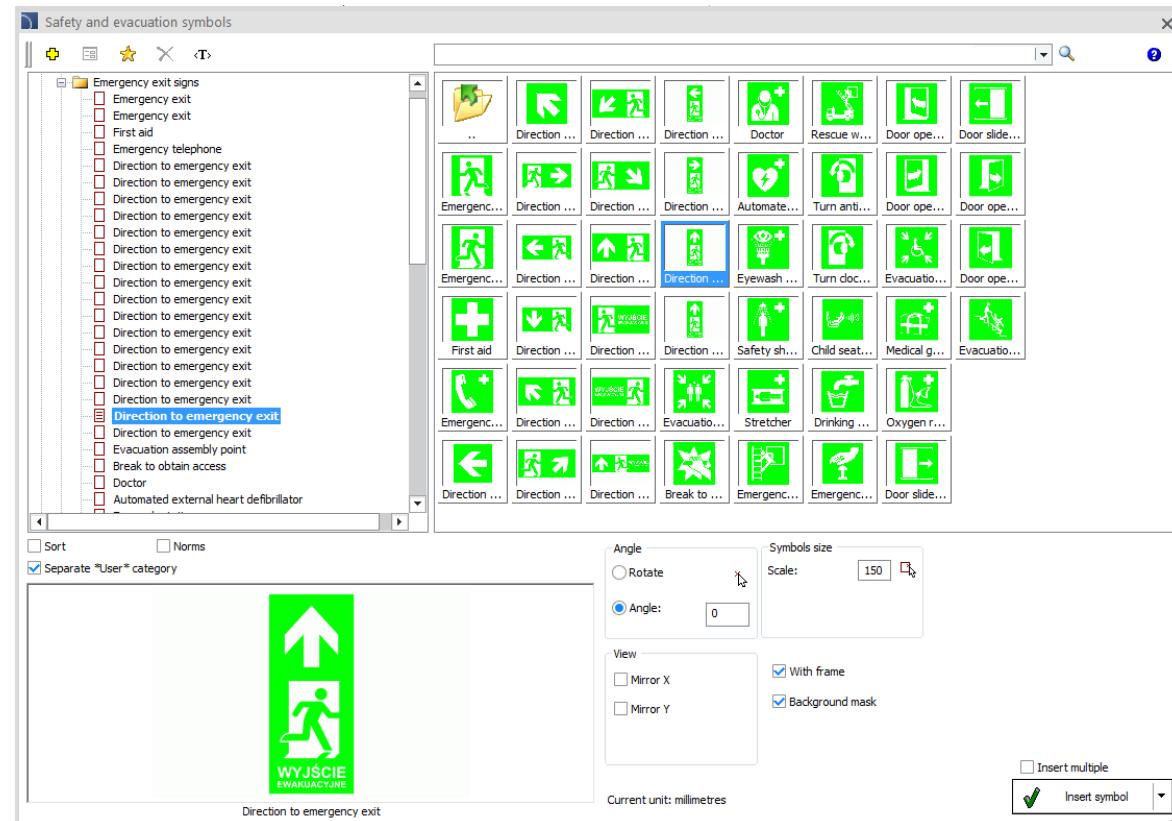
**CADprofi 2018.03**



# 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=

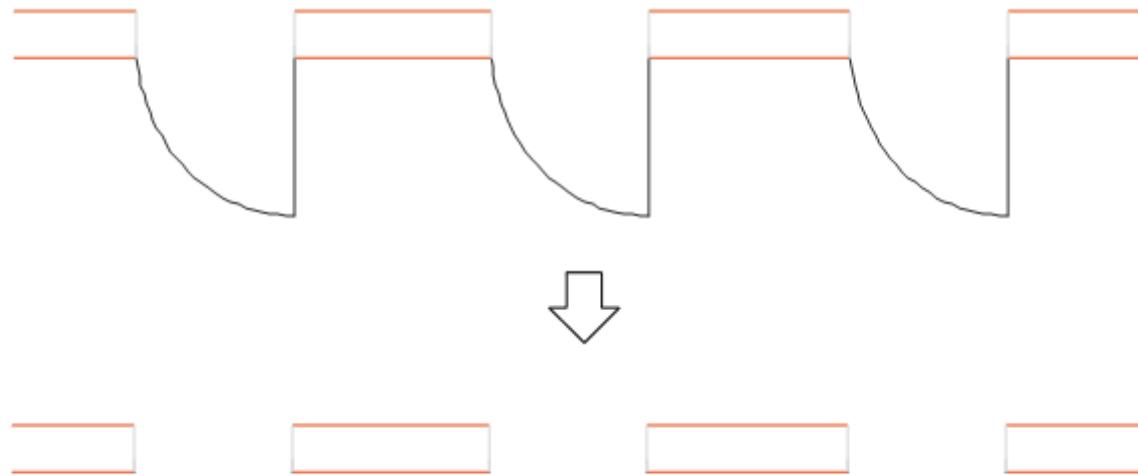




# CADprofi

## ✓ 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.



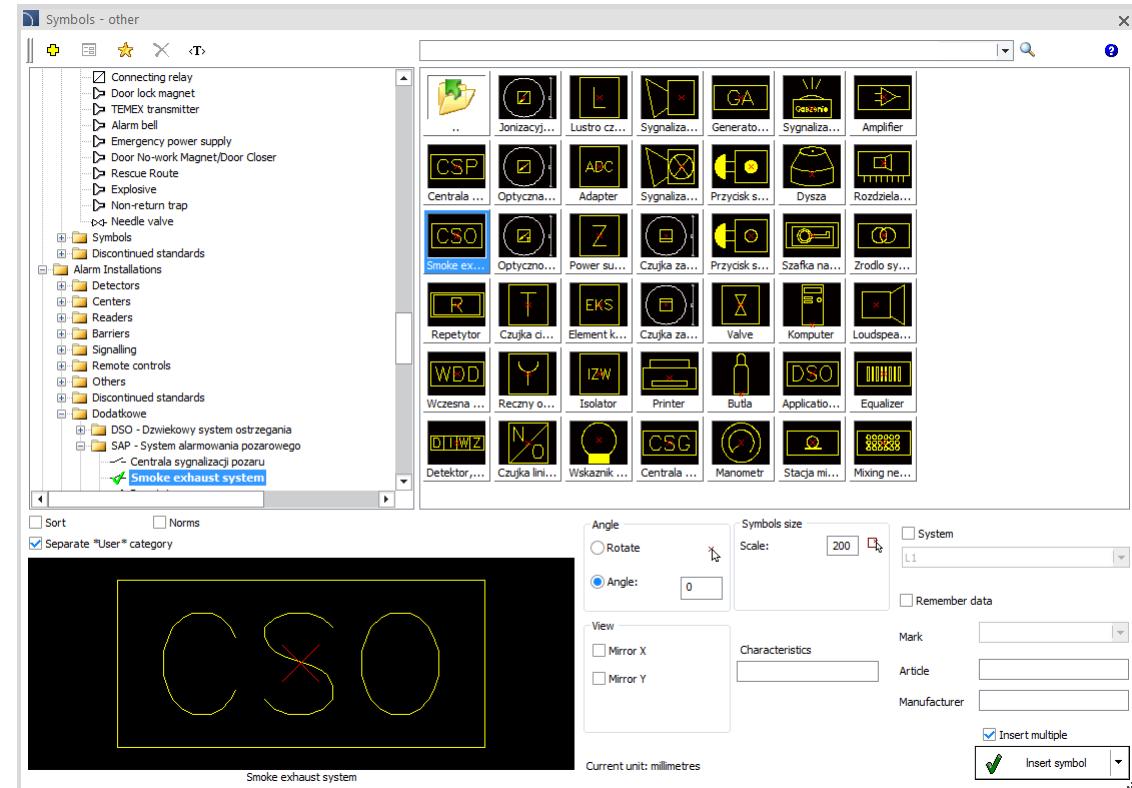


# CADprofi

## ✓ 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<br>So - multisensor alarm with sounder<br>Sp - multisensor alarm with sounder and speech messages |
| Manufacturer | FSp - multisensor alarm with flasher, sounder and speech messages  |

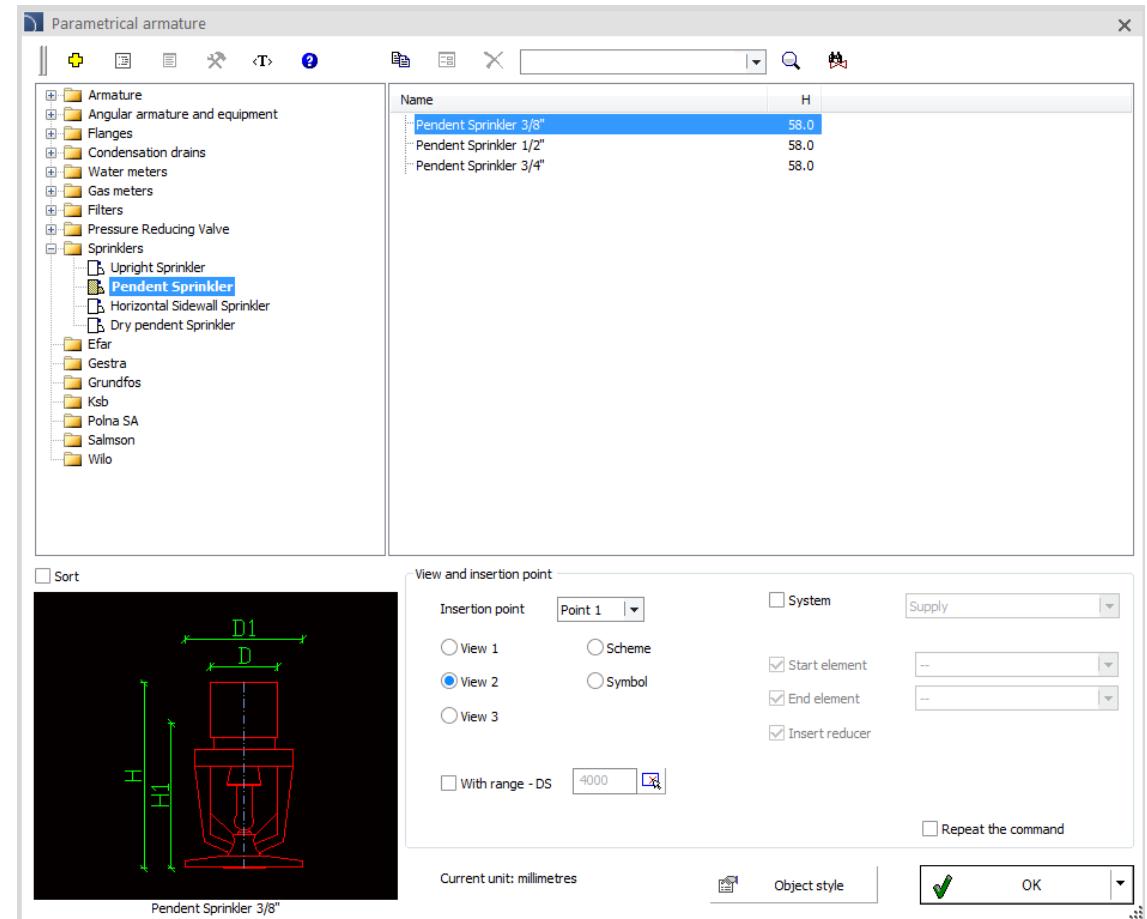




# CADprofi

## ✓ CADprofi HVAC & Piping – addition of sprinklers to the program

Upright, pendent, horizontal sidewall and dry pendent sprinklers have been added to the program.

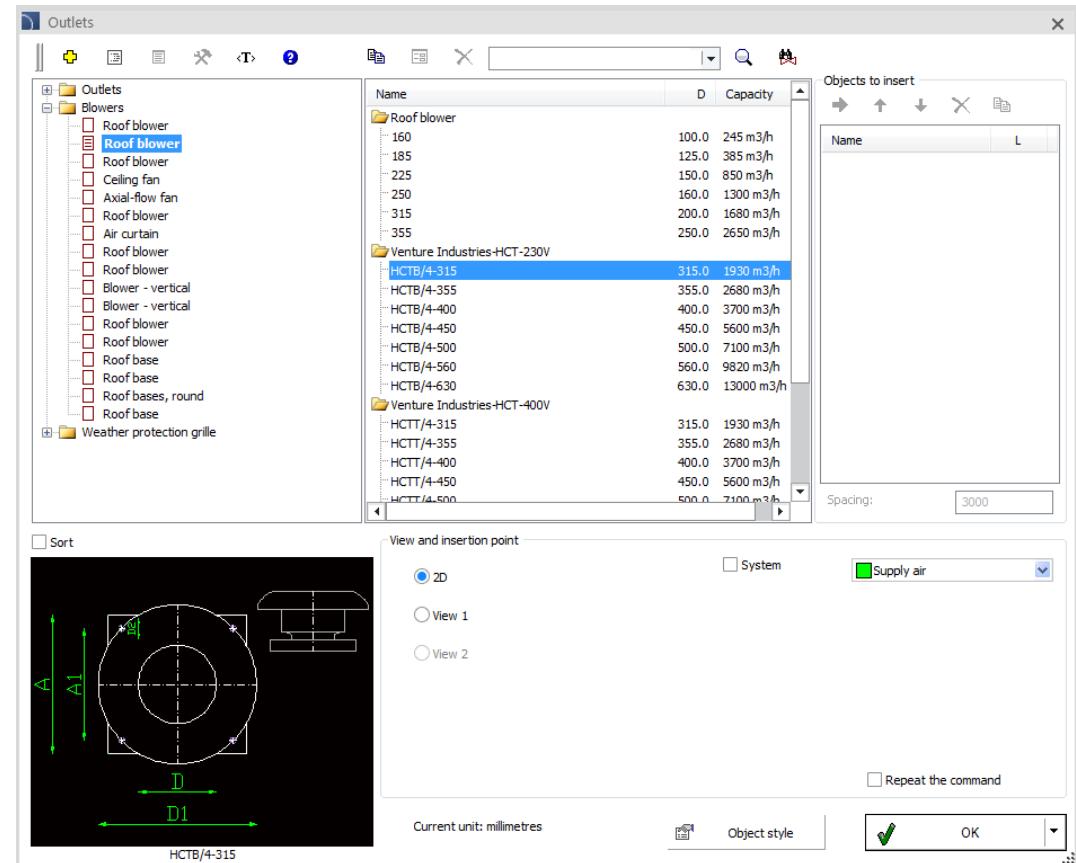




# CADprofi

## ✓ CADprofi HVAC & Piping - addition of roof blowers to the program

Venture Industries roof blowers have been added to the program.

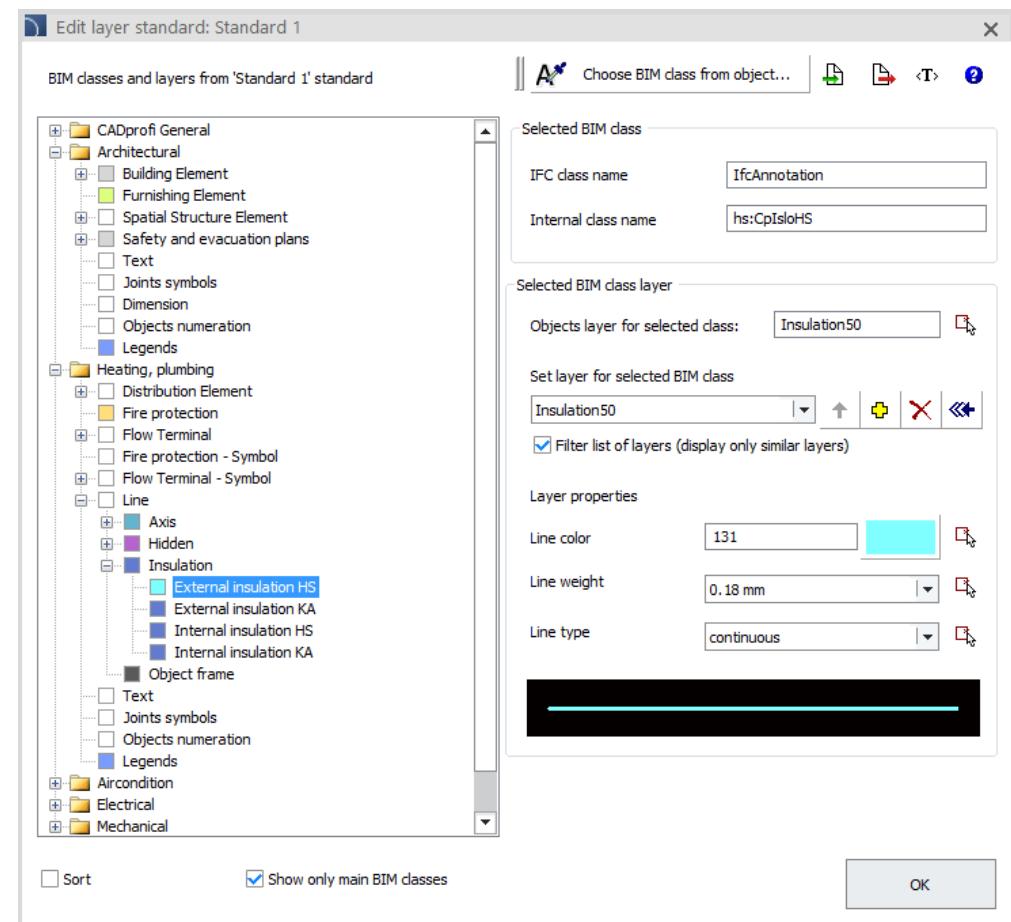
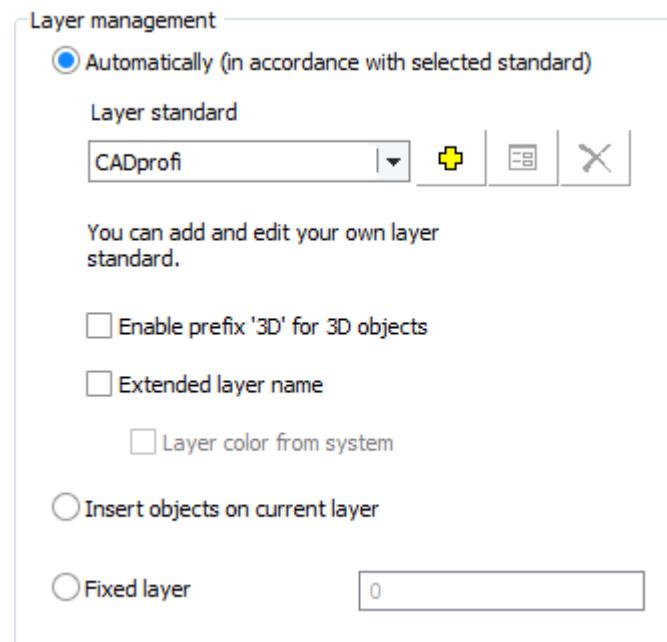




# CADprofi

## ✓ CADprofi – layer management

A possibility to manage layers have been added to the program. Management is available in the *CADprofi – Options* command.





**CADprofi**

✓ **Update of manufacturers' libraries:**





# CADprofi

## ✓ Adjustment to many base CAD programs

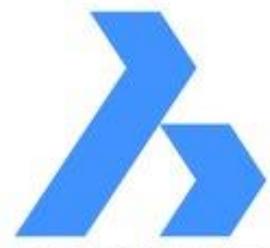
CADprofi 2018.03 has been adjusted to work with latest CAD programs, including: 4MCAD 19 and ARES 2018.

CADprofi 2018 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

  
**BRICSCAD**

  
**progeSOFT**

  
**IntelliCAD**

  
**Gräbert  
ARES® Commander**



**CADprofi**



# **CADprofi 2018**

Summary of main changes made to the program since the CADprofi 2017.01 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

Classification of objects and management of layers based on Open BIM (IFC classification) has been added to the program.



[Video – Open BIM](#)

Data printing from current drawing

Title: Report data

You can sort data and specify width of columns

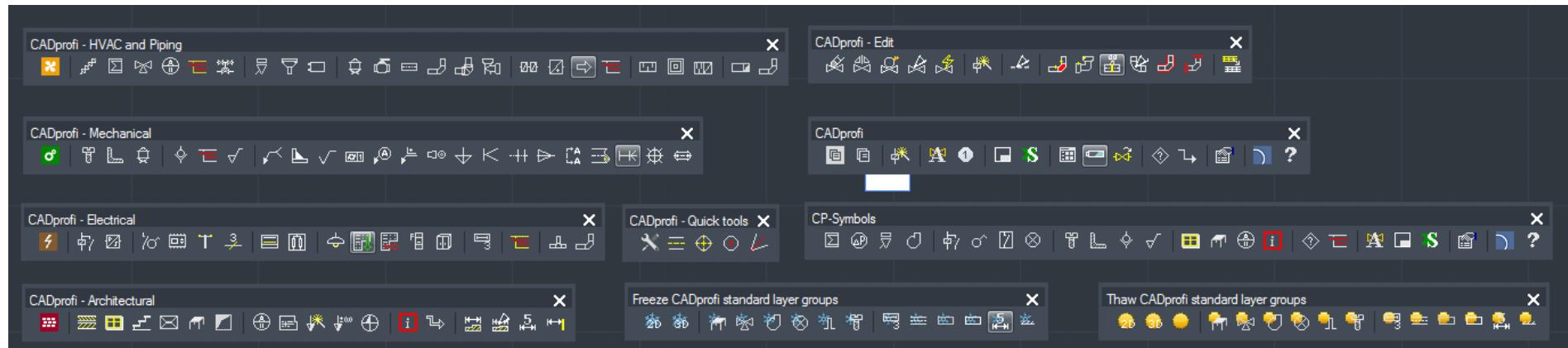
| Name                            | BIM class                     | Sum | --   |
|---------------------------------|-------------------------------|-----|------|
| Bed                             | IfcFurnishingElement          | 1   | pcs. |
| Binding circular ceiling lights | IfcLamp                       | 15  | pcs. |
| Binding circular wall lighting  | IfcLamp                       | 10  | pcs. |
| Binding light triple            | IfcLamp                       | 6   | pcs. |
| Binding lighting, raster        | IfcLamp                       | 10  | pcs. |
| Binding single light            | IfcLamp                       | 2   | pcs. |
| Cabinet                         | IfcFurnishingElement          | 3   | pcs. |
| Cabinet                         | IfcFurnishingElement          | 1   | pcs. |
| Cabinet                         | IfcFurnishingElement          | 1   | pcs. |
| Car                             | IfcCivilElement               | 1   | pcs. |
| Chair                           | IfcFurnishingElement          | 4   | pcs. |
| Chest of drawers                | IfcFurnishingElement          | 3   | pcs. |
| Chest of drawers                | IfcFurnishingElement          | 2   | pcs. |
| Combustion duct                 | IfcDistributionElement        | 3   | pcs. |
| Connection                      | IfcSpaceHeater                | 5   | pcs. |
| Control valve                   | IfcDistributionControlElement | 2   | pcs. |



# CADprofi

## ✓ Icons for dark interface

CADprofi toolbars and ribbons have been customized for dark interface that is used on some newer CAD programs (AutoCAD, ZWCAD and others).



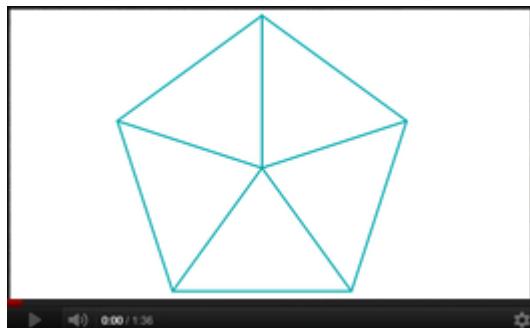


# CADprofi

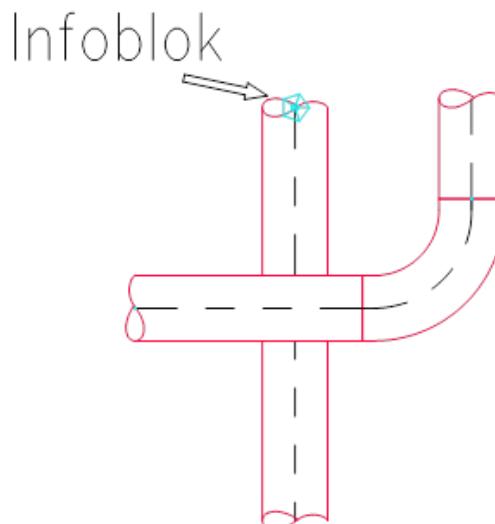
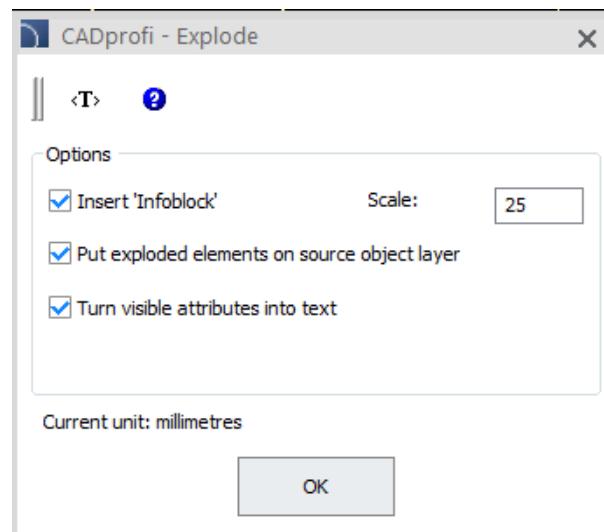
## ✓ CADprofi - Explode

New command *CADprofi - Explode*  has been added to the program. This command explodes the indicated CADprofi blocks, allowing to freely edit the drawing without the loss of information from the exploded elements.

In case of indicating the *Insert 'Infoblock'* option the program creates a special block, to which all data from the exploded element will be taken over. This block will be placed on layer that is not visible on printouts, but it's attributes will be included in specifications.



[Video – 'CADprofi Explode' + Infoblocks](#)

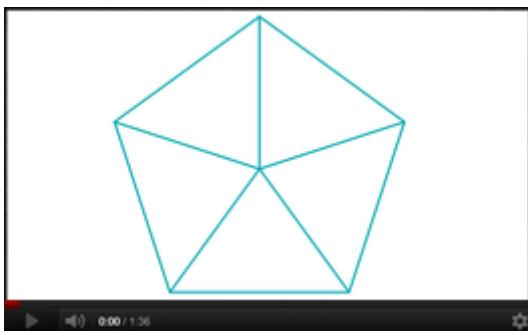




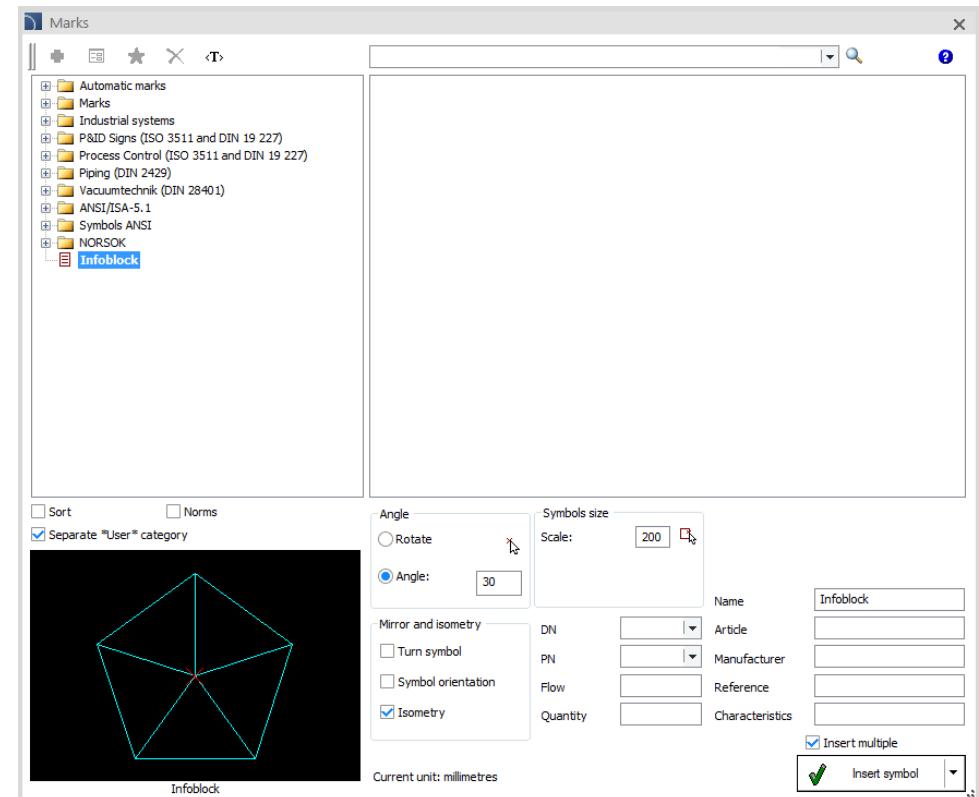
# CADprofi

## ✓ Infoblocks in CADprofi program libraries

*Infoblocks* have been added to CADprofi libraries. They contain a set of attributes that user can freely fill. Thanks to Infoblocks user can insert a special block into the drawing whose attributes will be included in specifications, but the block itself will not be visible on printouts.



[Video – 'CADprofi Explode' + Infoblocks](#)



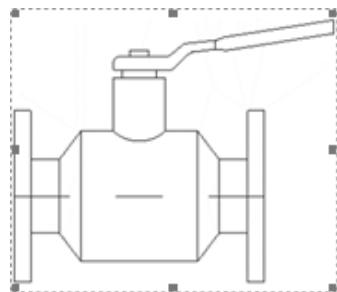


## ✓ Using commands from the context menu

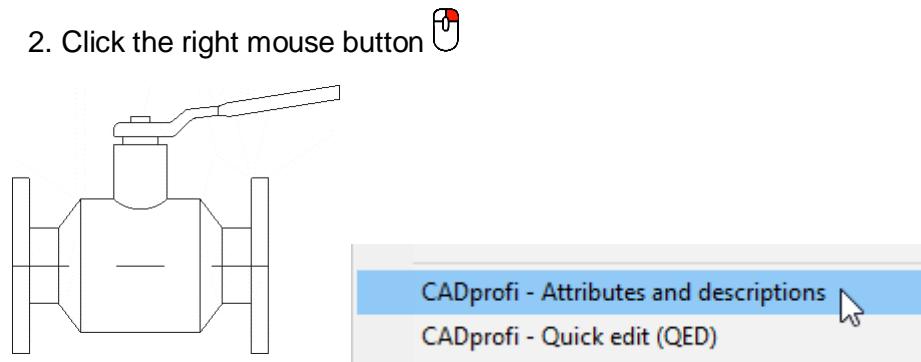
In selected CAD programs, some commands are available in the context menu (right mouse button):

- Attributes and descriptions,
- Quick edit.

1. Indicate an object on the drawing



2. Click the right mouse button to open the context menu





## ✓ Repeat the command. Insert multiple

For some dialog windows an additional options that enhance functionality have been added:

- **Repeat the command** - allowing for automatic repetition of the last command without the need to manually run the command dialog window from menu or toolbar.
- **Insert multiple** - allowing for multiple insertion of the selected object to the drawing with bypassing the dialog window. In this case, the command can be cancelled by pressing the *Esc* key.

**Repeat the command**

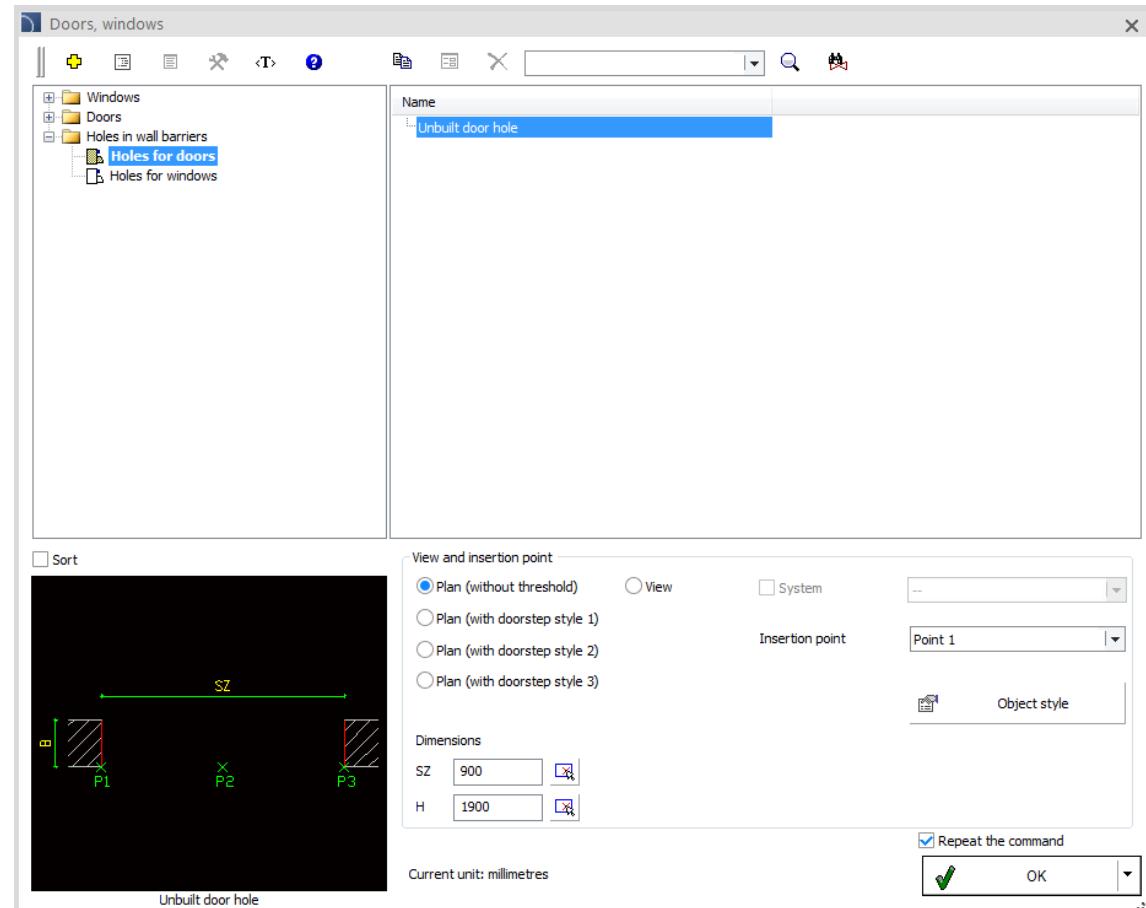
**Insert multiple**



# CADprofi

## ✓ CADprofi Architectural – holes in wall barriers

Holes in wall barriers (unbuilt door hole and unbuilt window hole) have been added to the program.

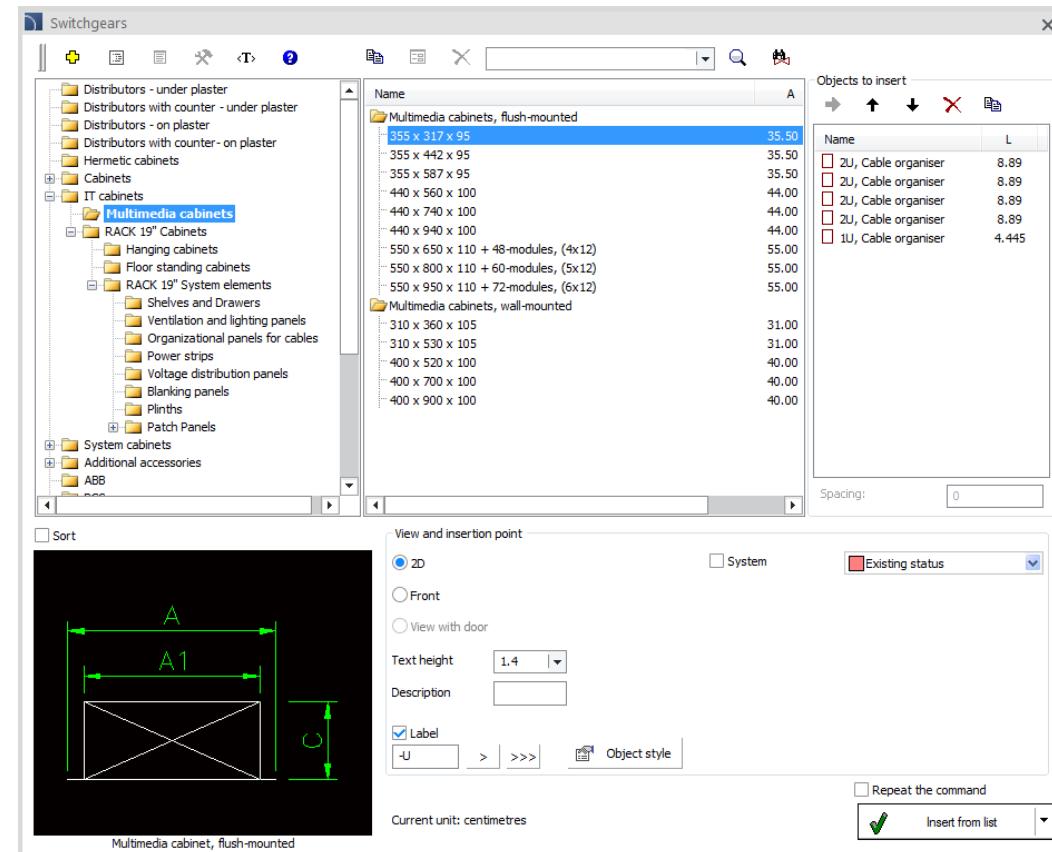




## ✓ CADprofi Electrical – changes in the *Switchgear* command

Functionality of the command has been extended by:

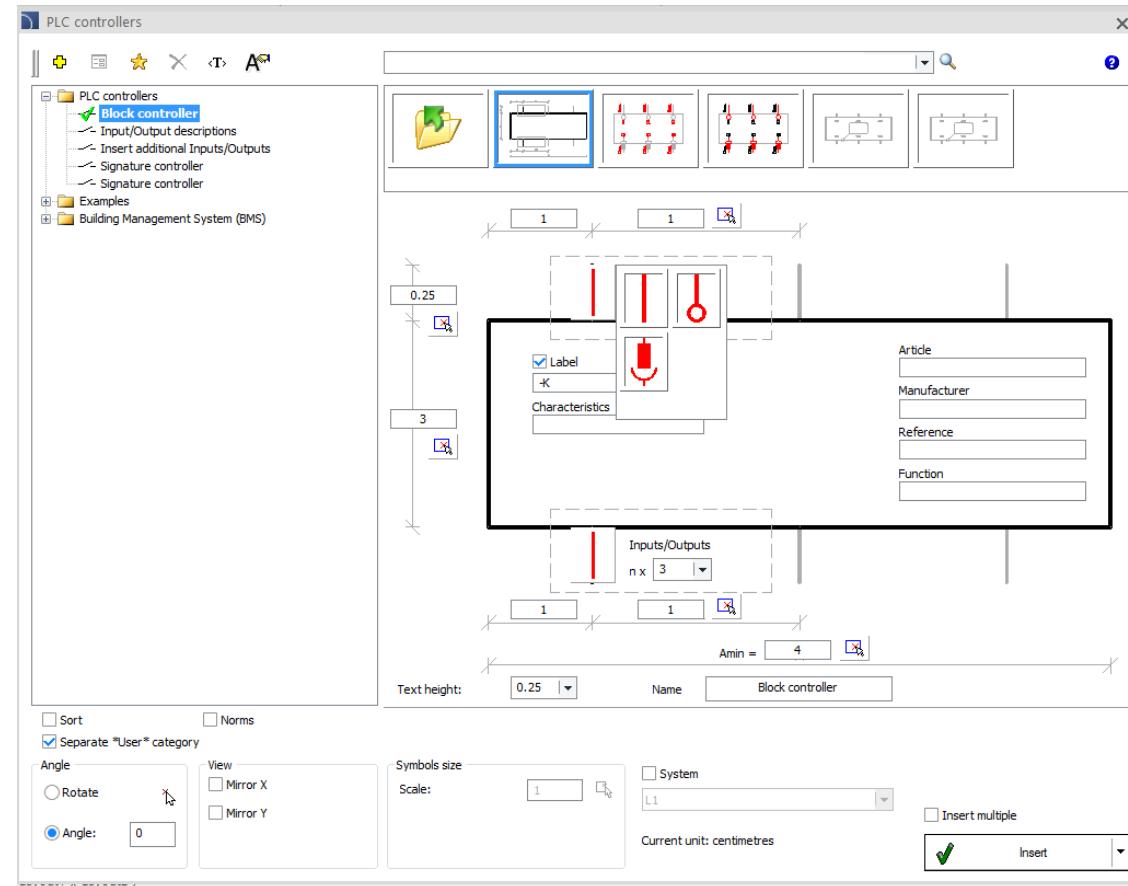
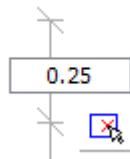
- Possibility to insert items from the list, thanks to which it is possible to insert to the drawing many elements.
- Extension of the switchgear database (distributors under plaster/on plaster and distributors with counters).
- Addition of IT cabinets (multimedia cabinets, RACK19" cabinets with system elements)
- Addition of system cabinets (wall mounted, flush mounted, floor standing with system elements).
- Addition of mounting rails DIN TH35, busbars and plastic wiring ducts.
- Switchgear blocks have got defined intelligent connection points that allow automatic positioning of products inserted into switchboard, such as building system elements and various electrical apparatus.





## ✓ CADprofi Electrical – changes in the *PLC controllers* command

The PLC controller command has been extended with the possibility to specify the input/output size. The way to describe and insert additional inputs/outputs has been rebuilt and adapted to the new functionality.



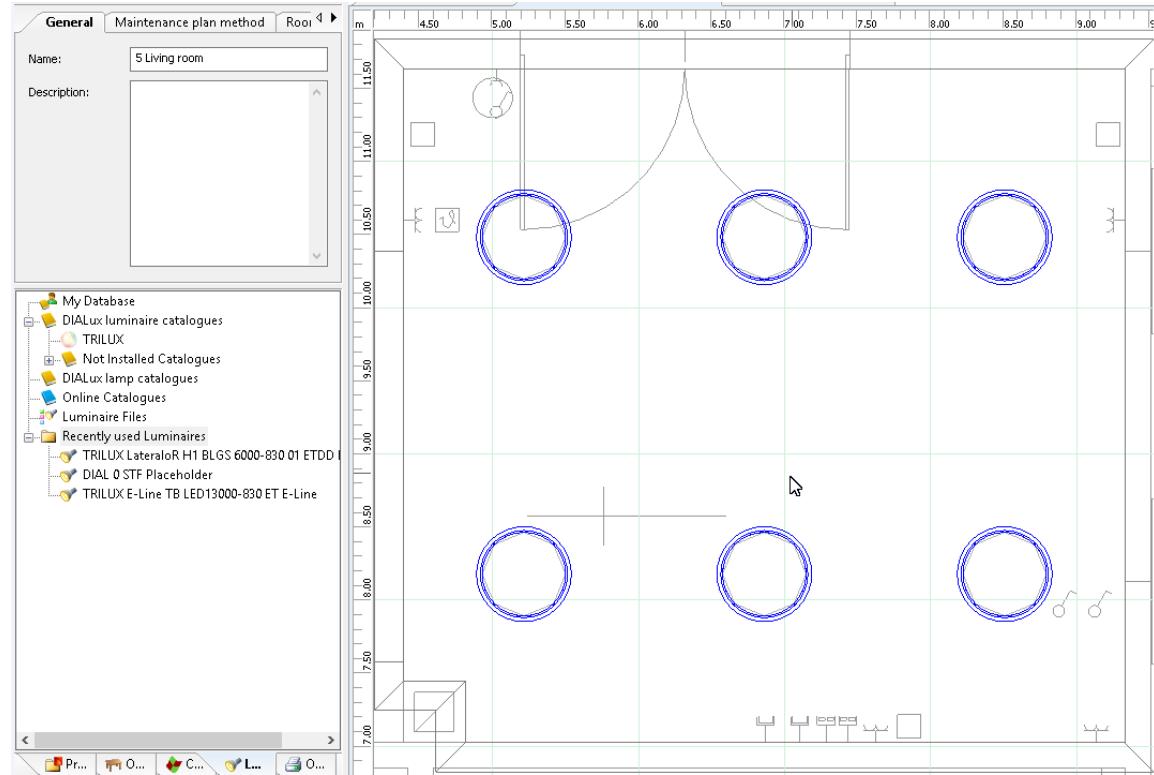


# CADprofi

## ✓ CADprofi Electrical – cooperation with DIALux program

A possibility to export rooms do DIALux have been added to the program. Thanks to this we will receive a building outline and the project structure with room names imported from CADprofi.

Program also allows to import luminaires from DIALux. During import all luminaires will be replaced with standard CADprofi blocks and information about them (name, type) will be taken from DIALux and replaced with appropriate attributes.



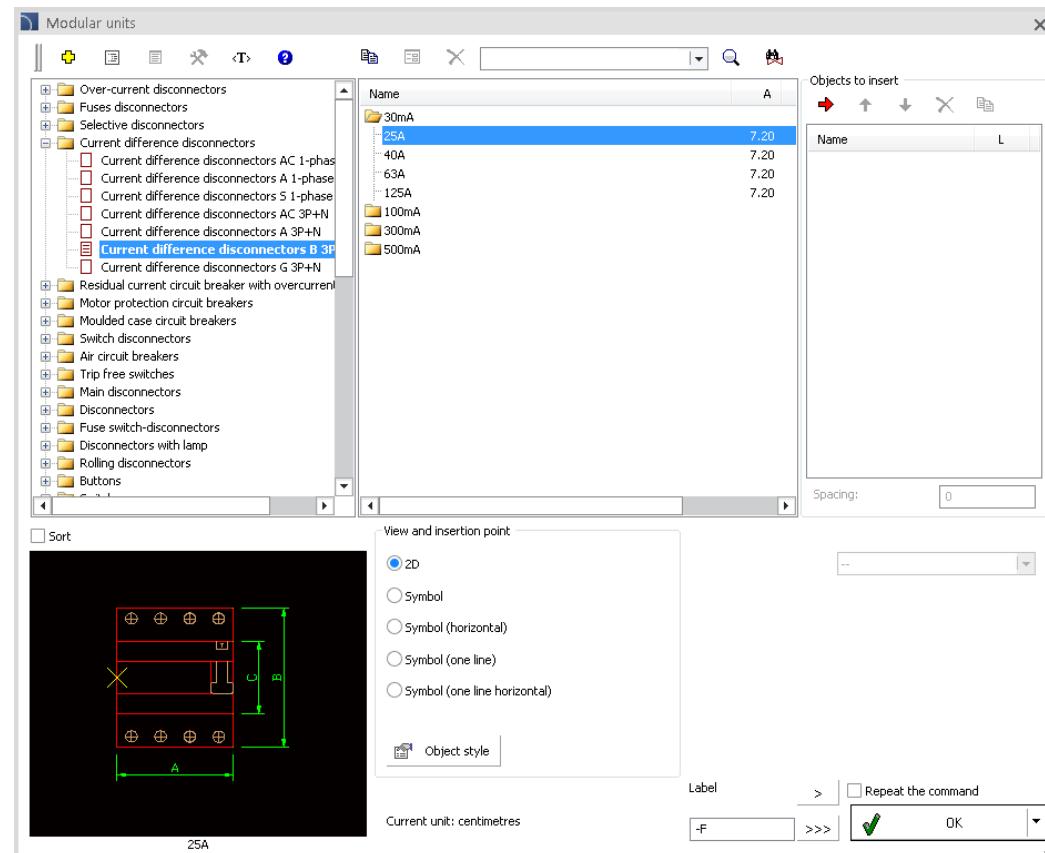
[Watch how CADprofi works with DIALux](#)



# CADprofi

## ✓ CADprofi Electrical – extension of the current difference disconnectors database

New current difference disconnectors (type AC, A, B) have been added to the program.



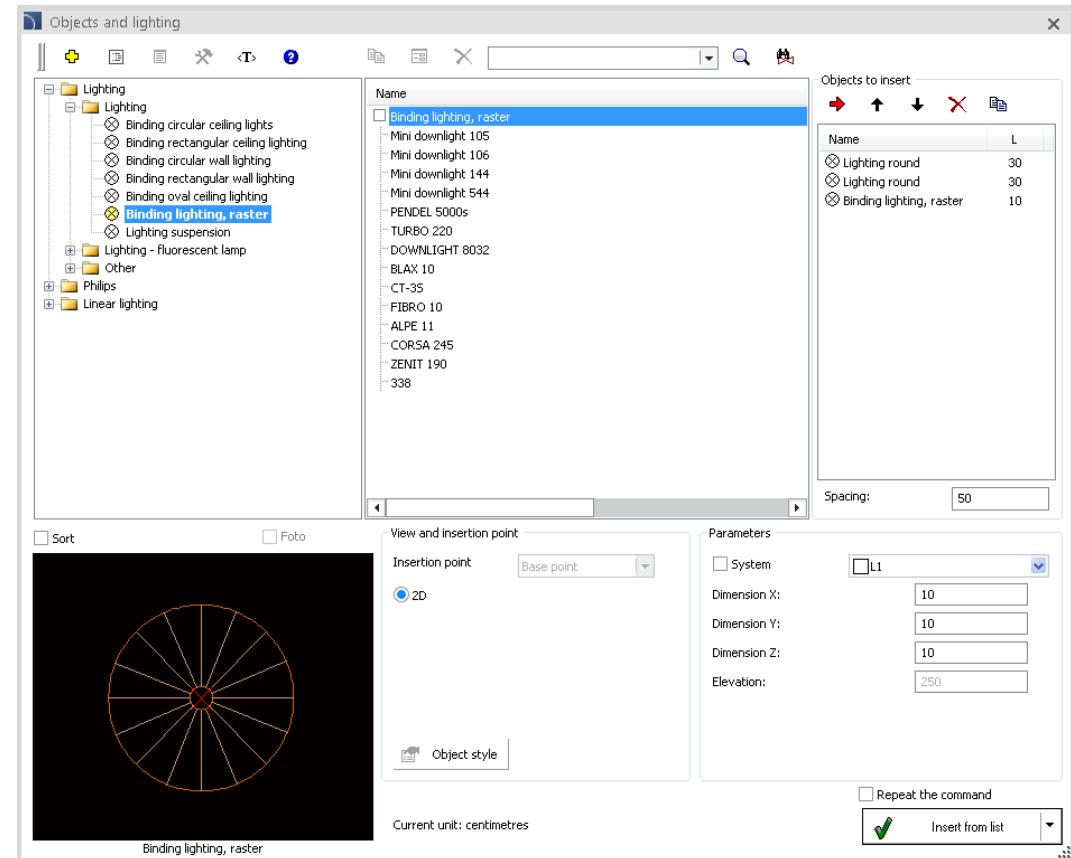


## ✓ CADprofi Electrical – changes in the *Objects and lighting* command



Functionality of the command has been extended by:

- Possibility to insert items from the list, thanks to which it is possible to insert to the drawing many elements with specified spacing.
- Possibility to repeat the command.



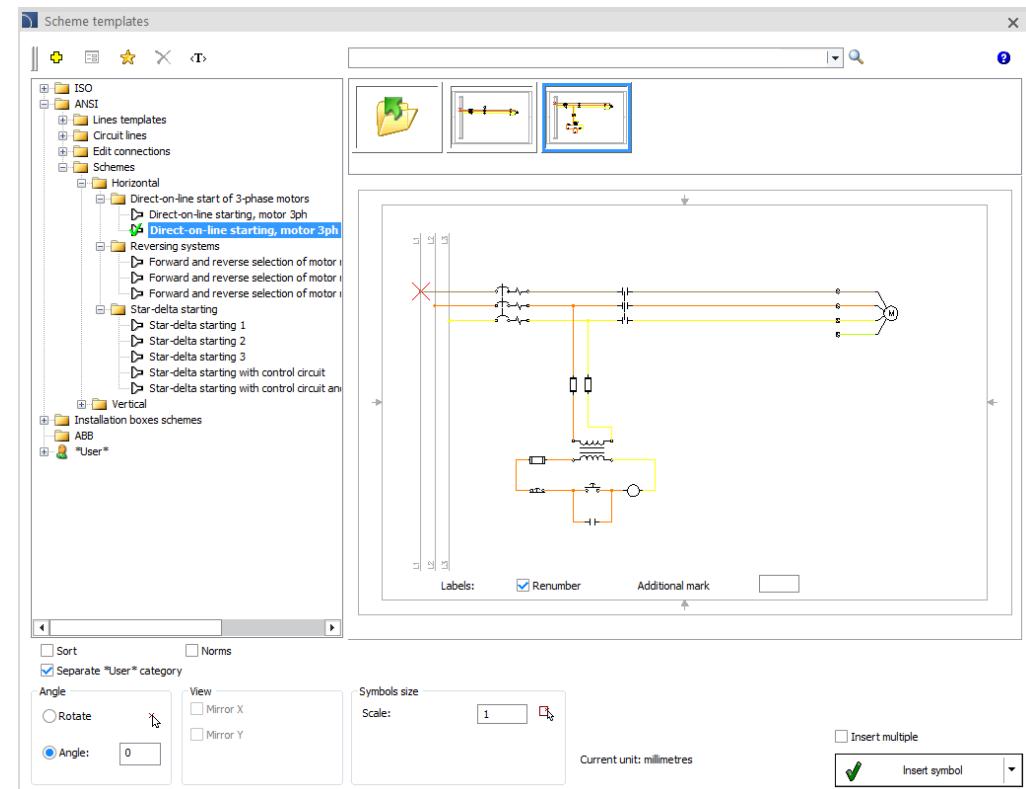


# CADprofi

## ✓ CADprofi Electrical – scheme library extension

Additional symbols, potential & circuit lines and sample schemes have been added to the program, including:

- electrical symbols (IEC, NFPA);
- vertical and horizontal complex symbols (NFPA);
- potential and circuit lines (IEC, ANSI);
- vertical and horizontal schemes templates (ANSI).

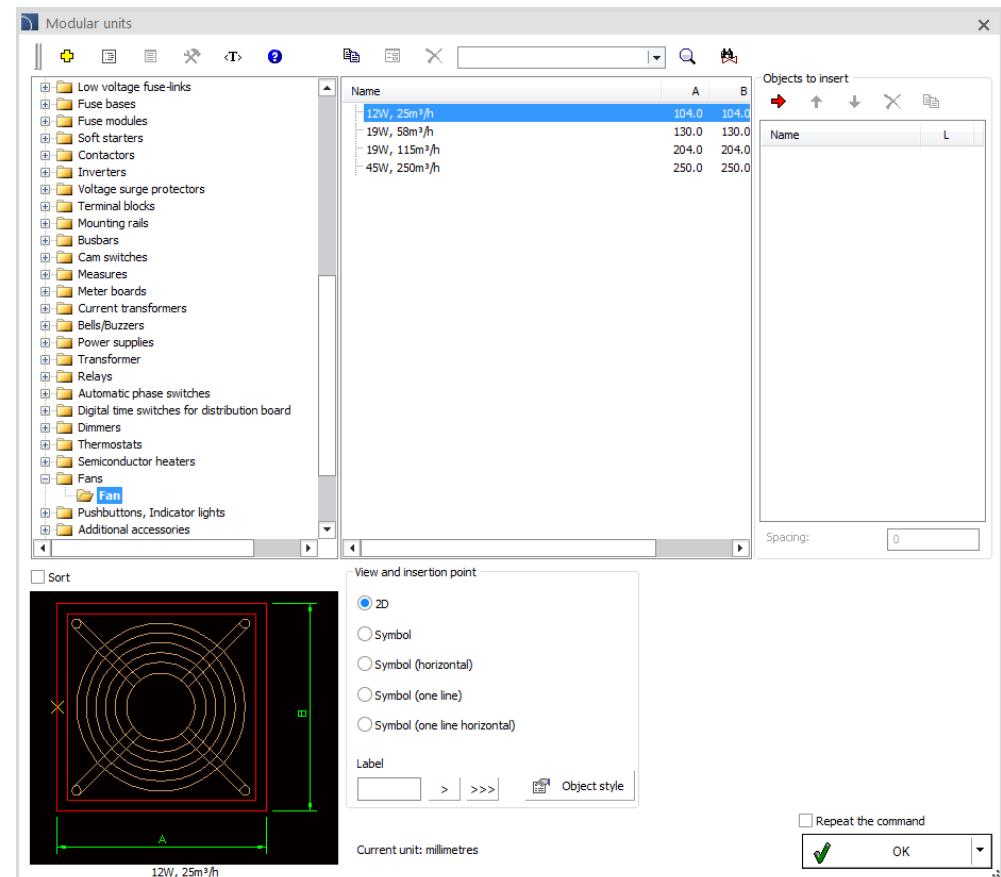




## ✓ CADprofi Electrical – extension of the modular apparatus library

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

- Residual current circuit breaker with overcurrent protection 3-phase;
- Disconnectors with lamp 2-pole;
- Switch for panel mounting;
- Changover switch for panel mounting;
- Switches;
- Modular analogue and digital ammeter;
- Modular analogue and digital voltmeter;
- Installation relay;
- Interface relay;
- Time relay, flush mount version;
- Time relay for starting;
- Priority relay;
- Astronomical & digital time switch with weekly & yearly program;
- Shunt trip and undervoltage release;
- Front and side mountable auxiliary contact,
- Rotary handle,
- Direct and door handle,
- Residual-current boxes, characteristics A, AC, B,
- Selective residual-current boxes A, AC, B;
- Two states control lamp;
- Fuse modules;
- Semiconductor heaters and electrical fans;
- Auxiliary contact for motor contactor.



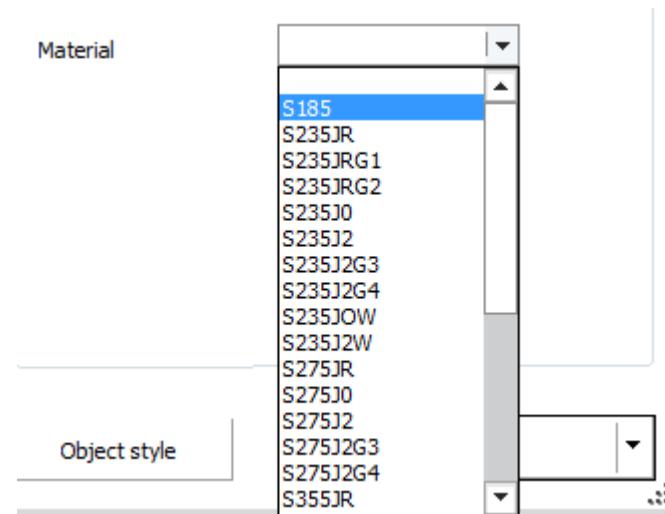
Additional signal cables and lighting have been added to the program.



# CADprofi

## ✓ CADprofi Mechanical – ability to specify the type of steel in profiles

An ability to specify the type of steel (material) in steel profiles have been added to the program.

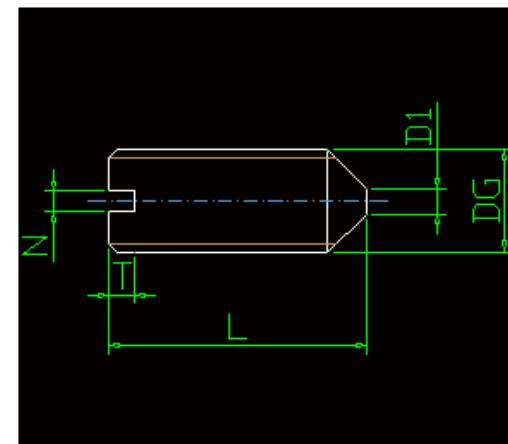
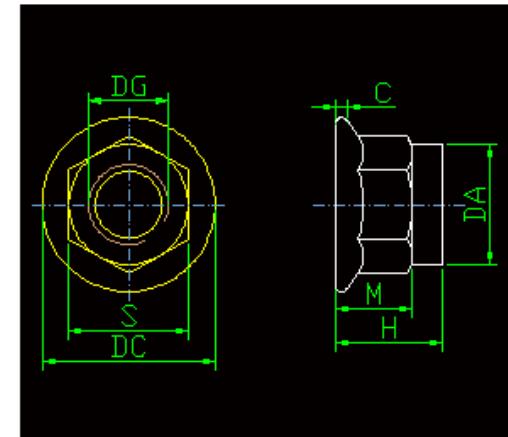




## ✓ CADprofi Mechanical – additional DIN, EN, ISO, PN standards

New standardized elements have been added to the program, including:

- DIN EN ISO 2342 - Slotted headless screw with shank,
- DIN EN ISO 8735 - Parallel pin with internal thread,
- DIN EN ISO 8746 - Grooved pin with round head,
- DIN EN ISO 8765 – Hexagon head bolt with metric fine pitch thread product A and B,
- DIN EN 14399-6 - Plain washer, chamfered, hardened and tempered for high-strength structural bolting,
- DIN EN 14399-8 - System HV - Hexagon fit bolt
- DIN EN 27435 - Slotted set screw with long dog point,
- DIN 920 – Slotted pan head screws with small head,
- DIN 921 - Slotted pan head screws with large head,
- DIN 923 – Slotted pan head screws with shoulder,
- DIN 927 – Slotted shoulder screws,
- DIN 986 – Prevailing torque type hexagon domed cap nuts,
- DIN 6888 – Woodruff key,
- DIN 6912 – Hexagon socket head cap screws with centre, with low head,
- DIN 7349 – Plain washers for bolts with heavy clamping sleeves,
- DIN 7603 – Sealing ring,
- DIN 7968 - Hexagon fit bolt,
- DIN 7984 – Hexagon socket head cap screws with low head,
- ISO 2342 - Slotted headless screw with shank,
- ISO 4766 - Slotted set screws with flat point,
- ISO 7041 - Prevailing torque type hexagon nut,
- ISO 7043 - Prevailing torque type hexagon nut with flange,
- ISO 7044 - Prevailing torque type hexagon nut with flange,
- ISO 7719 - Prevailing torque type hexagon nut,
- EN 14399-8 - System HV - Hexagon fit bolt.
- PN-73/H-93460.01 (L-shape equal angles).

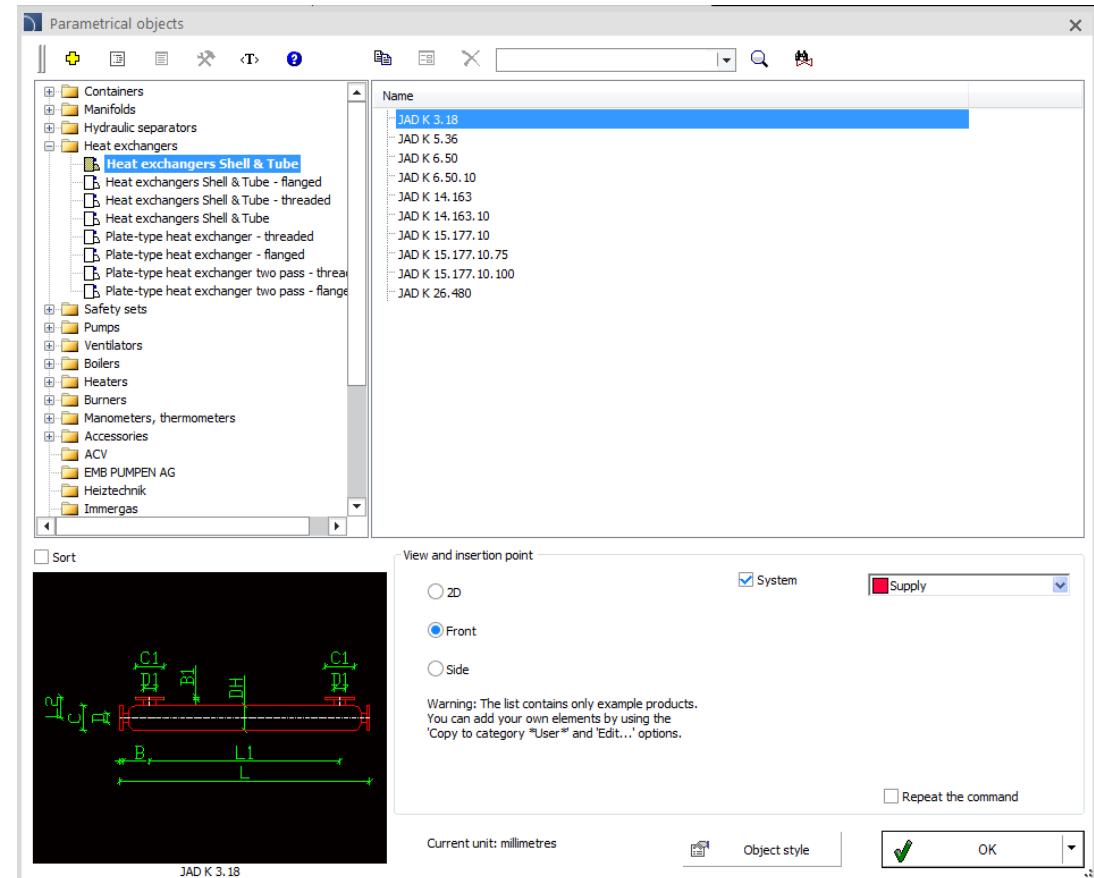




## ✓ CADprofi HVAC & Piping – addition of heat exchangers to the library

Do biblioteki programu dodano wymienniki ciepła, w tym:

- heat exchangers Shell & Tube;
- plate type heat exchangers;
- plate type heat exchangers two pass.

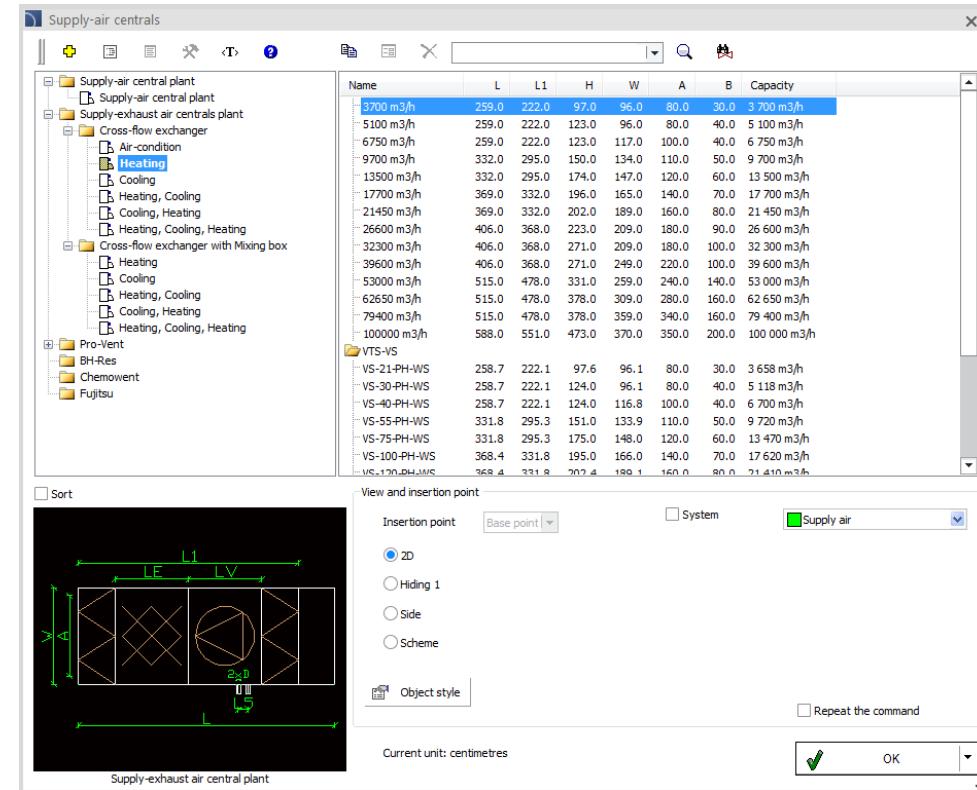




## ✓ CADprofi HVAC & Piping - addition of supply-exhaust air central plants to the library

Supply-exhaust air central plants have been added to the library, including:

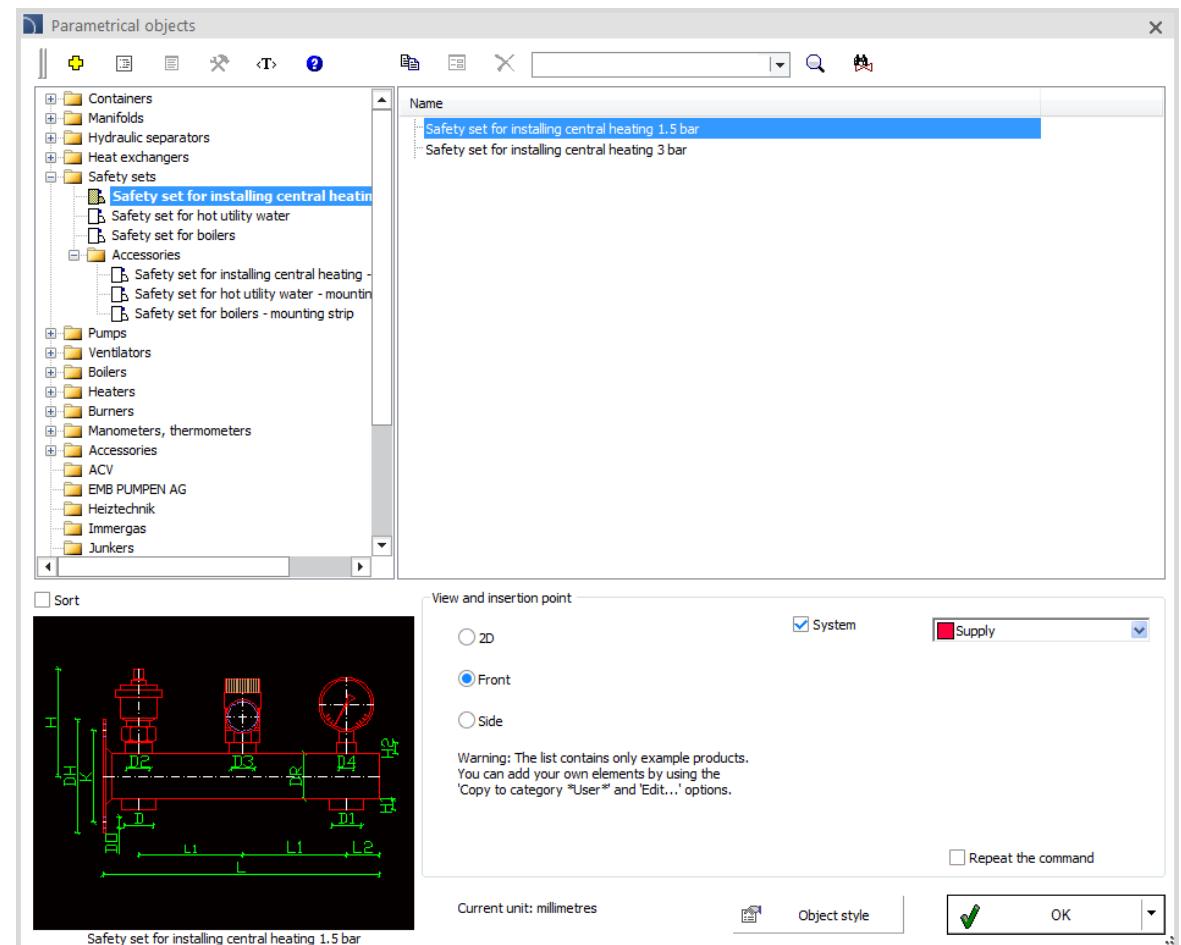
- cross flow exchanger;
- cross-flow exchanger with mixing box.





## ✓ CADprofi HVAC & Piping – addition of safety sets to the library

Safety sets used in central heating, hot utility water and for boilers that protect against dangerous pressure rise have been added to the program.





# CADprofi

## ✓ CADprofi HVAC & Piping – additional drawing style for 2D pipelines

Additional drawing style for pipelines in general view (used for example in bent pipes) have been added to the program.



| Installation and drawing |                |
|--------------------------|----------------|
| Installation             | Supply         |
| Type                     | Pipe           |
| Manufacturer and type    |                |
| Pipe                     | Pipe - style 2 |

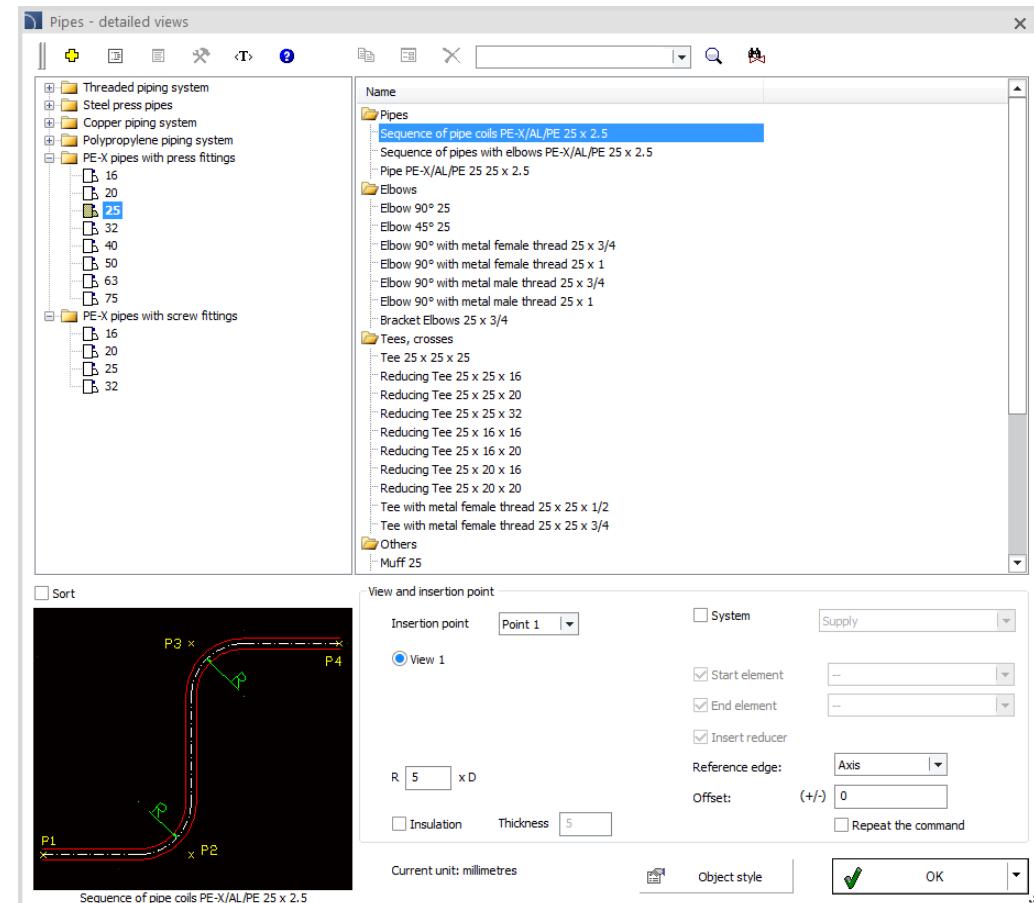
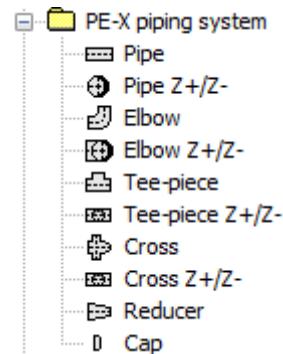
| Installation and drawing |                   |
|--------------------------|-------------------|
| Installation             | Supply            |
| Type                     | Elbow - style 2   |
| Manufacturer and type    |                   |
| Elbow                    | Elbow             |
|                          | Elbow - style 2   |
| Manufacturer             | Two-segment elbow |
| Type                     | Segmented elbow   |



## ✓ CADprofi HVAC & Piping – PE-X Piping system and fittings

PE-X Piping system (with screw and press fittings) have been added to the *Pipes- general views* and *Pipes – detailed views* commands.

This system is used in hot and cold water installations, as well as, in central heating.

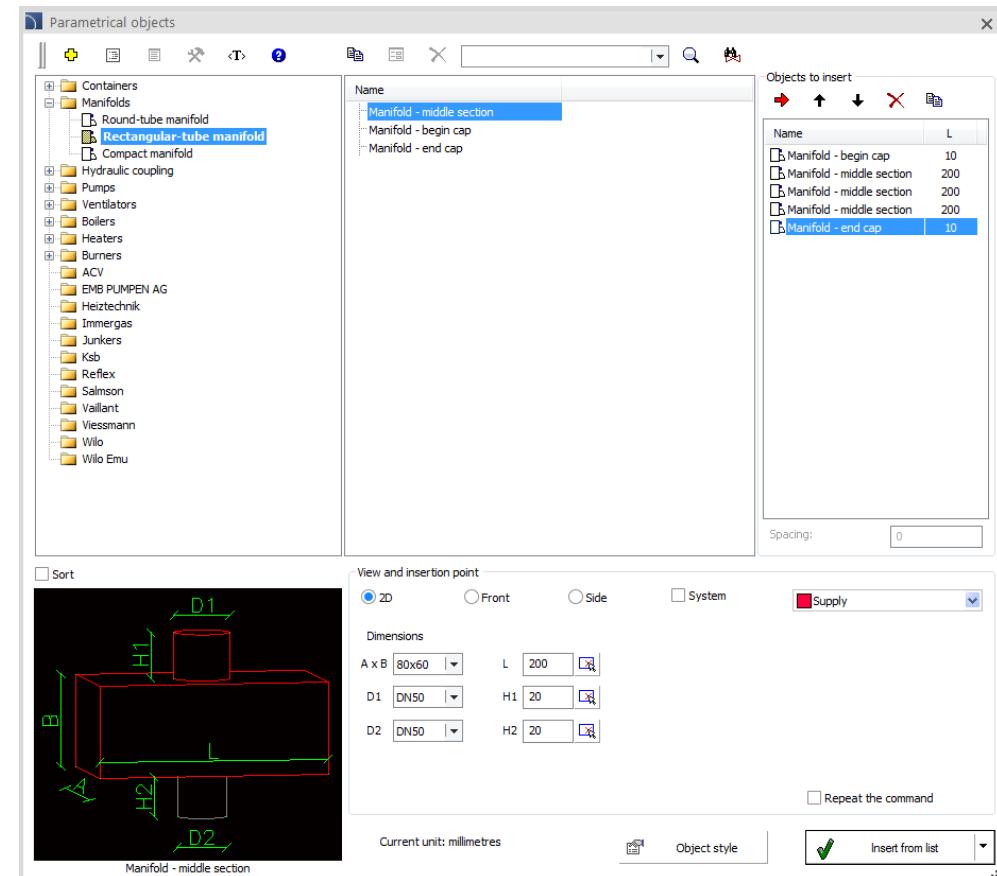
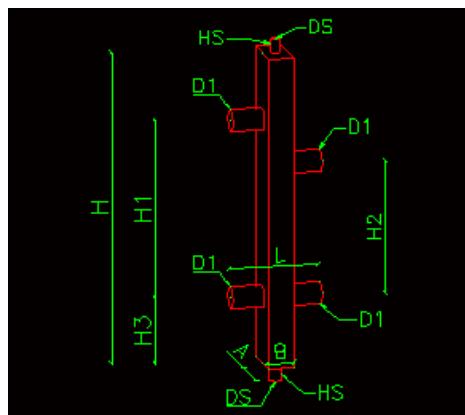




## ✓ CADprofi HVAC & Piping – upgraded insertion of manifolds

In the current program version the definition of manifolds is fully parametric, which makes it easier to define a manifold and its caps. In addition, individual sections can be added to the objects to insert list, allowing user to immediately insert the entire manifold into the drawing.

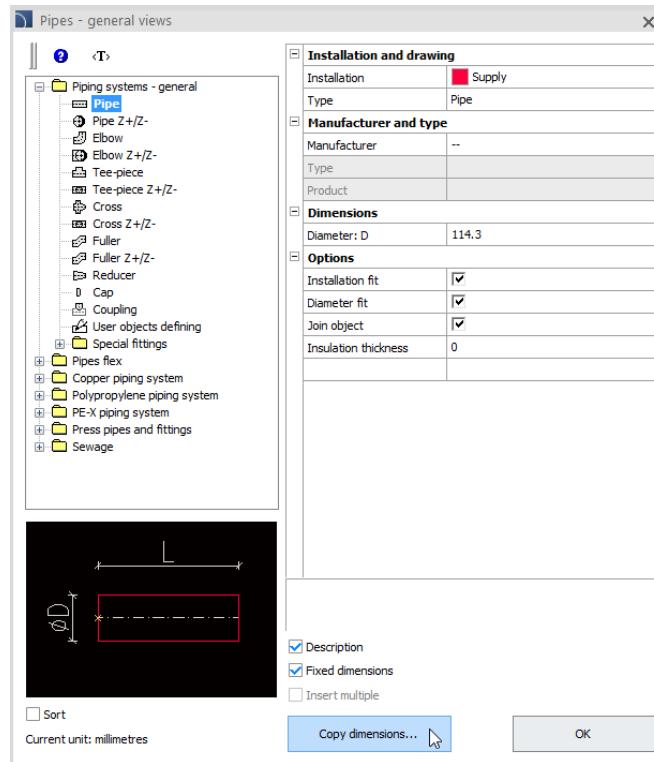
Additionally a round type and compact hydraulic couplings have been added to the program.





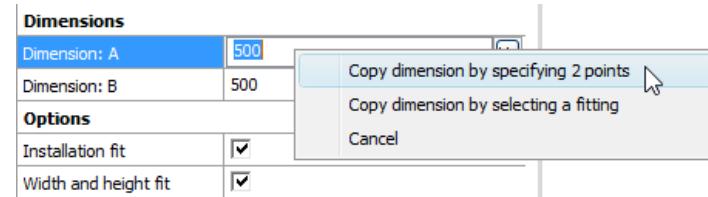
## ✓ CADprofi HVAC & Piping – copying dimensions

In pipes and duct in general views an additional *Copy dimensions* option has been added.

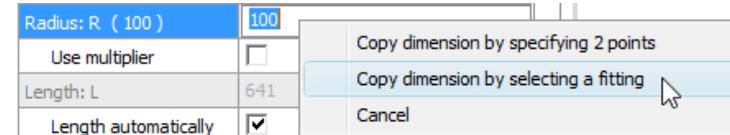


In general views a possibility to retrieve dimensions by right clicking the mouse button and afterwards have been added to the program. Thanks to this user can:

- Copy dimension by indicating two points:



- Copy dimension by selecting a fitting:



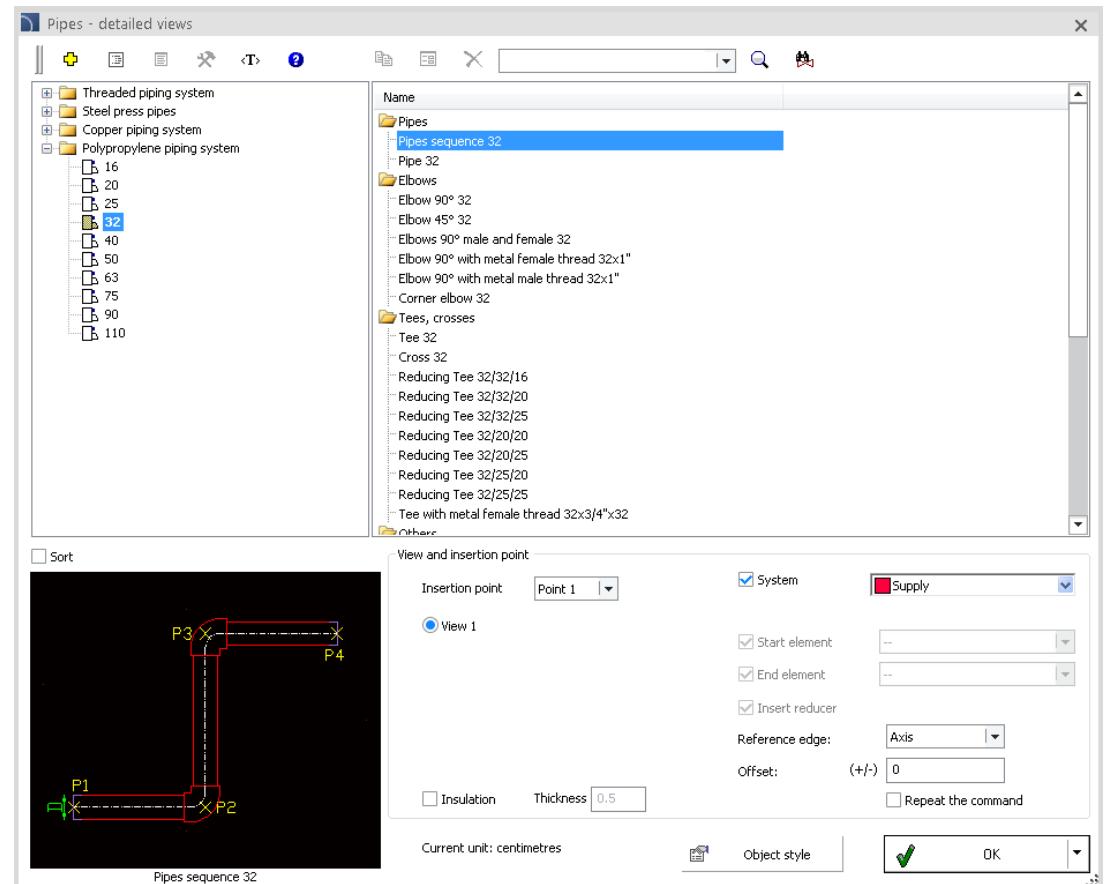


# CADprofi

## ✓ CADprofi HVAC & Piping – drawing insulation in detailed view

The possibility to draw fittings and pipes with insulation in detailed views have been added to the program.

Insulation      Thickness 10



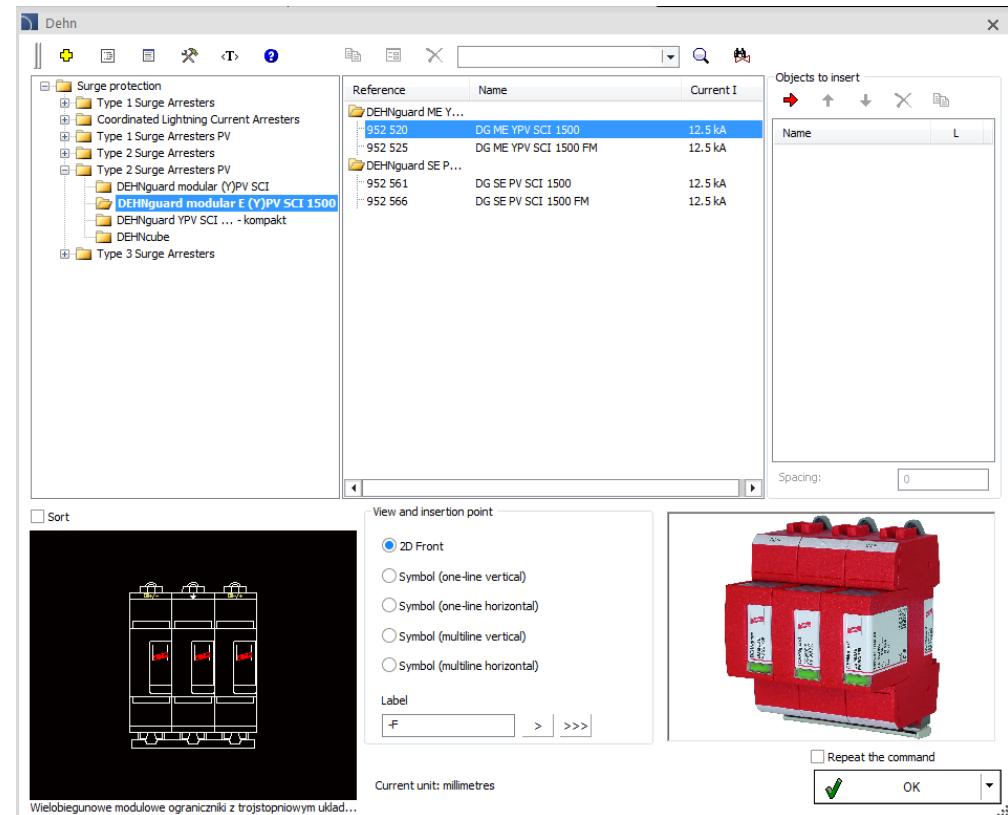


# CADprofi

## ✓ New Dehn library

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

- type 1 surge current arresters;
- type 1 surge arresters PV;
- type 2 surge arresters;
- type 2 surge arresters PV;
- type 3 surge arresters;
- coordinated lightning current arresters.

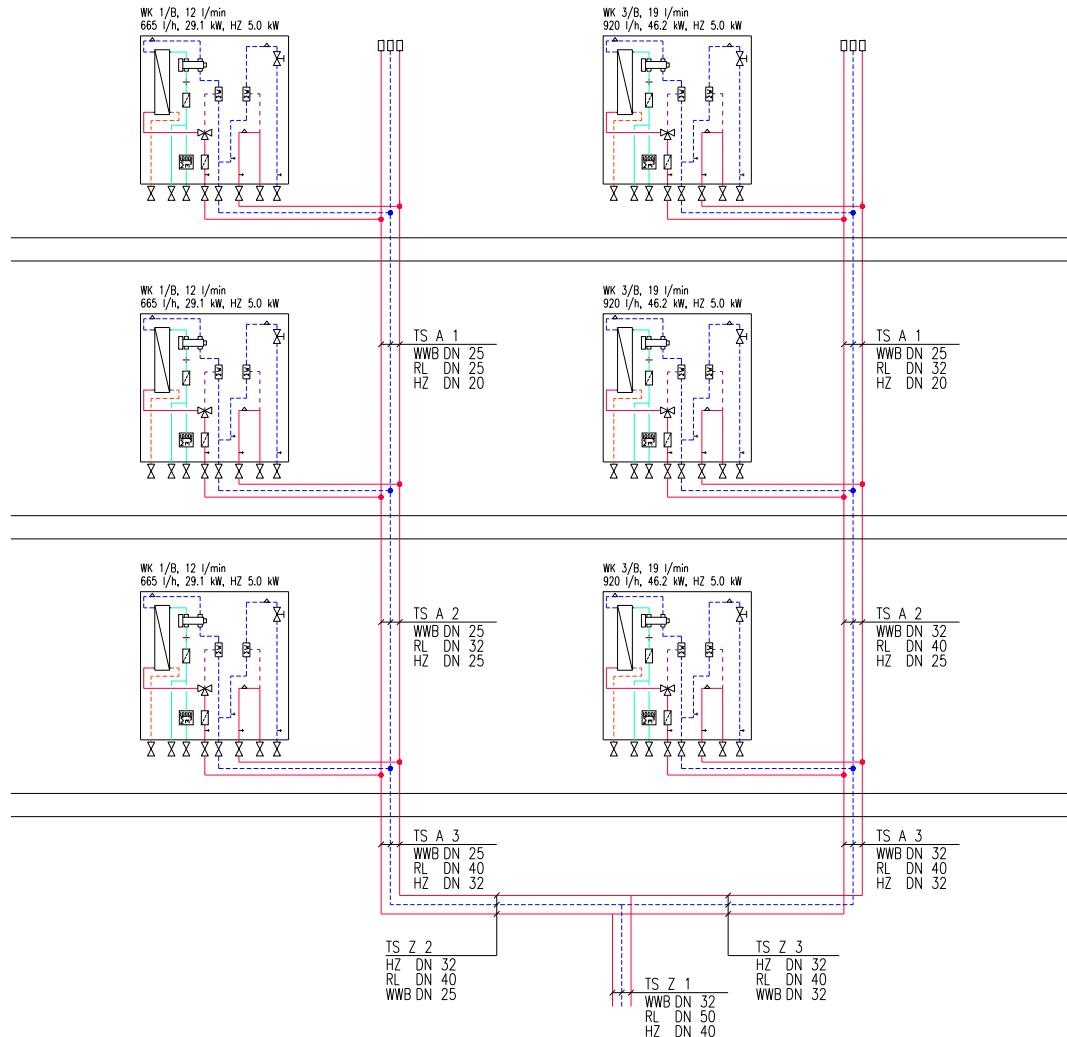




# CADprofi

## ✓ Changes in the KaMo library

3-wire housing stations have been added to the program. These stations are also included in comprehensive hydraulic calculations and in the schemes generator.



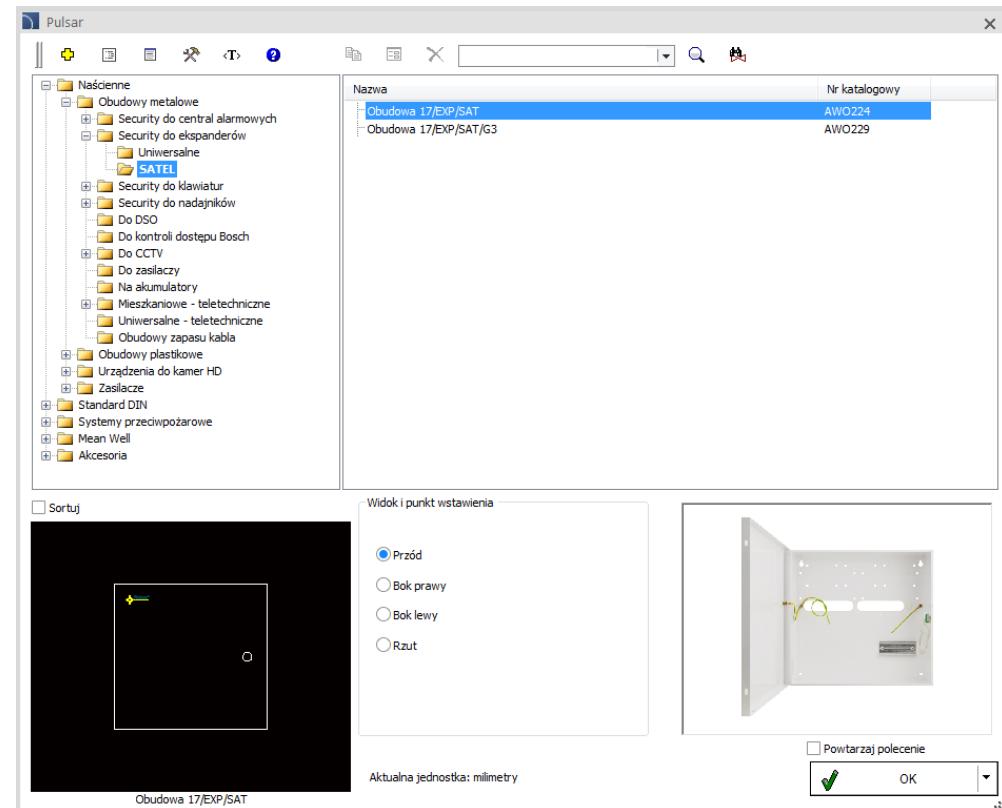


# CADprofi

## ✓ New Pulsar library

New Pulsar library that contains covers and power supplies has been added to the program.

Library is available only in Polish language.



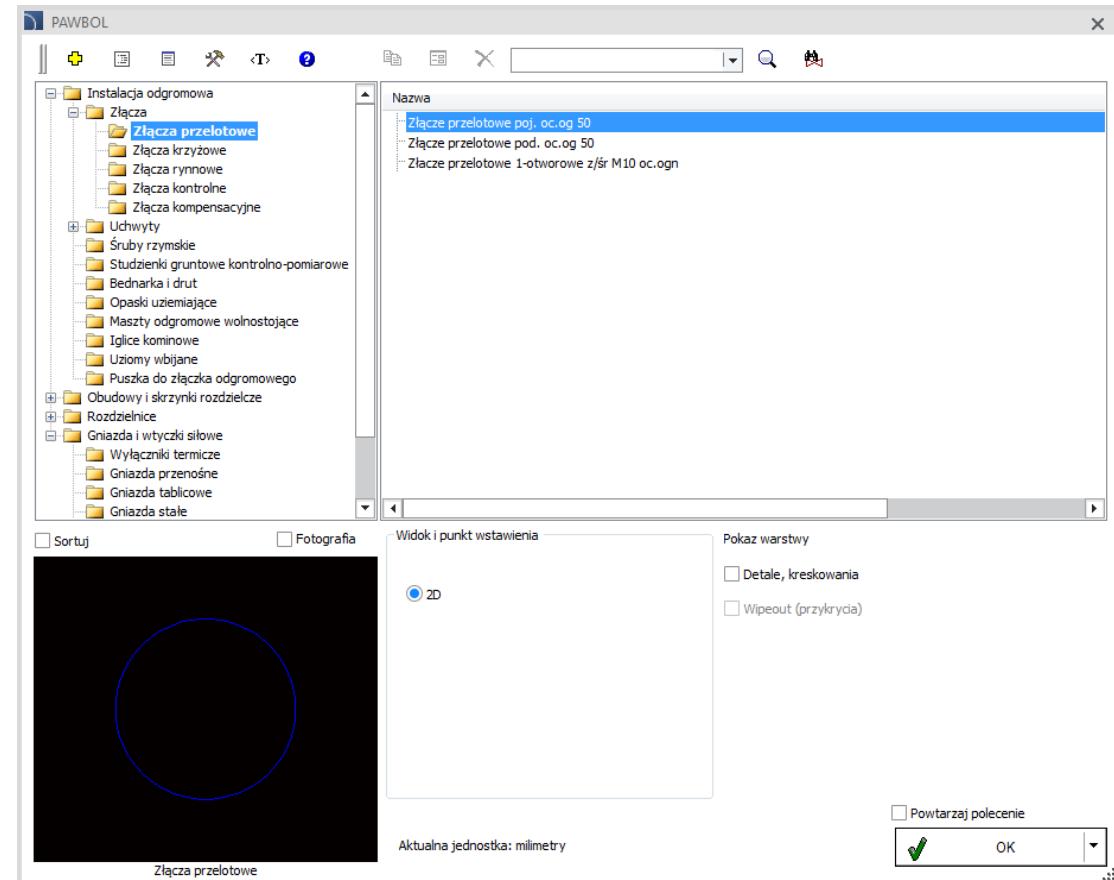


# CADprofi

## ✓ New Pawbol library

New Pawbol library that contains distributors and lighting protection systems has been added to the program.

Library is available only in Polish language.





# CADprofi

## ✓ New Trilux library

New Trilux library that contains lighting has been added to the program.

Library is available only in Polish language.

In case of importing DIALux stf files that contain Trilux products, then the appropriate lighting from Trilux is being added to the CAD program.



The screenshot shows the CADprofi software interface with the Trilux library loaded. The left pane is a tree view of lighting fixtures, with 'Siella G3 M73 (600x600)' selected. The right pane shows a table of products:

| Nazwa                             | Moc  | Wydajno... | Strumień ... |
|-----------------------------------|------|------------|--------------|
| Siella G3 M73 OTA 19              | 34 W | 94 lm/W    | 3200 lm      |
| Siella G3 M73 OTA 19 LED3200-8... | 34 W | 94 lm/W    | 3200 lm      |
| Siella G3 M73 OTA 19 LED3400-8... | 34 W | 100 lm/W   | 3400 lm      |
| Siella G3 M73 OTA 19 LED3400-8... | 34 W | 100 lm/W   | 3400 lm      |
| Siella G3 M73 OTA 22              | 34 W | 100 lm/W   | 3400 lm      |
| Siella G3 M73 OTA22 LED3200-8...  | 34 W | 94 lm/W    | 3200 lm      |
| Siella G3 M73 OTA22 LED3200-8...  | 34 W | 94 lm/W    | 3200 lm      |
| Siella G3 M73 OTA22 LED3400-8...  | 34 W | 100 lm/W   | 3400 lm      |
| Siella G3 M73 OTA22 LED3400-8...  | 34 W | 100 lm/W   | 3400 lm      |

Below the table, there is a preview window showing a square ceiling light fixture with a red 'X' mark. The text below the preview reads: 'Siella LED sprawdza się w zastosowaniach biurowych dzięki energooszczędności, łatwej instalacji, przyjemnemu światlu i niskim kosztom inwestycji. Dostępność modeli z UGR 19 (do pracy biurowej) i 22 (do oświetlenia ogólnego) pozwala oświetlić zróżnicowane obszary przy użyciu opraw jednej linii. Nie tylko ułatwia to planowanie i obniża koszty realizacji, ale także zapewnia jednorodny, estetyczny wygląd sufitów, stanowiąc idealne rozwiązanie do nowoczesnych biur. Wersja M73 - do sufitów rastrowych, wymiar 600x600. Trwałość L80(tq 25 °C) = 35.000 h.'



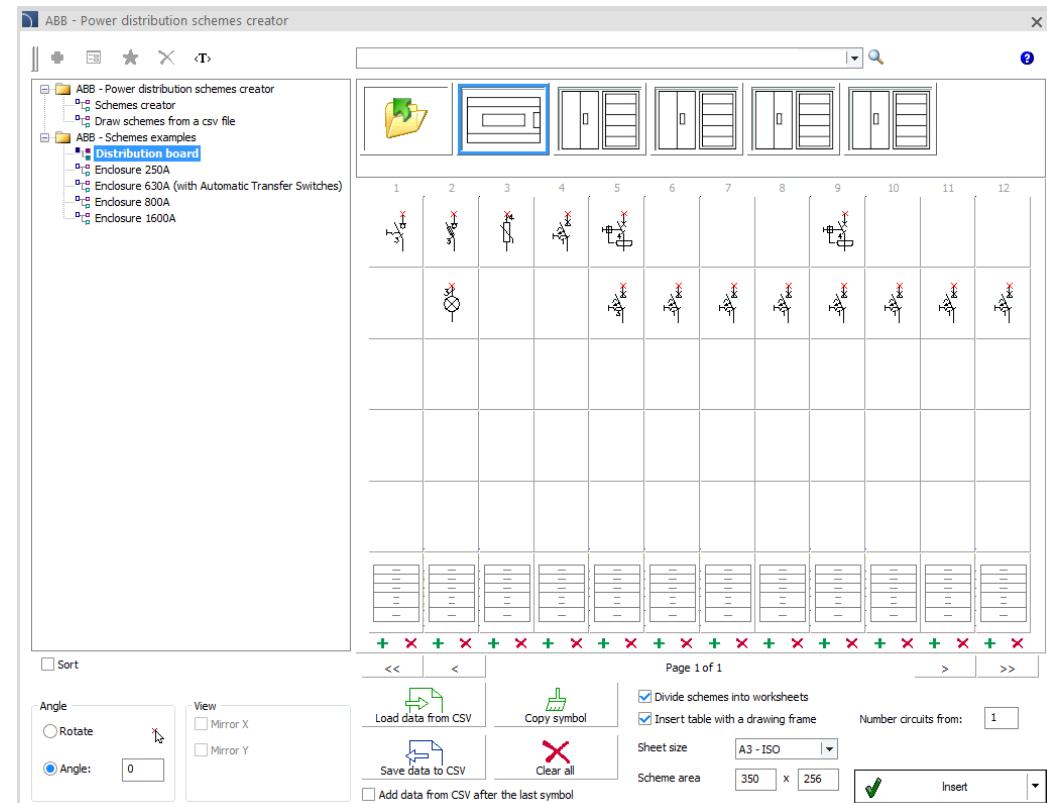
## ✓ New ABB library

An intuitive and easy to use ABB library automates the design of electrical installations using ABB products. Library is currently translated in Polish and in English. More languages will come soon.

ABB library includes the following categories:

- Low voltage apparatus and cabinets contains a complete library of ABB products, including: modular and measuring apparatus, photovoltaics, circuit breakers and disconnectors, ABB i-bus KNX and ABB free@home® system devices, cabinets and others.
- Power distribution schemes creator that allows to easily create an electrical installation project with ABB products.
- Low voltage systems that includes products from the call ABB SIGNAL and video intercom ABB WELCOME systems.
- Low voltage systems that includes exemplary schemes: ABB i-bus KNX, ABB free@home®, ABB SIGNAL and ABB WELCOME.

[Watch ABB library movie](#)



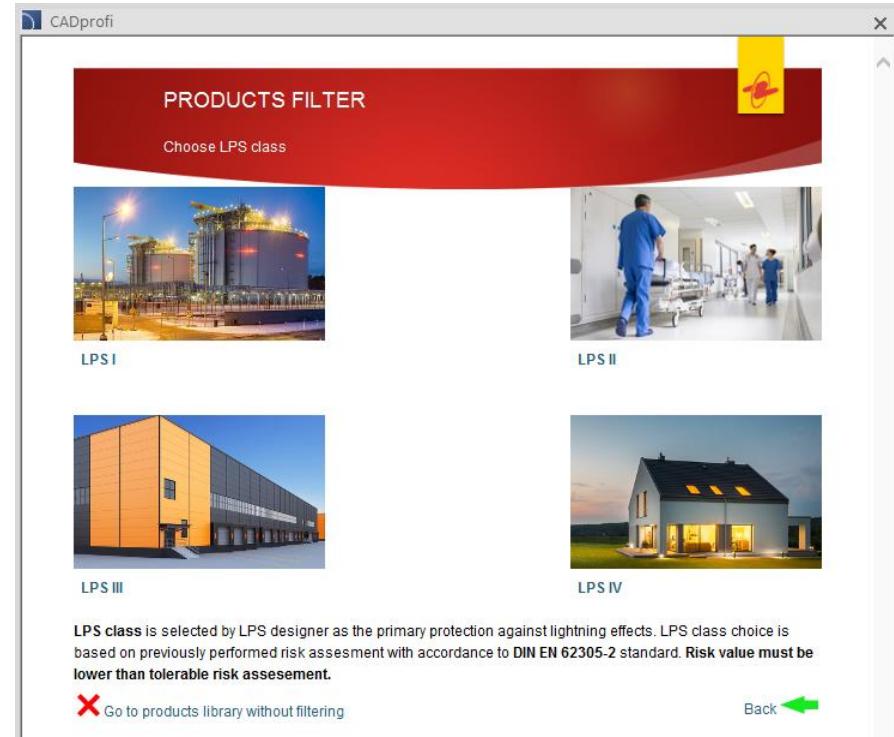
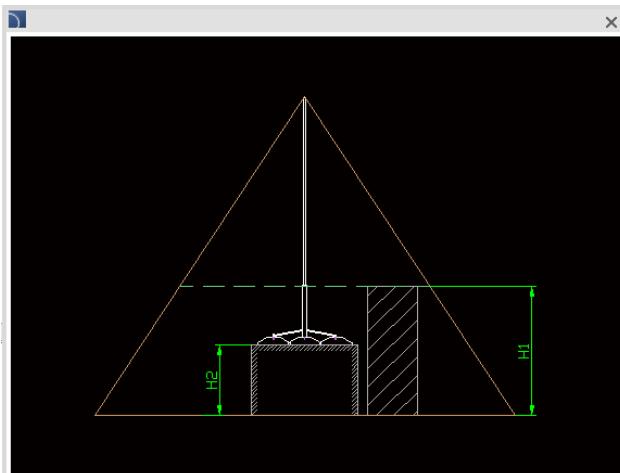


# CADprofi

## ✓ ELKO-BIS – updated library for lighting protection design

New features in ELKO-BIS:

- Update of ELKO-BIS company products.
- A new products filtering creator that allows user to easily select the right product, starting from choosing the LPS protection class to the type of roofing and the lighting protection materials.
- Easier selection of accessories, handles etc.
- Parametric definition of object protection zone (protected by masts and needles).
- Dynamic creator of legends.





# CADprofi

✓ Update of manufacturers' libraries:

The logo for legrand, featuring a red square icon with a white 'L' shape and the word 'legrand' in red lowercase letters.

The logo for Vaillant, featuring a green square icon with a white silhouette of a fox and the word 'Vaillant' in green lowercase letters.

The logo for magnoplast, featuring the words 'magna' in blue and 'plast' in red in a stylized font.

The logo for wilo, featuring the word 'wilo' in a large, bold, green sans-serif font.

The logo for Lovato electric, featuring a red square icon with a white 'L' shape and the words 'Lovato' and 'electric' in red, with 'ENERGY AND AUTOMATION' in smaller text below.

The logo for Salmson, featuring the word 'Salmson' in red cursive script with a red swoosh graphic.

The logo for reflex, featuring a green rounded rectangle with the word 'reflex' in white, with 'Thinking solutions.' in smaller text below.

The logo for ELKO-BIS, featuring the words 'ELKO' and 'BIS' in red in a bold, sans-serif font.

The logo for KaMo Systemtechnik, featuring a red 'L' shape icon and the words 'KaMo' in blue and 'Systemtechnik' in smaller text below.

The logo for ABB, featuring the letters 'ABB' in a large, red, bold, sans-serif font.

The logo for PAWBOL, featuring a blue square icon with a white graphic of a bird in flight and the word 'PAWBOL' in blue.



## CADprofi

### ✓ Adjustment to many base CAD programs

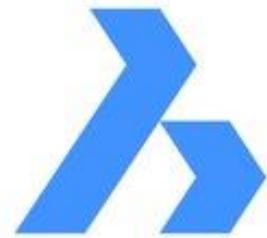
CADprofi 2018 has been adjusted to work with latest CAD programs, including: ArCADia PLUS 10.3, AutoCAD 2018, BricsCAD V18, CADian 2017, CMS IntelliCAD 8.3, GstarCAD 2017 SP1, GstarCAD 2018, progeCAD 2018, ZWCAD 2018.

CADprofi 2018 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 shape 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'.  
**ARES® Commander**