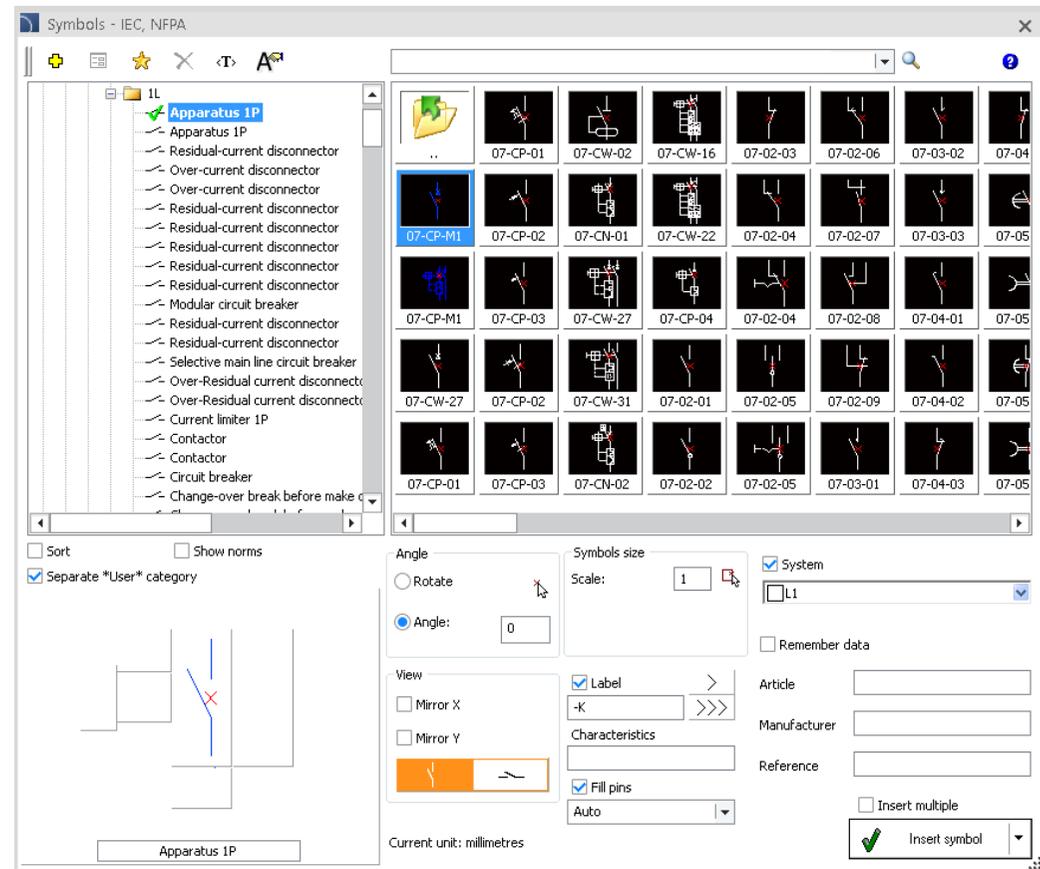




CADprofi 12.03

✓ Fast switching between symbols views/variants

A possibility to quickly switch variants or views of symbols has been added to the program. Thanks to this user can easily change the selected symbol (e.g. IEC symbols from the vertical variant to the horizontal variant or furniture views from top view to front view).

The screenshot shows the 'Symbols - IEC, NFPA' window. On the left, a tree view lists various electrical symbols under the 'Apparatus 1P' category. The main area displays a grid of symbol variants, with '07-CP-M1' selected. The right panel contains configuration options:

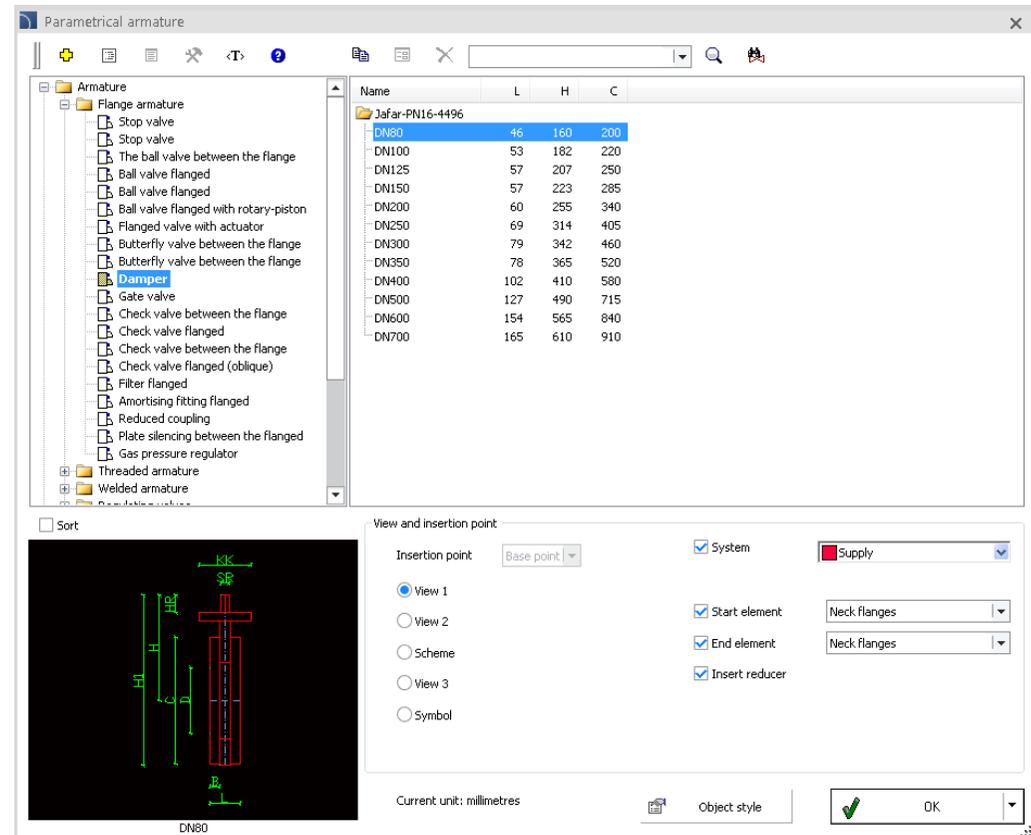
- Angle:** Rotate (unselected), Angle: 0 (selected)
- View:** Mirror X (unselected), Mirror Y (unselected)
- Label:** -K (selected)
- Fill pins:** Auto (selected)
- System:** L1 (selected)
- Article, Manufacturer, Reference:** Input fields
- Insert multiple:** Unchecked
- Insert symbol:** Checked (indicated by a green checkmark)

Current unit: millimetres

✓ CADprofi HVAC & Piping – extension of the armature library

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

- dampers,
- JAFAR company products (e.g. ball valves, non-return dampers and gate valves),
- ZETKAMA company products (e.g. filters).



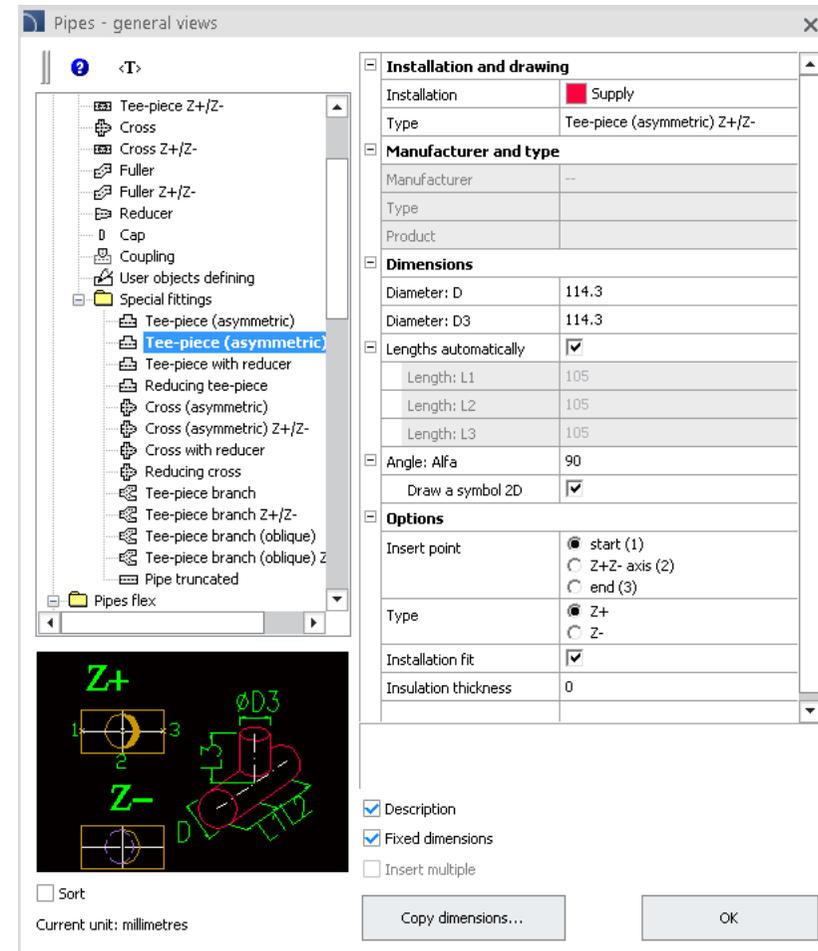
Name	L	H	C
Jafar-PN16-4496			
DN80	46	160	200
DN100	53	182	220
DN125	57	207	250
DN150	57	223	285
DN200	60	255	340
DN250	69	314	405
DN300	79	342	460
DN350	78	365	520
DN400	102	410	580
DN500	127	490	715
DN600	154	565	840
DN700	165	610	910



CADprofi

✓ CADprofi HVAC & Piping – additional fittings

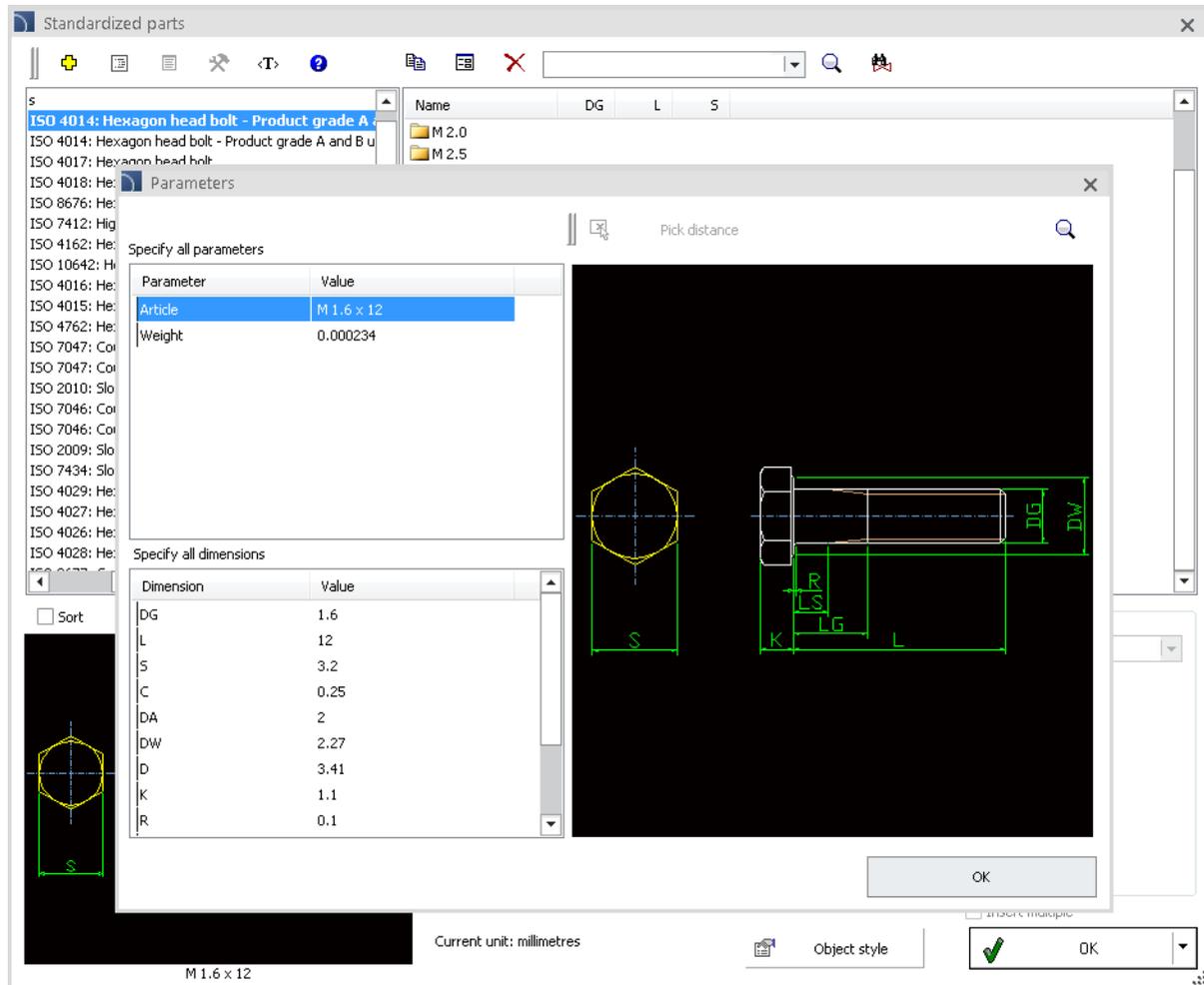
Asymmetric tee-piece and asymmetric cross in Z+/Z- views have been added to the *Pipes – general views* command.



✓ CADprofi Mechanical - possibility to expand the object database with user products

Program contains many object databases with specified parameters. Currently user can use standard type of series, as well as expand the database with his own type of series, which can be freely edited and saved in the database.

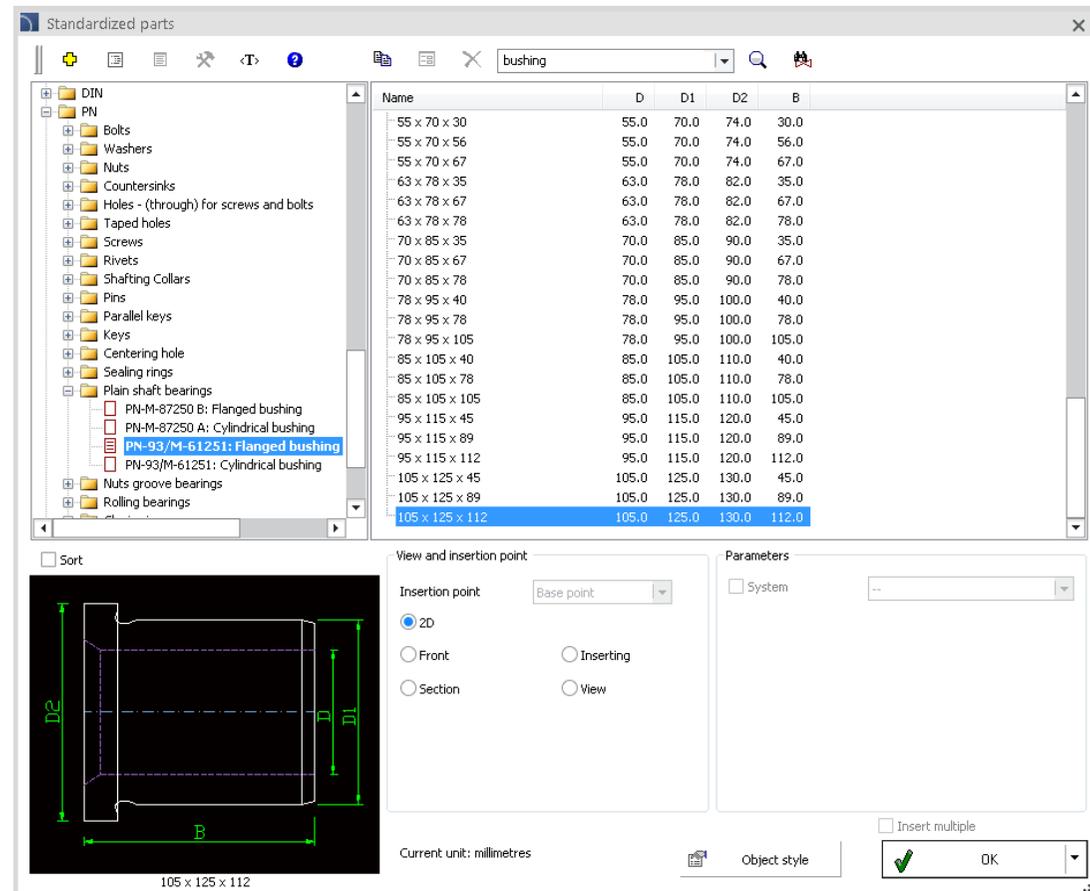
It is possible to specify any dimensions and technical parameters for all user elements that have been added to the program.



✓ CADprofi Mechanical – additional PN, ISO, ANSI and GOST standards

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

- Cylindrical and standard bushings.
- Round, square and rectangular structural tubings.
- Square steel bars.
- Steel and aluminium I-beams.
- Steel U-shapes.
- Aluminum T-shape.
- L-shapes with equal and unequal angles.
- Aluminum Z-shape.
- Electrically welded steel tubes, water supply, seamless and cold deformed.
- Seamless hot and cold deformed steel pipes.
- Seamless hydraulic tubes.
- Stainless steel welded pipes.
- Flat, loose plate, neck, blind, hubbed socket and hubbed slip-on flanges.





CADprofi

✓ **Update of manufacturers' libraries:**





CADprofi

✓ Adjustment to many base CAD programs

CADprofi 12.03 has been adjusted to work with latest CAD programs, including: GstarCAD 2016, ARES Commander 2016 and CADMATE 2016.

CADprofi 12 currently works with many base CAD programs including: AutoCAD (since the 2000 version), BricsCAD, GstarCAD, IntelliCAD, progeCAD, ZWCAD, ARES Commander Edition and others.

The logo for AutoCAD, featuring the word 'AutoCAD' in a bold, red, sans-serif font with a registered trademark symbol.

The logo for ZWCAD, featuring the word 'ZWCAD' in a blue, sans-serif font with a green and blue stylized cross symbol to the right.

The logo for GstarCAD, featuring the word 'GstarCAD' in a blue and yellow, sans-serif font, with the tagline 'An Alternative CAD System' in blue below it.

The logo for BRICSCAD, featuring a stylized blue 'B' shape above the word 'BRICSCAD' in a bold, black, sans-serif font.

The logo for progeSOFT, featuring a blue globe with a yellow and blue stylized 'I' shape above the word 'progeSOFT' in a blue, sans-serif font.

The logo for IntelliCAD, featuring a purple diamond shape with a yellow and blue stylized 'I' shape above the word 'IntelliCAD' in a purple, sans-serif font.



CADprofi



CADprofi 12

Summary of main changes made to the program since the CADprofi 11.01 version.

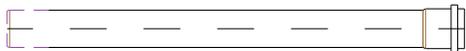
✓ CADprofi HVAC & Piping – changes in the drawing of general piping system

In the CADprofi program it is possible to draw pipes in schematic, general or detailed views.

In the *Pipes – general views* command the possibility to draw simplified views of plumbing installations, as well as, piping installations made from copper or plastic was added to the program. This command also allows to draw steel and flex installations.

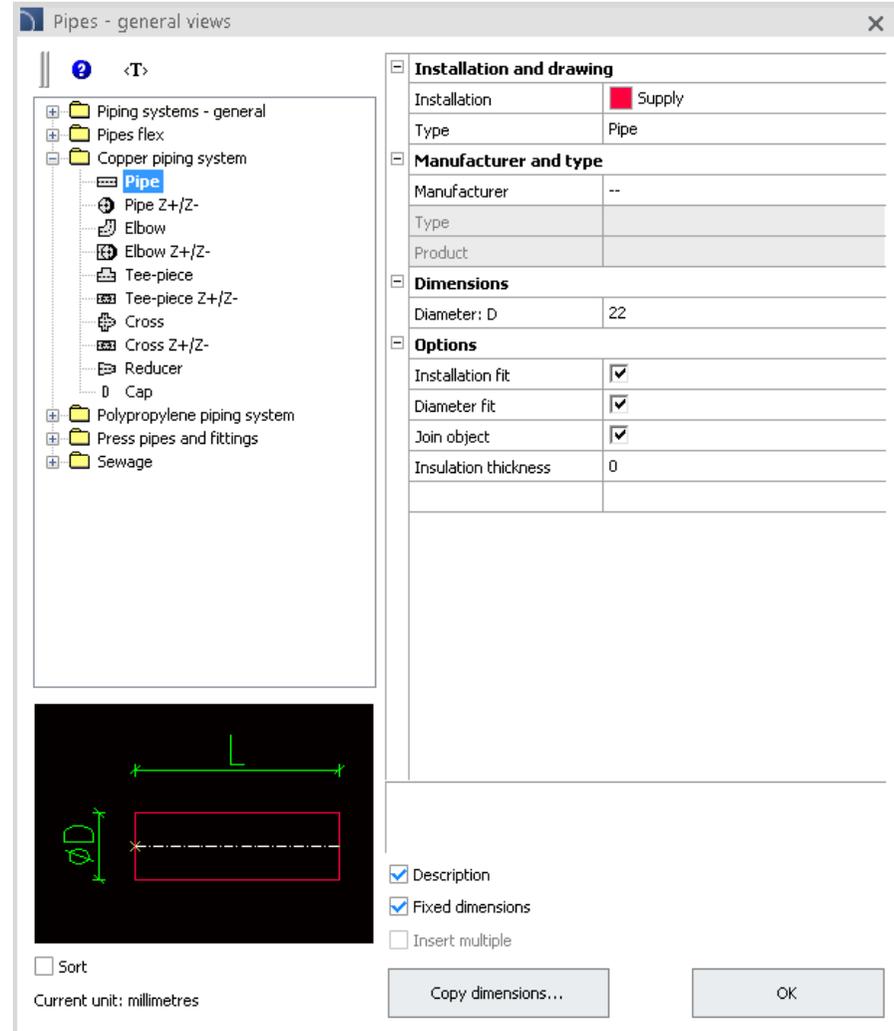
 - *Schematic view*

 - *General view*

 - *Detailed view*

Notice:

For welded or butt heat sealed installations general views can be also used as detailed views.



Pipes - general views

Tree view:

- Piping systems - general
 - Pipes flex
 - Copper piping system
 - Pipe
 - Pipe Z+/Z-
 - Elbow
 - Elbow Z+/Z-
 - Tee-piece
 - Tee-piece Z+/Z-
 - Cross
 - Cross Z+/Z-
 - Reducer
 - Cap
 - Polypropylene piping system
 - Press pipes and fittings
 - Sewage

Installation and drawing settings:

Installation	Supply
Type	Pipe
Manufacturer and type	
Manufacturer	--
Type	
Product	
Dimensions	
Diameter: D	22
Options	
Installation fit	<input checked="" type="checkbox"/>
Diameter fit	<input checked="" type="checkbox"/>
Join object	<input checked="" type="checkbox"/>
Insulation thickness	0

Preview area:

Diagram showing a pipe with dimensions L and $\varnothing D$.

Options:

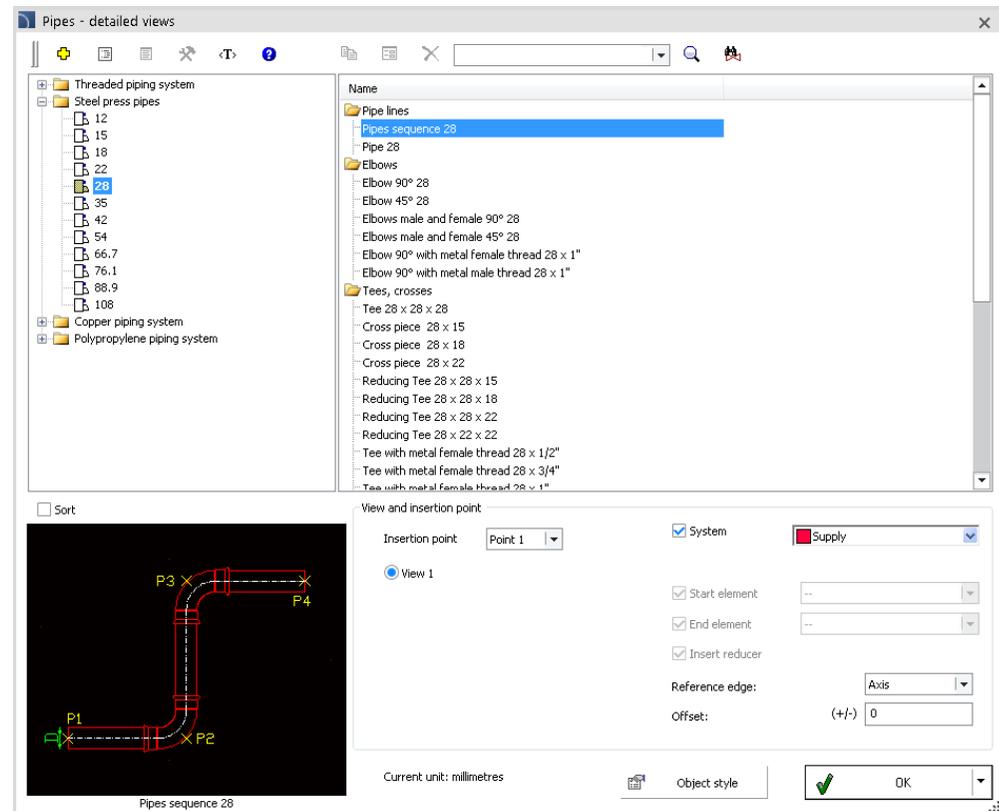
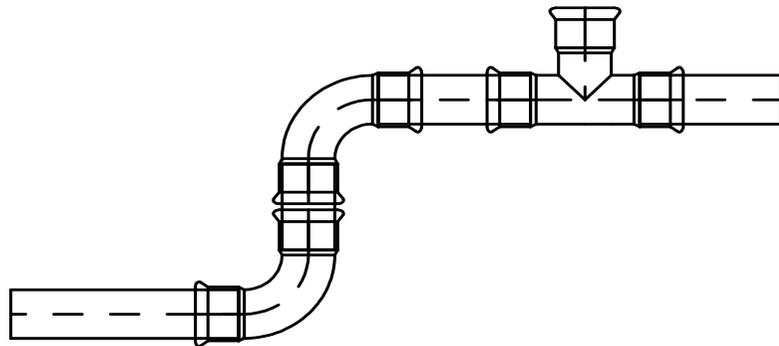
- Description
- Fixed dimensions
- Insert multiple

Buttons: Sort, Current unit: millimetres, Copy dimensions..., OK

✓ CADprofi HVAC & Piping – command *Pipes* – detailed views

This command contains detailed views for threaded, pressed, copper and plastic pipes. In the current program version the data layout has changed. The current data layout is prepared in accordance to the size of pipes, thank to which it is a lot easier to design the installation with a certain diameter, as well as, it is possible to automatically join pipes with elbows and tees.

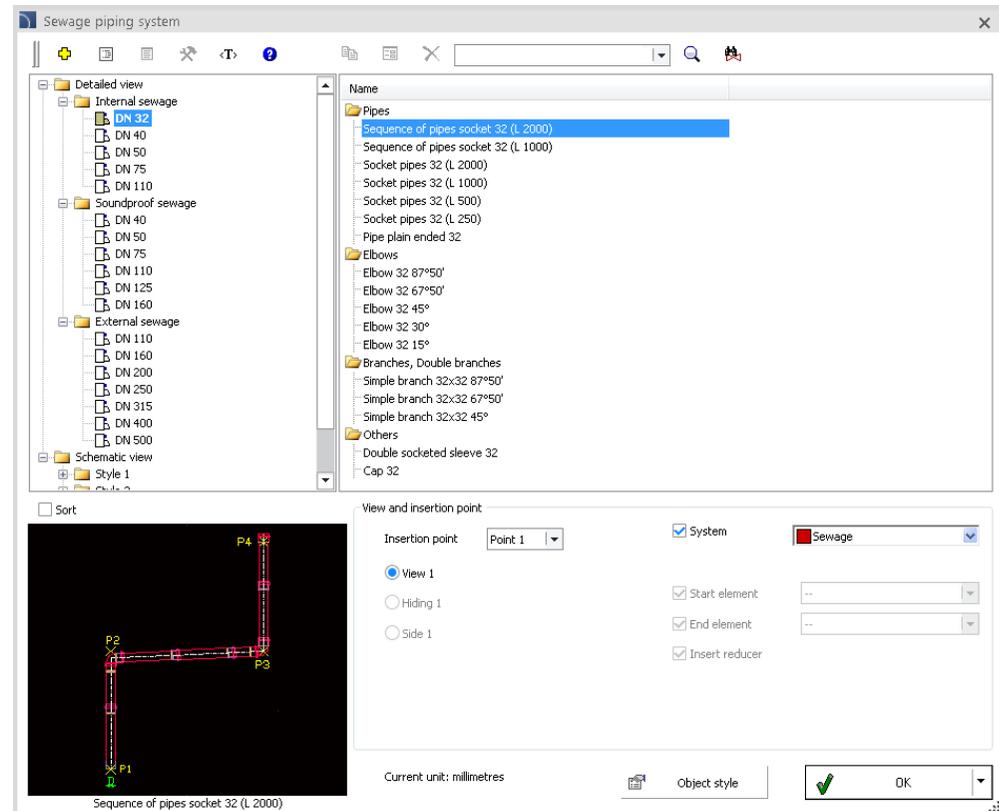
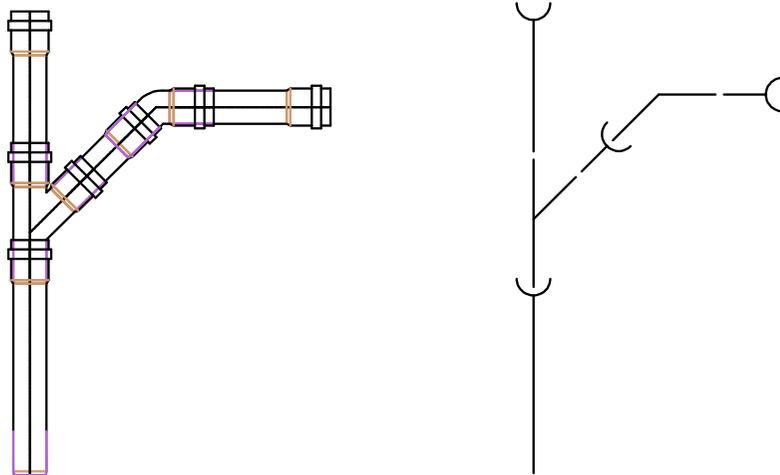
A system of pressed pipes and fittings for steel pipes which allows for convenient drawing of installations with automatic insertion of appropriate elbows (12 – 108 mm.) has been added to the program. In addition, a possibility to connect this system with other installations (by using the threaded or flanged fittings) has been added to the program.



✓ CADprofi HVAC & Piping – new command *Sewage piping system*

A *Sewage piping system* , which allows for convenient drawing of installations for both internal and external sewage with automatic insertion of appropriate fittings (DN32 - DN500) has been added to the program.

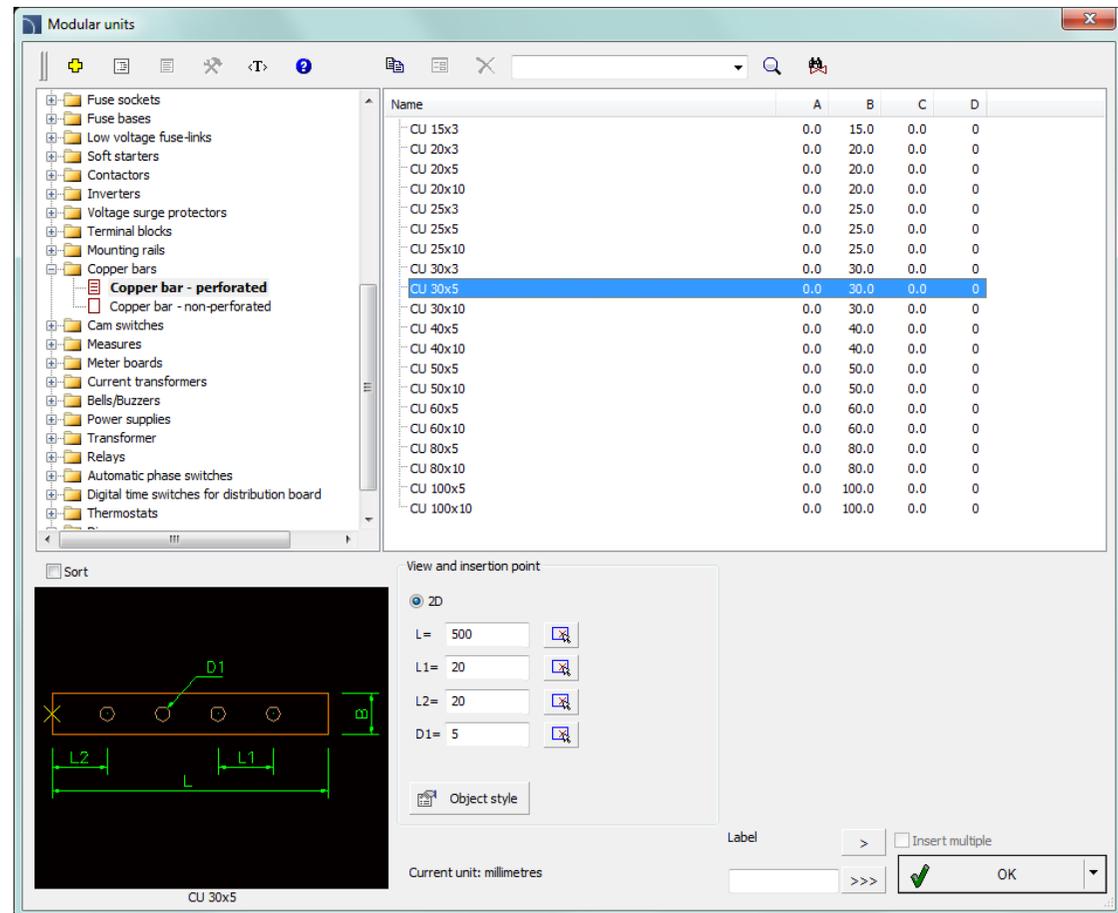
Sewage piping system can be drawn in detailed views and in various schematic views.



✓ CADprofi Electrical – extension of the library of symbols and the modular apparatus

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

- 1-phase and 3-phase electricity meter.
- Meter and dial boards.
- Mounting rails DIN TH35.
- Busbars.
- Terminal blocks.
- Telecommunication parallel joint.



Name	A	B	C	D
CU 15x3	0.0	15.0	0.0	0
CU 20x3	0.0	20.0	0.0	0
CU 20x5	0.0	20.0	0.0	0
CU 20x10	0.0	20.0	0.0	0
CU 25x3	0.0	25.0	0.0	0
CU 25x5	0.0	25.0	0.0	0
CU 25x10	0.0	25.0	0.0	0
CU 30x3	0.0	30.0	0.0	0
CU 30x5	0.0	30.0	0.0	0
CU 30x10	0.0	30.0	0.0	0
CU 40x5	0.0	40.0	0.0	0
CU 40x10	0.0	40.0	0.0	0
CU 50x5	0.0	50.0	0.0	0
CU 50x10	0.0	50.0	0.0	0
CU 60x5	0.0	60.0	0.0	0
CU 60x10	0.0	60.0	0.0	0
CU 80x5	0.0	80.0	0.0	0
CU 80x10	0.0	80.0	0.0	0
CU 100x5	0.0	100.0	0.0	0
CU 100x10	0.0	100.0	0.0	0

View and insertion point

2D

L = 500

L1 = 20

L2 = 20

D1 = 5

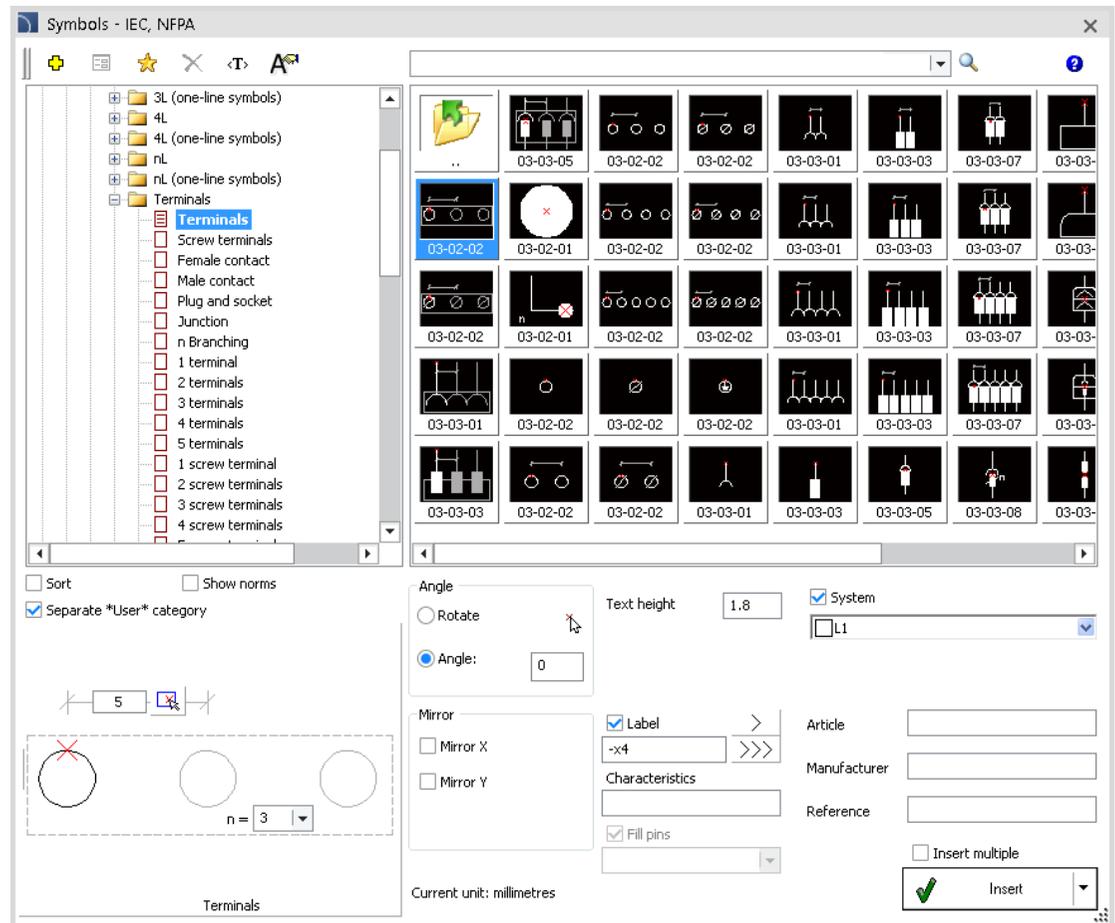
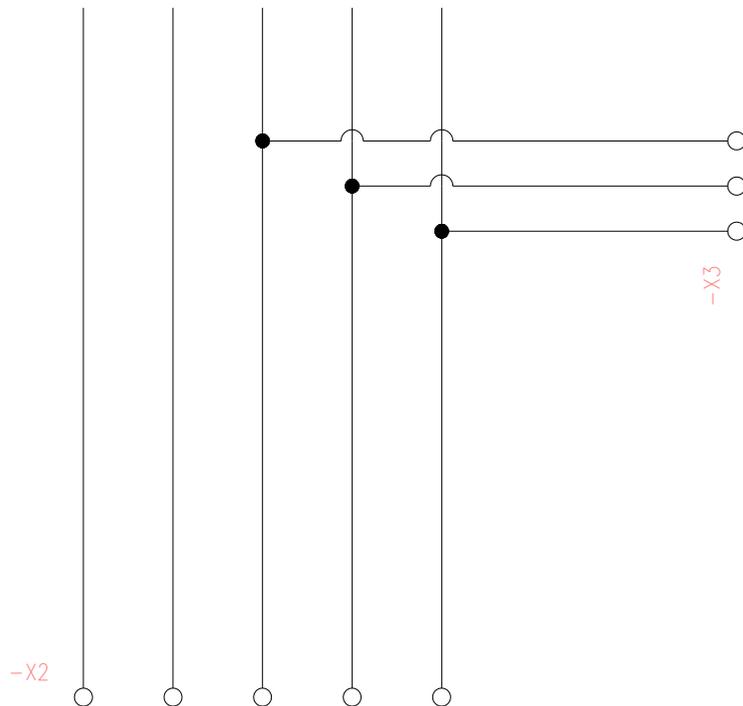
Label

Insert multiple

Current unit: millimetres

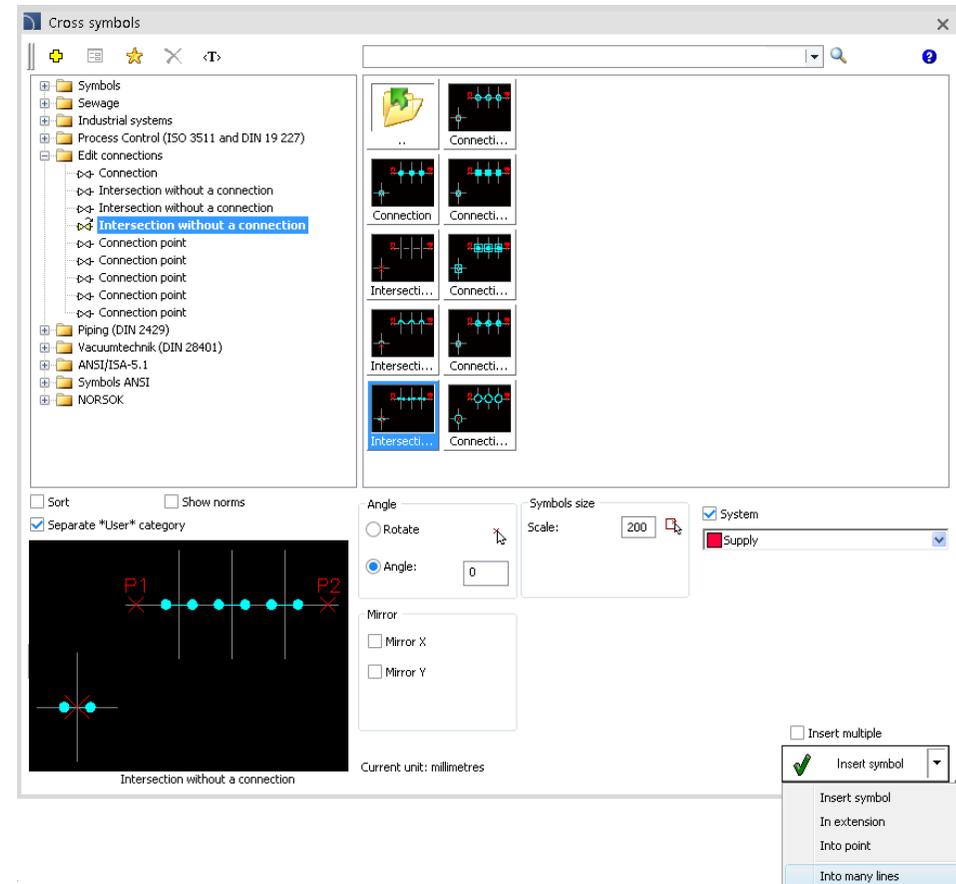
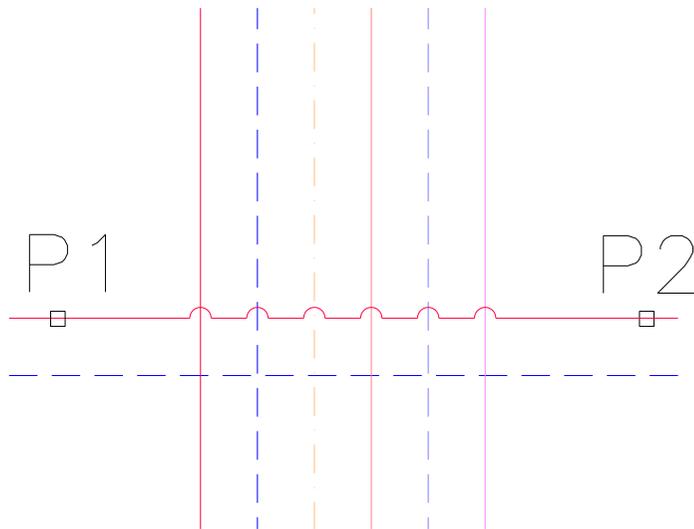
✓ CADprofi Electrical – parametrical symbols of terminals

In the new version of the program, symbols of terminals are parameterized so it's possible for example to insert a terminal block with any number of terminals and with any spacing between them.



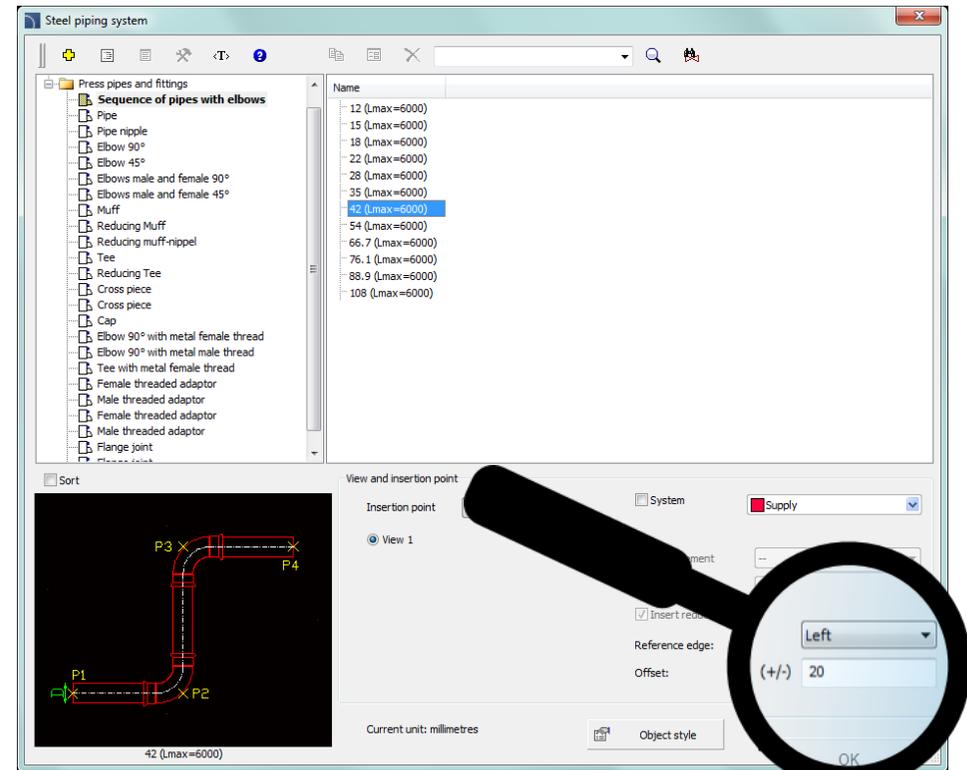
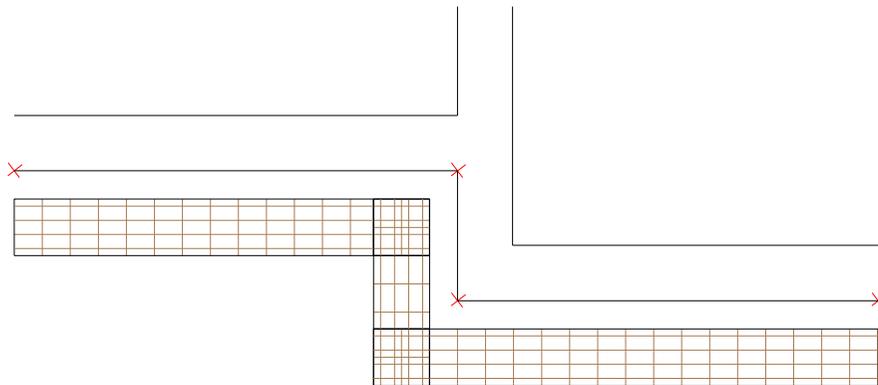
✓ Edition of connections of schematic lines

The possibility to easily edit the line intersections has been added to the program. Appropriate intersection symbols "with connection" and "without connection" can be found in the program libraries in the *Edit connection* category. In case of selecting the *Into many lines* option it is possible to quickly edit multiple intersecting lines.



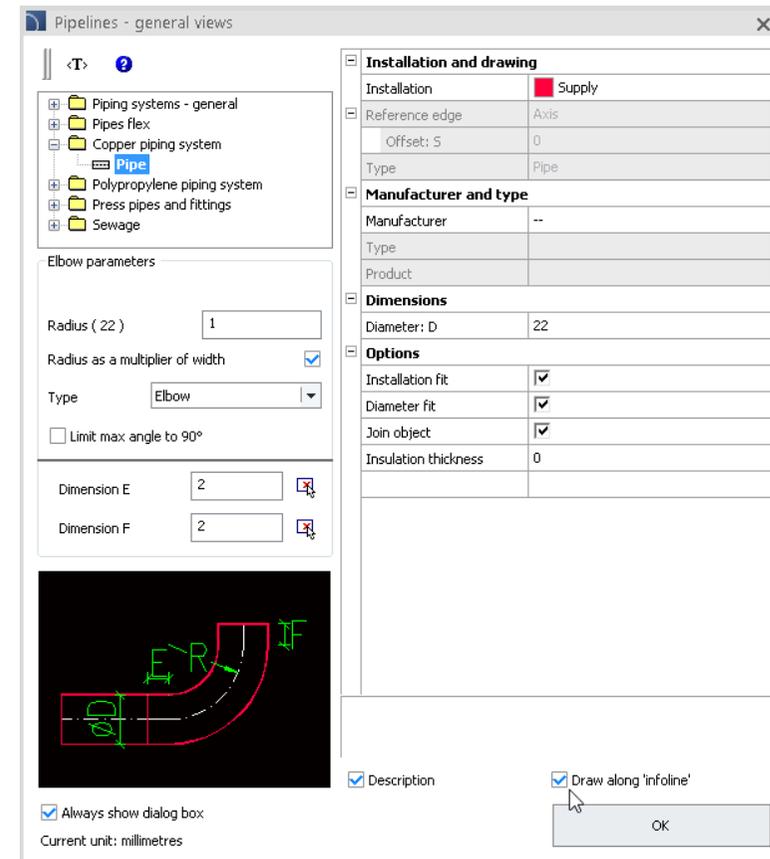
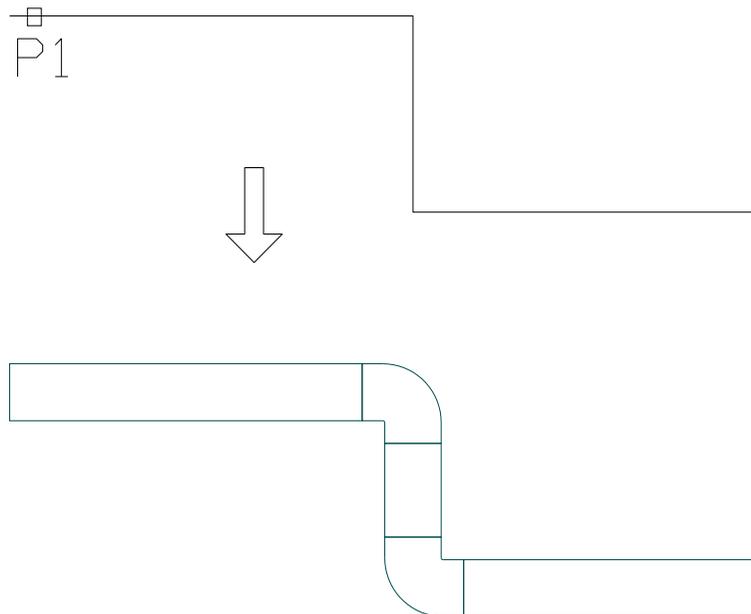
✓ Drawing strings of installations with an offset

Until now it was possible to draw installations only along the axis. Currently, the program allows user to specify the reference edge (axis, left, right) and an offset of the drawn string from the actually indicated points. This facilitates the design of such strings along the walls or other installations.

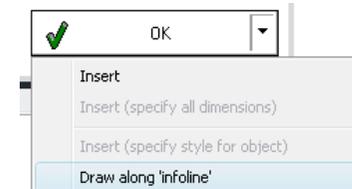


✓ Drawing installations along the 'infoline'

New program version allows to quickly draw installations sequences along the selected „infoline” (polyline or several linked lines). This option is very useful, e.g. in the case of creating detailed technical projects on the basis of initial drawn "single-line". Drawing along the "infoline" is available in various libraries of products, for both general and detailed views for piping installations, ventilation installations and cable routes.

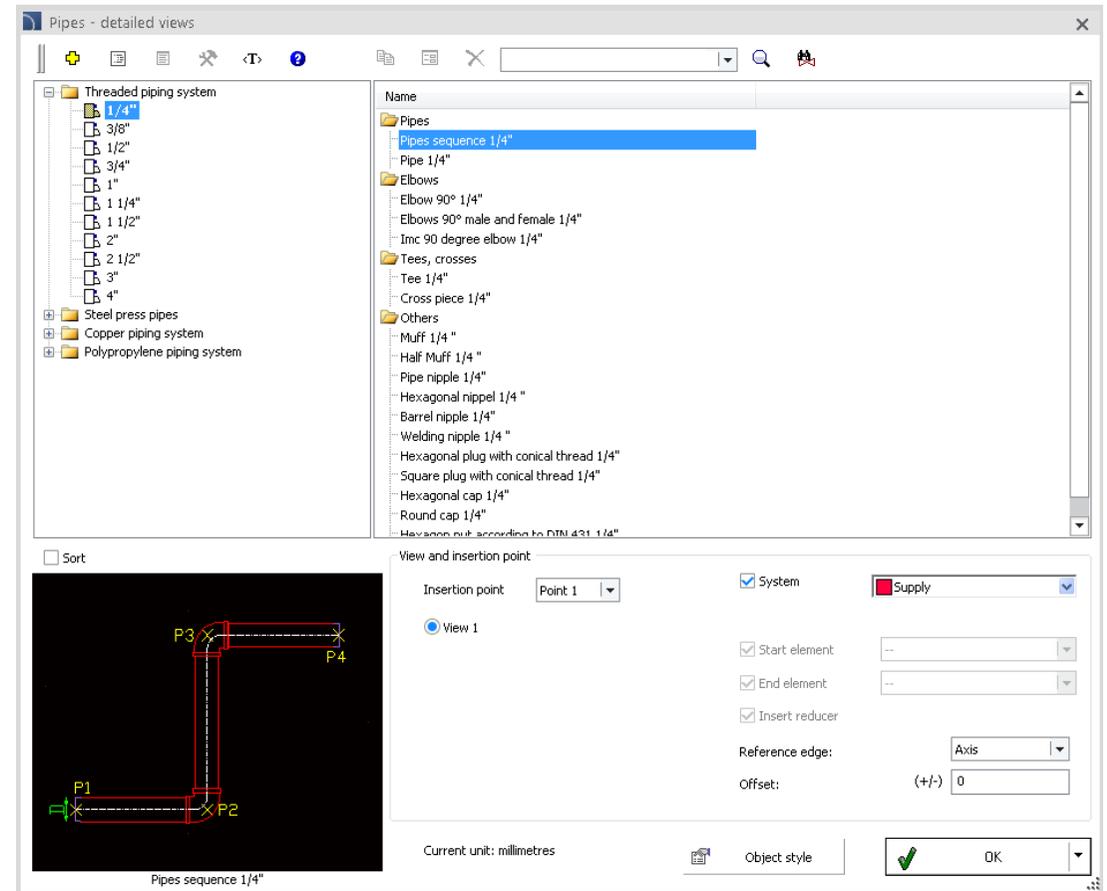
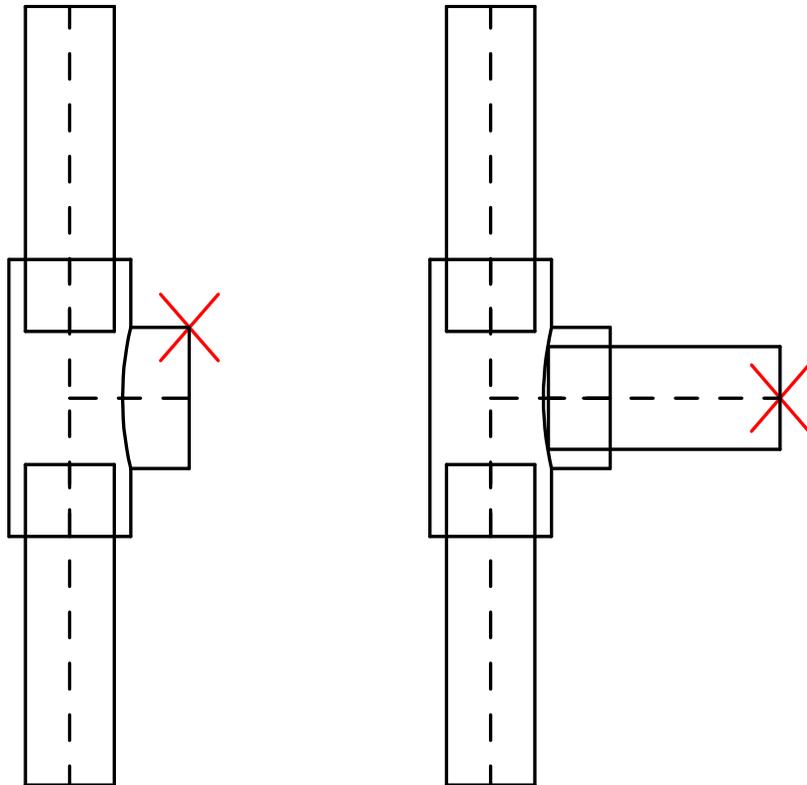


*Expandable button
in the libraries of products*



✓ Drawing strings of installations with connection to the specified object

Currently when user starts drawing a new installation string he can specify an existing object from the drawing. If this object "fit" to the newly created string then program will automatically connect the string to the indicated object and will continue drawing the installation with an appropriate angle.

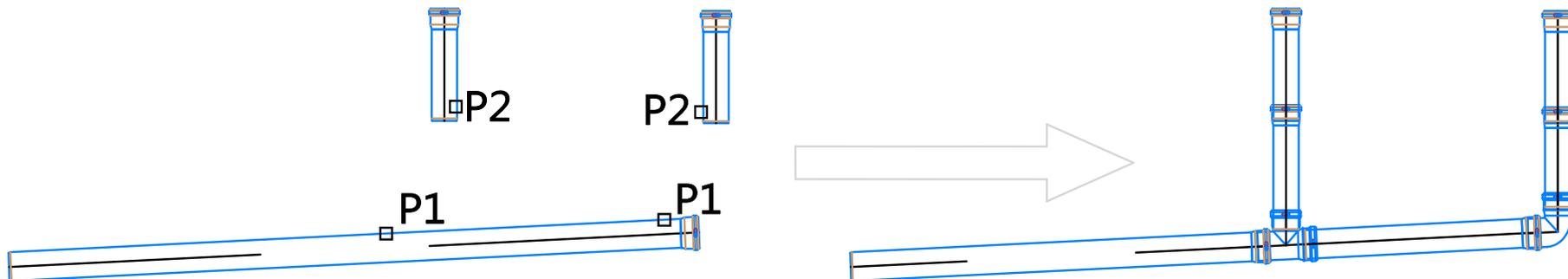
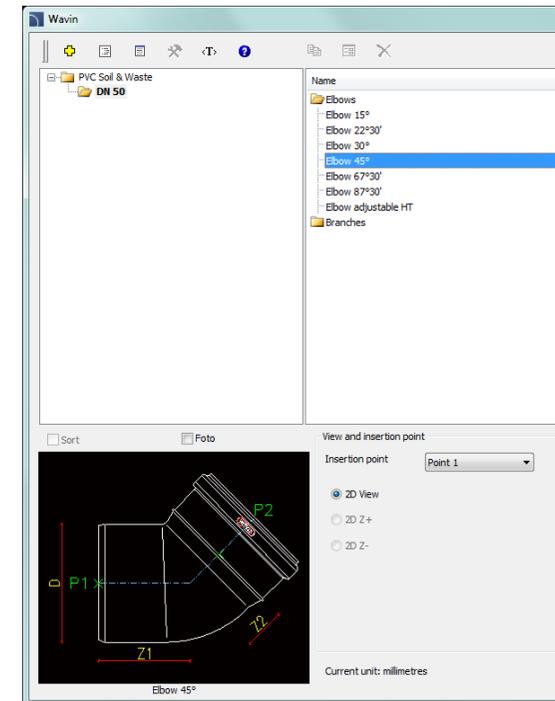


✓ Joining elements of installations from manufacturers libraries and CADprofi catalogs

In earlier versions of CADprofi it was possible to automatically connect simplified views of pipelines, ventilation ducts or cable trays. New version of the program allows for easy connection of detailed elements from manufacturers libraries or CADprofi catalogs.

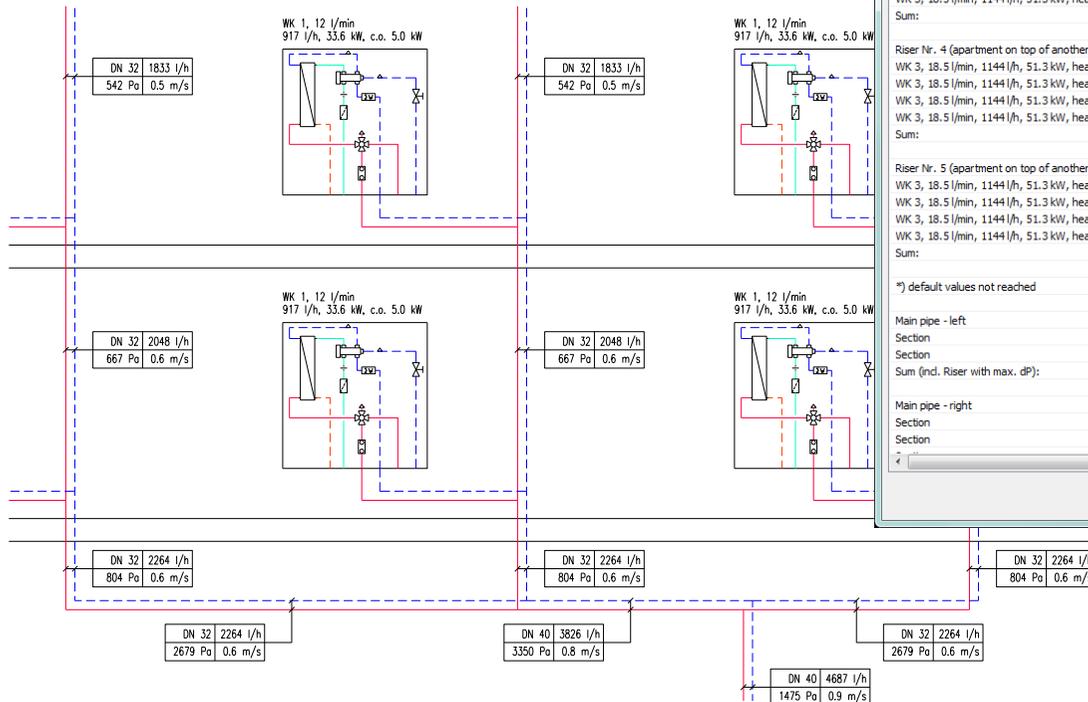
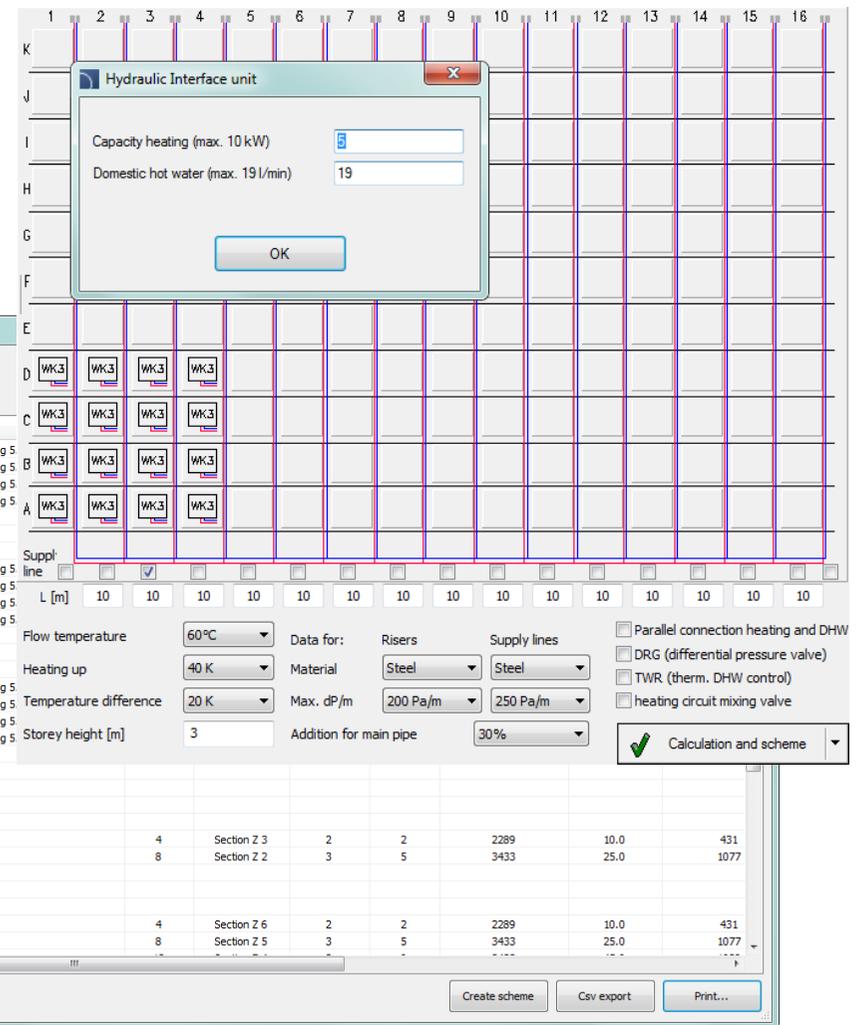
Connections can be implemented in several ways:

- During the insertion of the selected fitting to the drawing. In this case after attaching the fitting to the selected element (P1) it is possible to indicate another element (P2). If the indicated elements are "compatible" then the program will connect them.
- With the help of the "Join general elements" command. In this case program automatically selects the appropriate elbow and connects indicated elements.
- With the help of the "Join detailed elements". After indicating the first element program will display dialog window with the matching fittings. After selecting the desired fitting user must indicate element for which the connection will be made.



✓ Hydraulic calculations and automatic drawing of diagrams in KaMo/Delta

- Instant selection of receivers (hydraulic interface units) in the dialog window where user can specify up to 16 risers and 11 storeys.
- Determination of central heating power and efficiency of hot tap water for receivers.
- Determination of way of calculation and general installation parameters.
- Possibility to choose the type of pipes for risers and power cables.
- Full hydraulic calculations with specifying the pressure drop, flow and pipe diameters.
- Calculation of the power of the heating source and the power peak for the need of the hot tap water. Choice of the buffer size.
- Choice of the buffer circulation and charging pump.
- Choice of the optional mixing valve.
- Automatic drawing of installations diagrams.
- Specifications of the quantity of pipes.

The screenshot shows the software interface for hydraulic calculations. A 'Hydraulic Interface unit' dialog box is open, allowing the user to specify parameters for capacity heating (max. 10 kW) and domestic hot water (max. 19 l/min). The 'Data printing from current drawing' window is also visible, displaying a table of data for risers and supply lines.

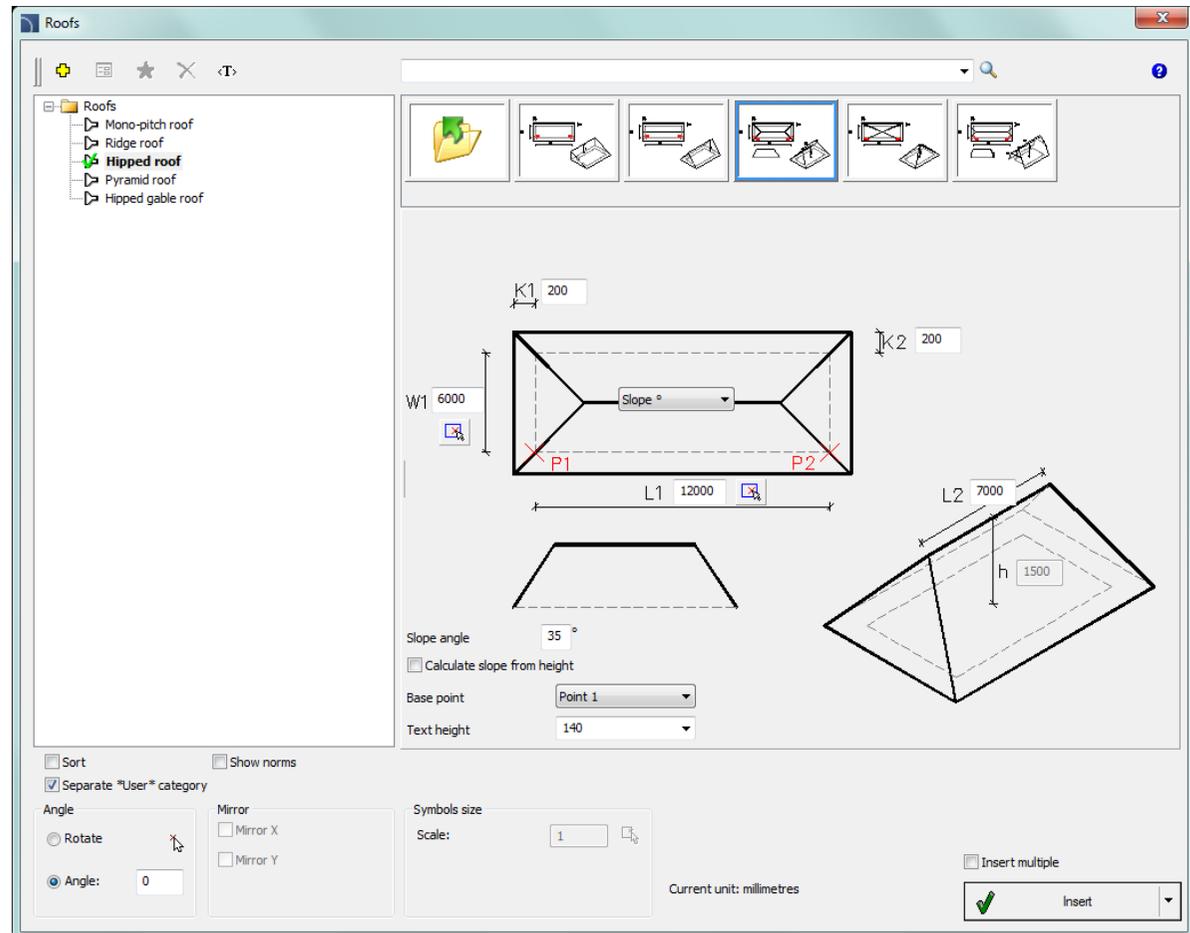
Section	4	Section 2 3	2	2	2289	10.0	431
Section	8	Section 2 2	3	5	3433	25.0	1077
Sum (incl. Riser with max. dP):							

The interface also includes a 'Data for:' section with options for risers and supply lines, and a 'Calculation and scheme' button at the bottom right.

Hydraulic calculations and automatic drawing of installations is available in the **KaMo** and **Delta Systemtechnik** libraries.

✓ CADprofi Architectural – new command *Roofs*

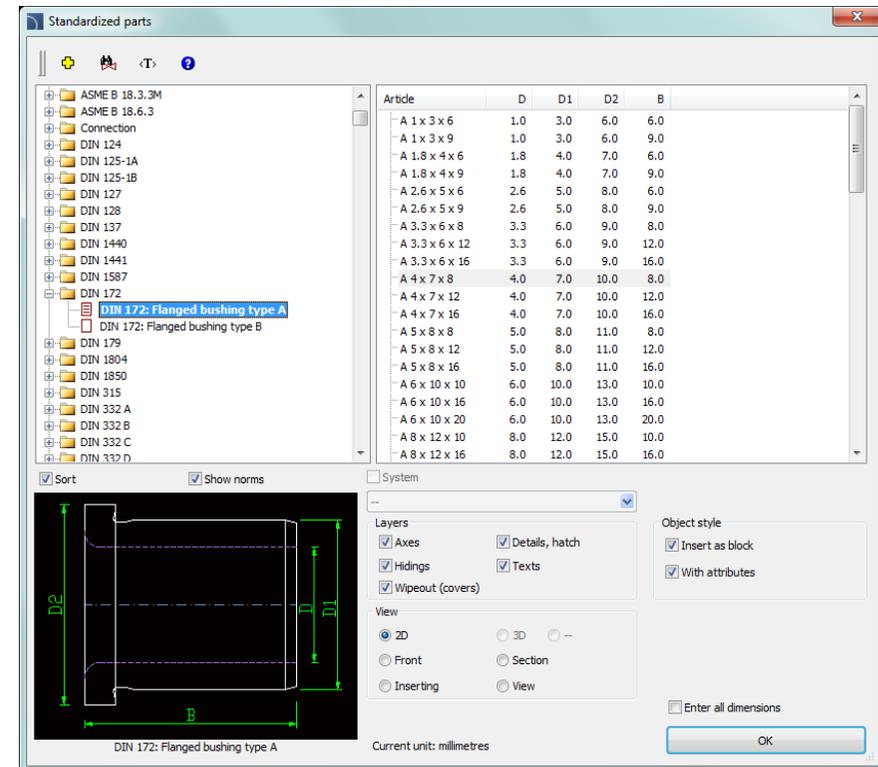
The *Roofs* command allows to insert roofs views with the most commonly used shapes. For each roof the tracts surface is calculated, as well as, roof slope or height.



✓ CADprofi Mechanical – additional PN, EN, DIN, ISO and GOST standards

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

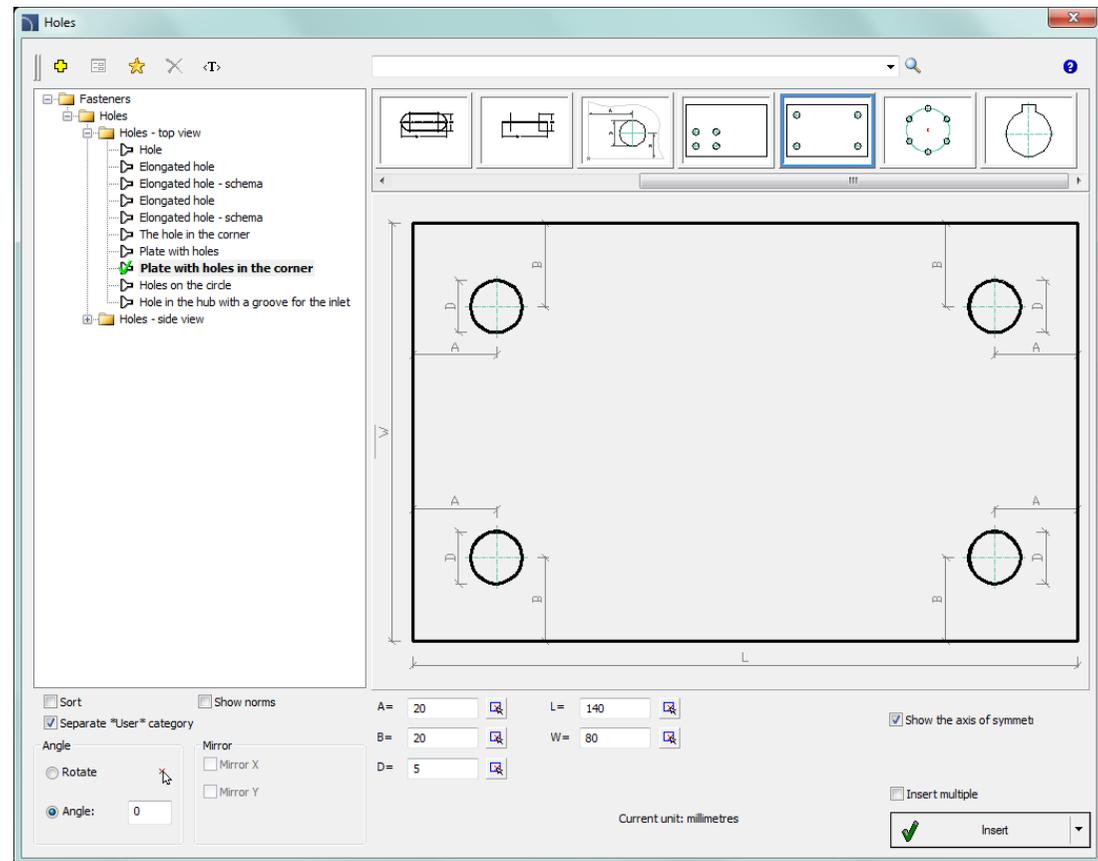
- Slotted set screws with flat point
- Slotted set screws with cup point
- Steel round head rivets
- Centering hole type A, B, C, R, D
- Seal type O (O-rings)
- Radial Oil Seal type A, AS
- Retaining ring type A, B
- Flanged and cylindrical bushing
- Rolling bearing - Locknuts
- Slotted Round Nut
- Parts ending with outer thread



✓ CADprofi Mechanical – extended content of the *Holes* command

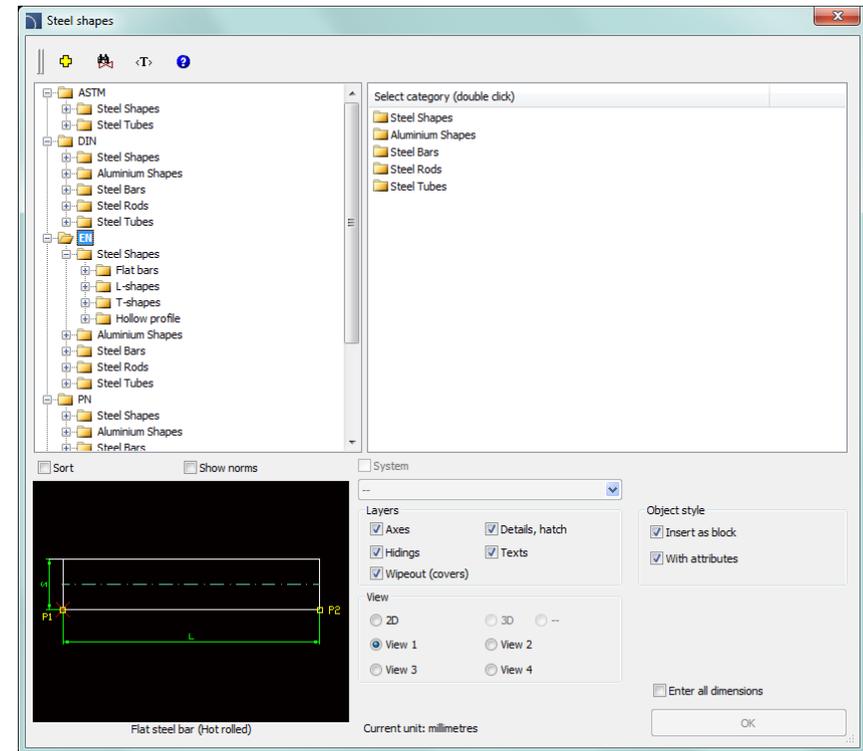
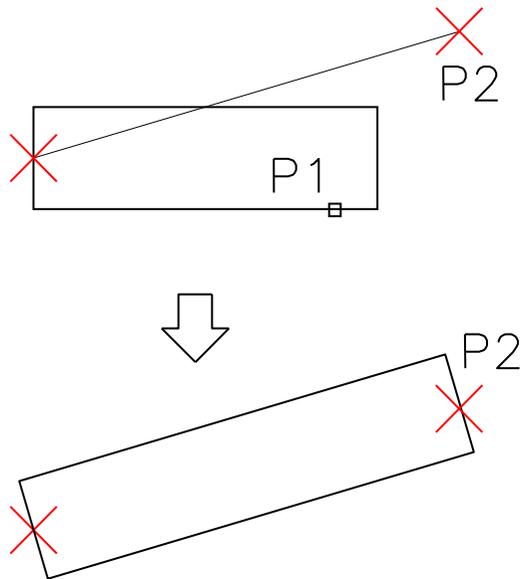
Additional elements have been added to the command:

- The hole in the corner.
- Plate with holes.
- Plate with holes in the corner.
- Holes in the circle.
- Holes in the hub with a groove for the inlet.



✓ CADprofi Mechanical - dynamic extension of steel profiles

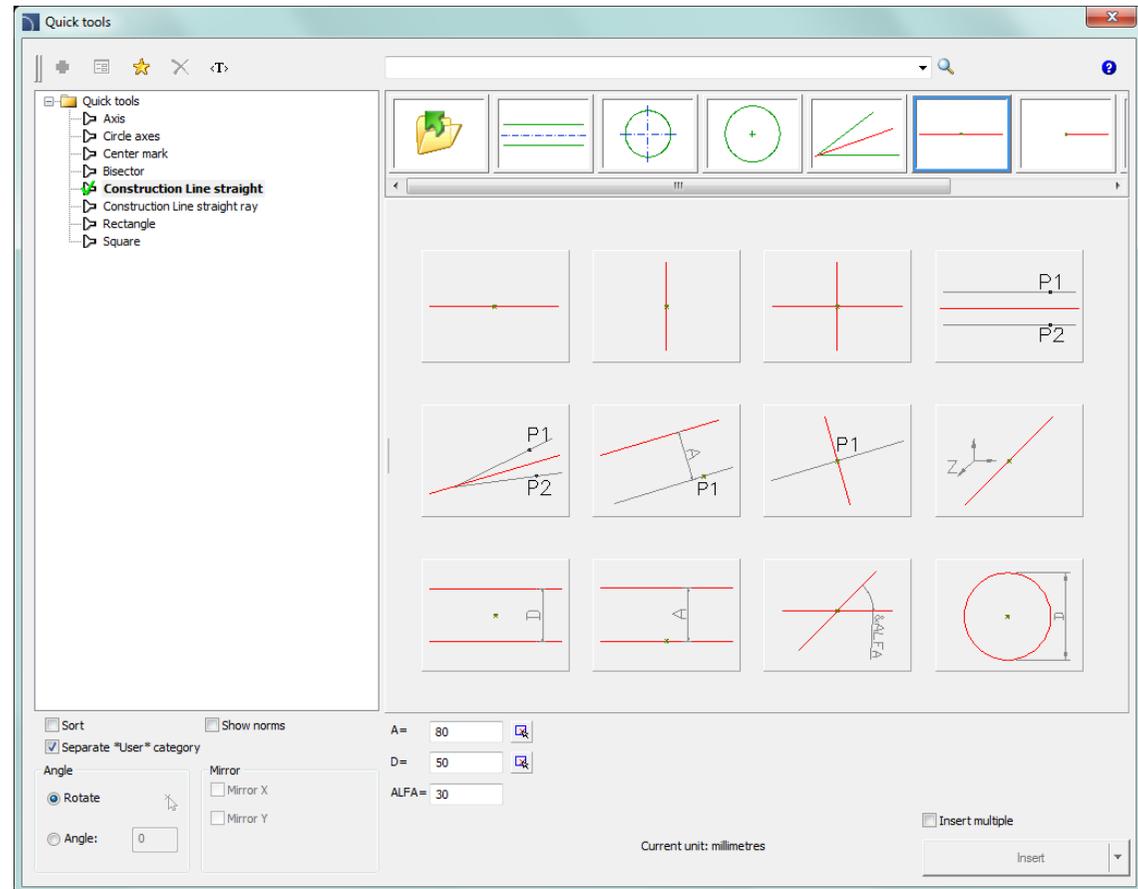
In the new program version it is possible to dynamically edit steel profiles with the help of the *Edit symbols* command. After running the command and selecting the steel profile (point 1) it is possible to dynamically change the position and the length of the steel profiles (point 2). In the selected CAD programs it is possible to visually track the current location of the object (ie. "visualize" the edition process).



✓ Extended content of the *Quick tools* command

The *Quick tools* command has been extended with the opportunity to insert construction lines (straight and rays) to the drawing.

Additionally, a possibility to quickly insert into the drawing squares and rectangles (with a convenient determination of dimensions and the insertion point) has been added to the command.

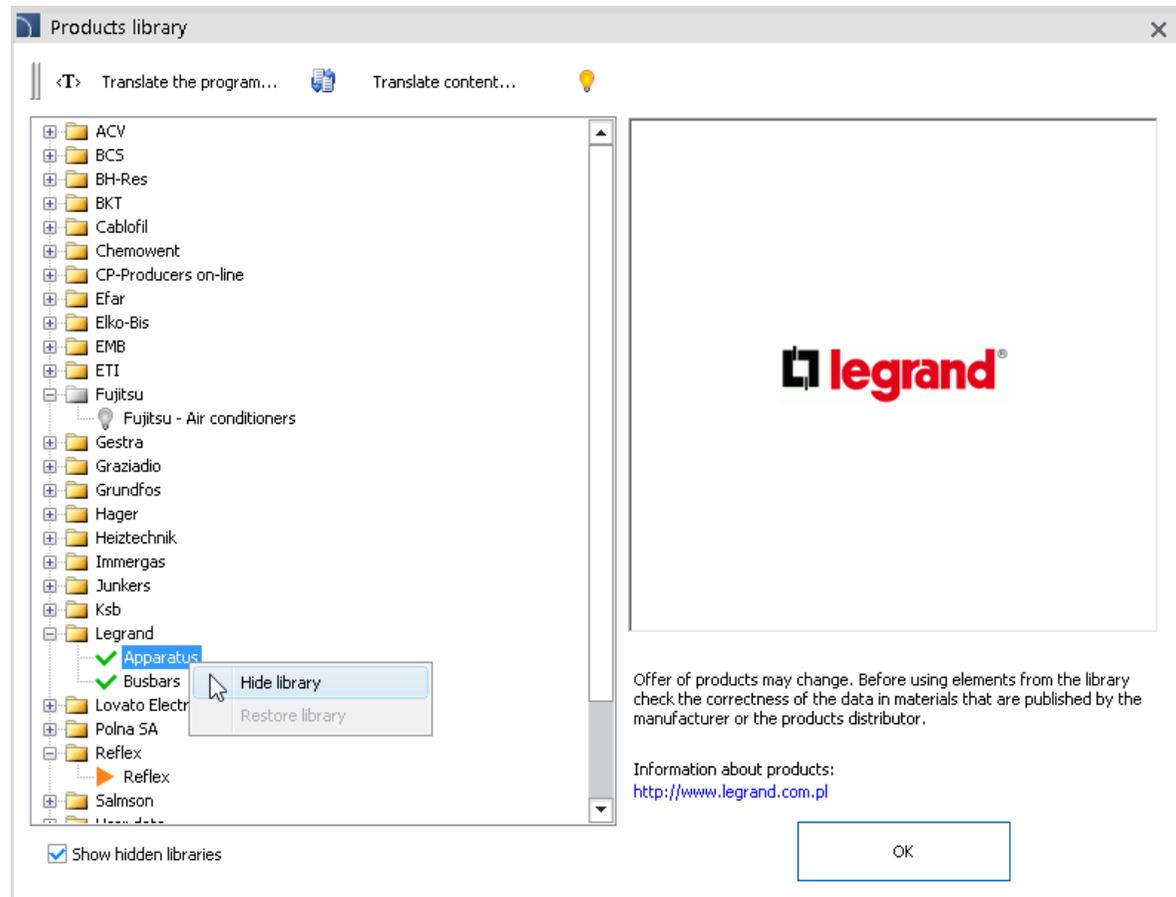


✓ Management of the library of products

New libraries products that are prepared with manufacturers of various devices from many industries are constantly added to the program. In new version of the program user can hide libraries, which he is not using in his daily work. Thanks to this the library selection window is more transparent and suited for the user needs.

All libraries can be shown after selecting the *Display hidden libraries* option. In the dialog window user is informed for which libraries the updates are available, as well as which libraries can be downloaded from the CADprofi server. (e.g. additional hidden libraries that were published after the installation of the program).

Hidden libraries are not included in the online updates, thanks to which the amount of data needed to update the program.

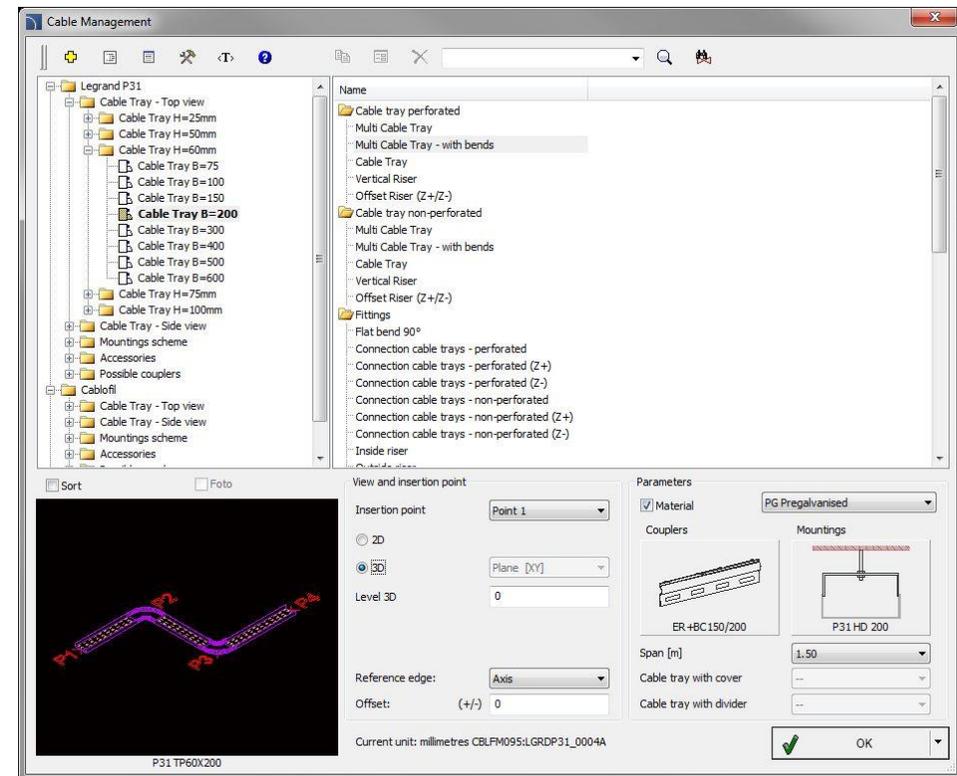
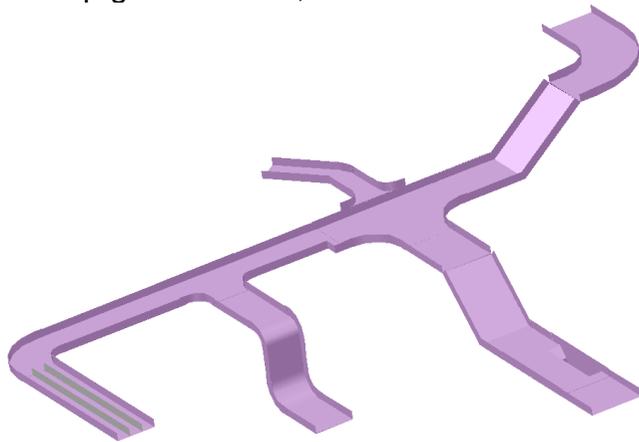


✓ New library of 2D and 3D Legrand and Cablofil cable trays

New library of Legrand Cable Management contains a system of Cablofil mesh trays and Legrand P31 sheet metal trays. Library contains:

- Mesh cable trays.
- Sheet metal trays with and without perforation.
- Elbows, tees, cross pieces, branch pieces, reductions etc.
- Fasteners, mountings, covers, dividers, accessories.
- Product are available in 2D and 3D views.

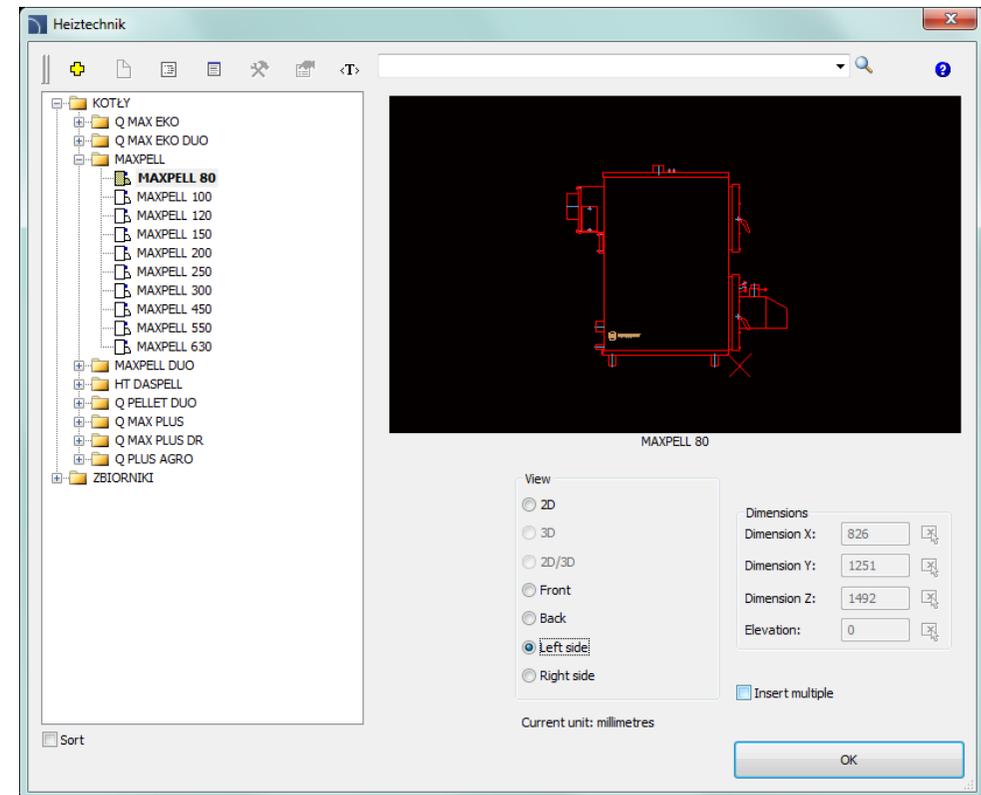
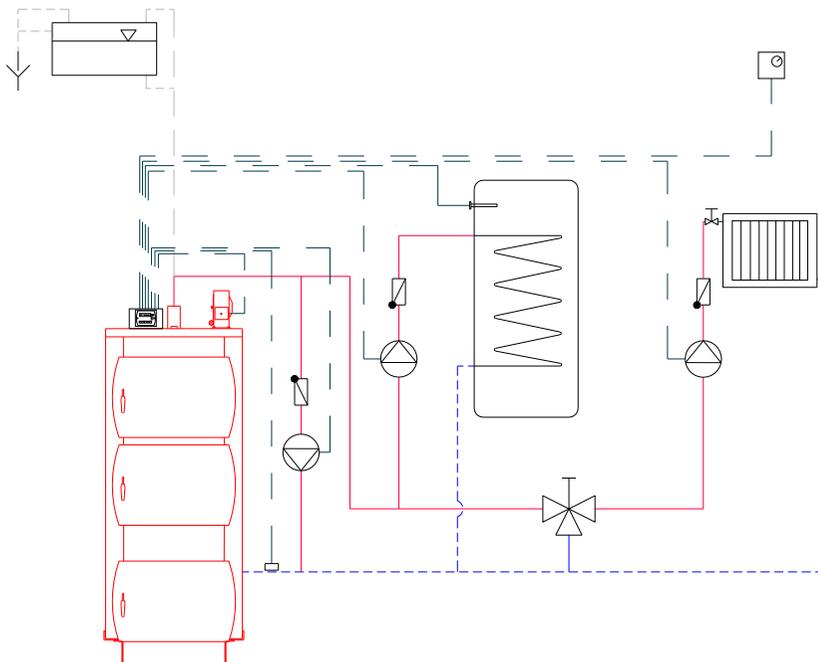
Program allows for easy and quick design of cable tray routes in various technologies: continuous galvanisation, hot dip galvanisation, electrozinc or stainless steel.



✓ New library of Heiztechnik products

New library of *Heiztechnik* contains heating boilers used for solid fuel combustion. Boilers for wood, biomass and pellets, as well as, tanks for pellets are available.

Library also contains ready-made boiler schemes with selection depending on the used controller.

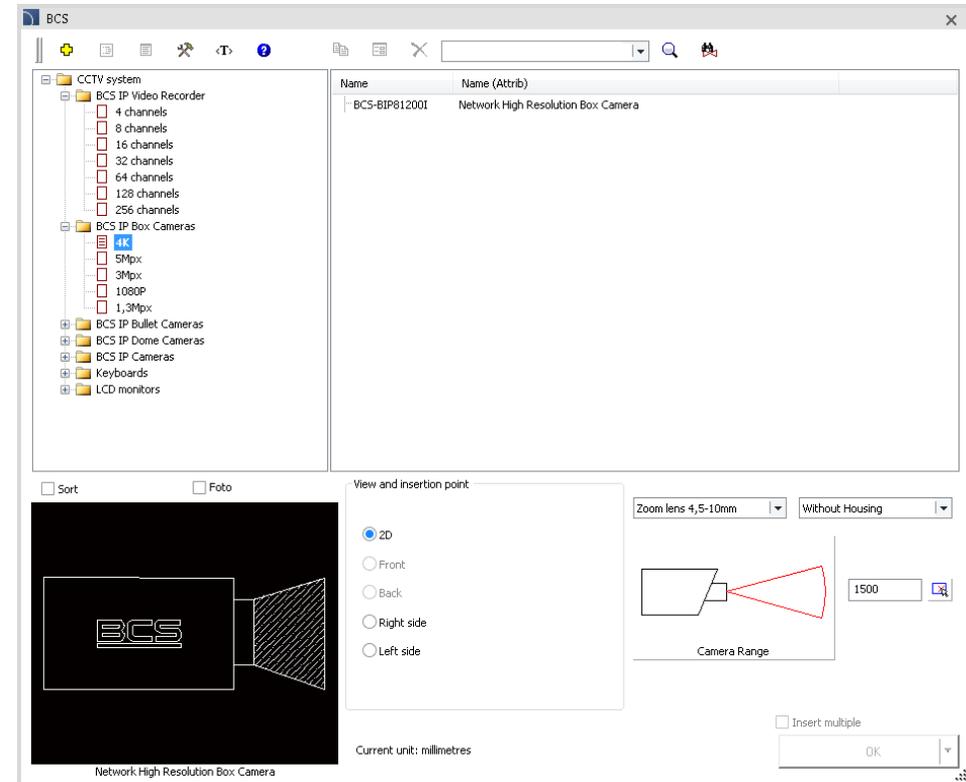
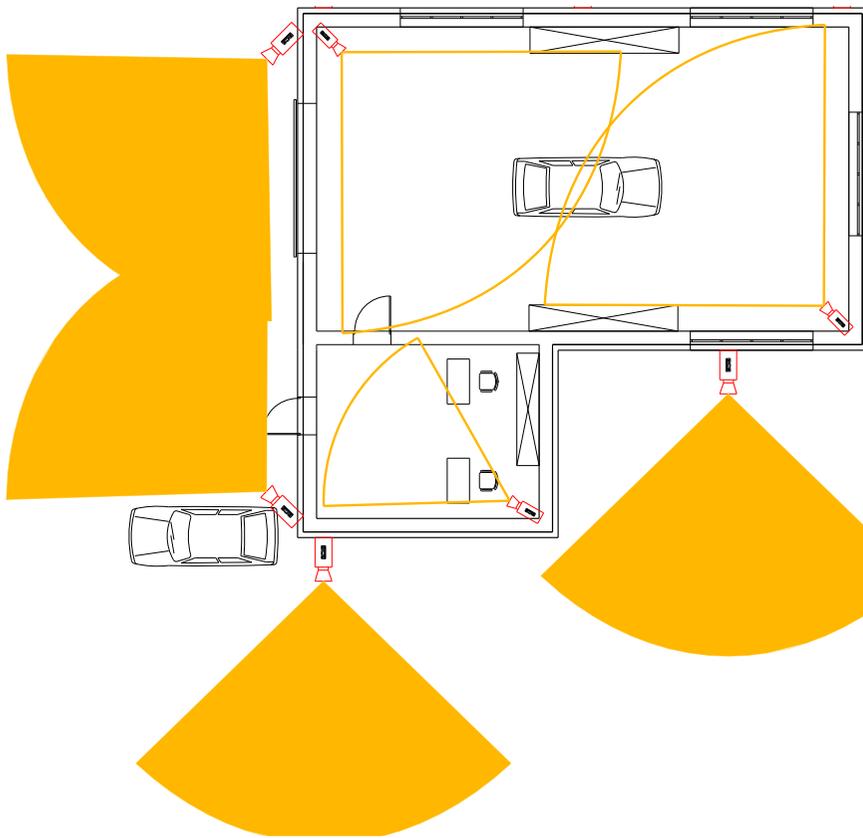




CADprofi

✓ New library of BCS products

New library of *BCS* helps in designing of IP video monitoring installations.



BCS[®]

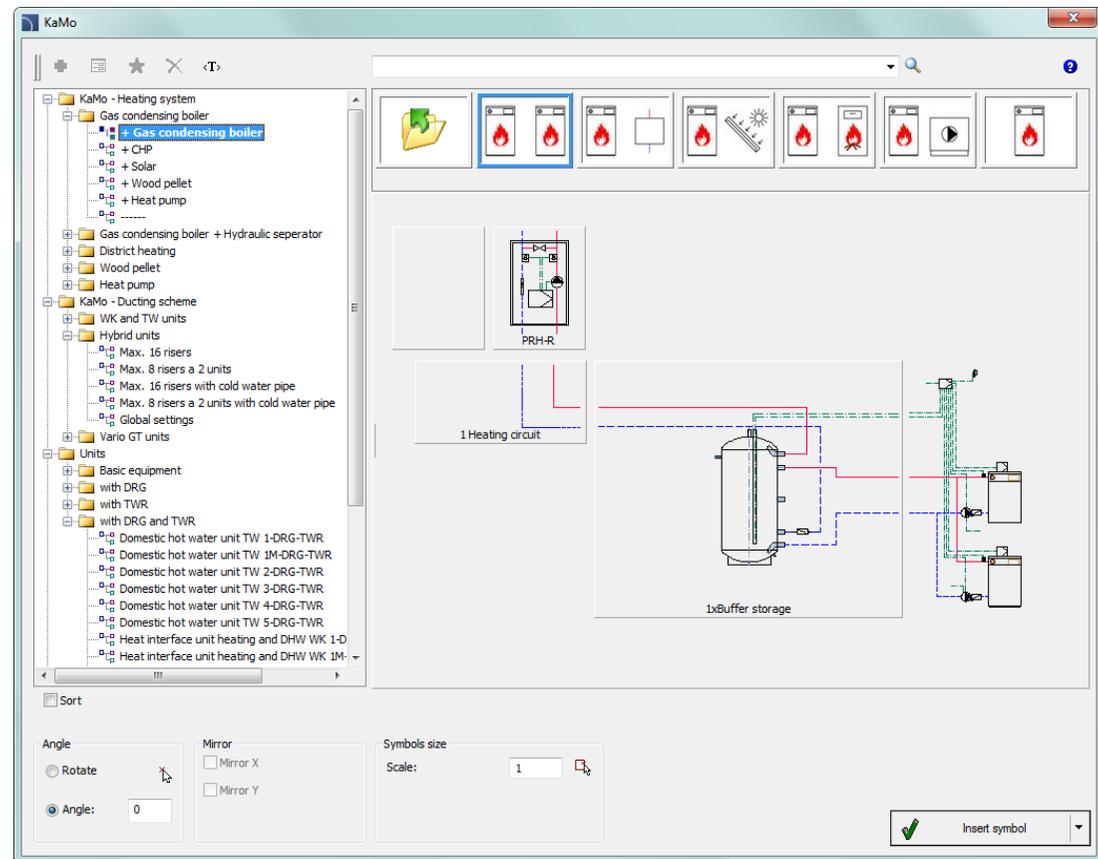


CADprofi

✓ New libraries of KaMo and Delta Systemtechnik

Kamo and Delta Systemtechnik libraries allow for complex design of installations with usage of housing stations. Program performs hydraulic calculations and automatically draws installations.

Library also contains boilers and heat centers diagrams with the ability of choosing the heat buffers that are linked in series or in a Tichelmann system (reverse-return system).





CADprofi

- ✓ Update of manufacturers' libraries:





CADprofi

✓ Windows 10

Current CADprofi version has been tested in the latest Windows 10 operating system.

Users who plan to move to the latest Microsoft system can do it without any fear of working with CADprofi.

Tested on



Windows 10



CADprofi

✓ Adjustment to many base CAD programs

CADprofi 12 has been adjusted to work with latest CAD programs, including: AutoCAD 2016, ARES Commander Edition 2015, BricsCAD V16, progeCAD 2016, ZWCAD Classic, CADMATE.

CADprofi 12 currently works with many base CAD programs including: AutoCAD (since the 2000 version), BricsCAD, GstarCAD, IntelliCAD, progeCAD, ZWCAD, ARES Commander Edition and others.

