CADprofi 11.12

CADprofi

✓ NEW!!! 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.

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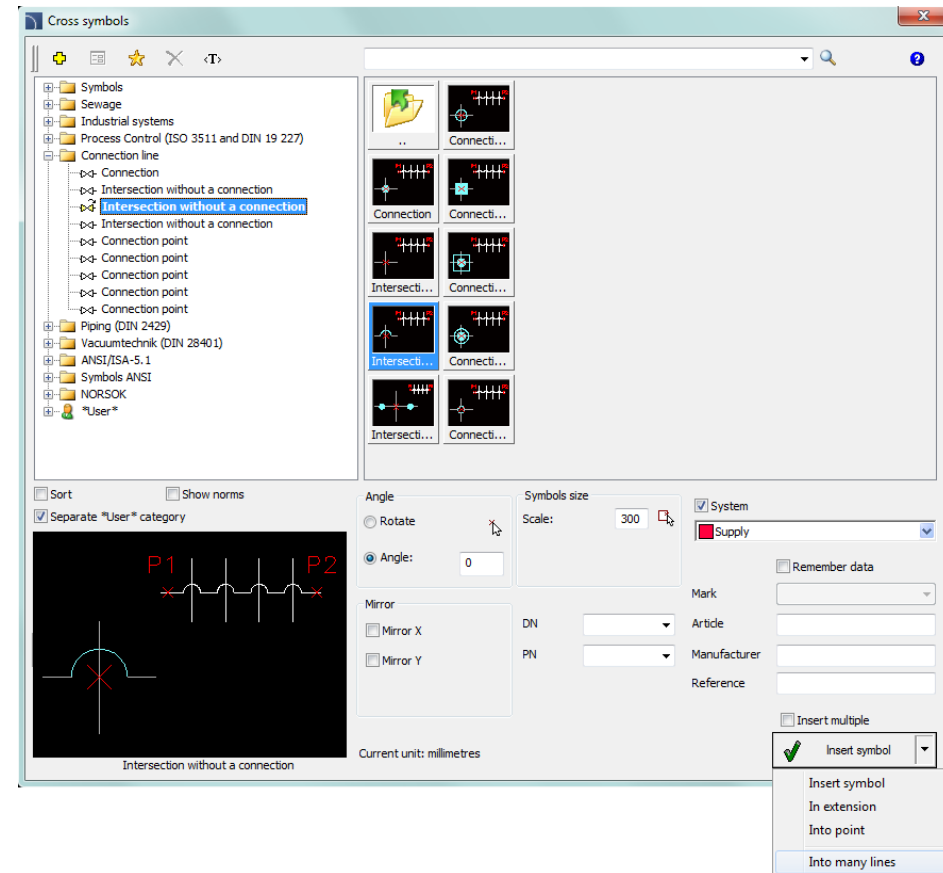
CADprofi

✓ CADprofi HVAC & Piping – extension of the library of symbols

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 *Cross symbols* library in the *Connection line* category. In case of selecting the *Into many lines* option it is possible to quickly edit multiple intersecting lines.
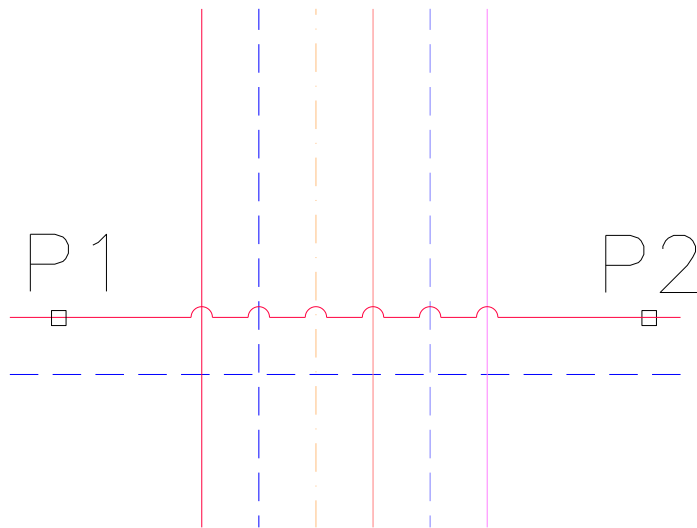
Additional symbols that are used for central heating installations have been also added to the program.

CADprofi

✓ **Joining elements of installations from manufacturers libraries and CADprofi catalogs**

In earlier versions of CADprofi it was possible to automatically connect elements that were inserted with the help of the *2D Cables, Pipes or Ducts* commands. New version also allows to easily connect various elements from manufacturers libraries or general CADprofi catalogs. It is possible to connect electrical cable trays, ventilation ducts, sewage systems etc.

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 2D Join pipes/ducts command. In this case program automatically selects the appropriate elbow and connects indicated elements.
- With the help of the "Legrand - Couple cable trays". 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.

CADprofi
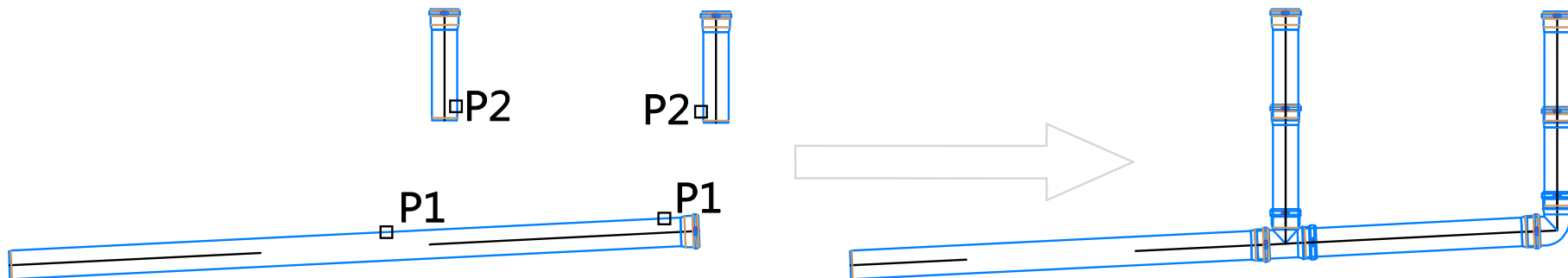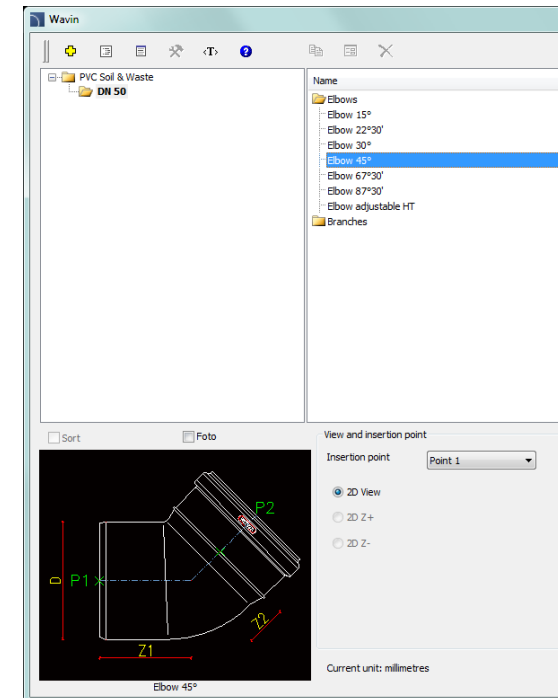
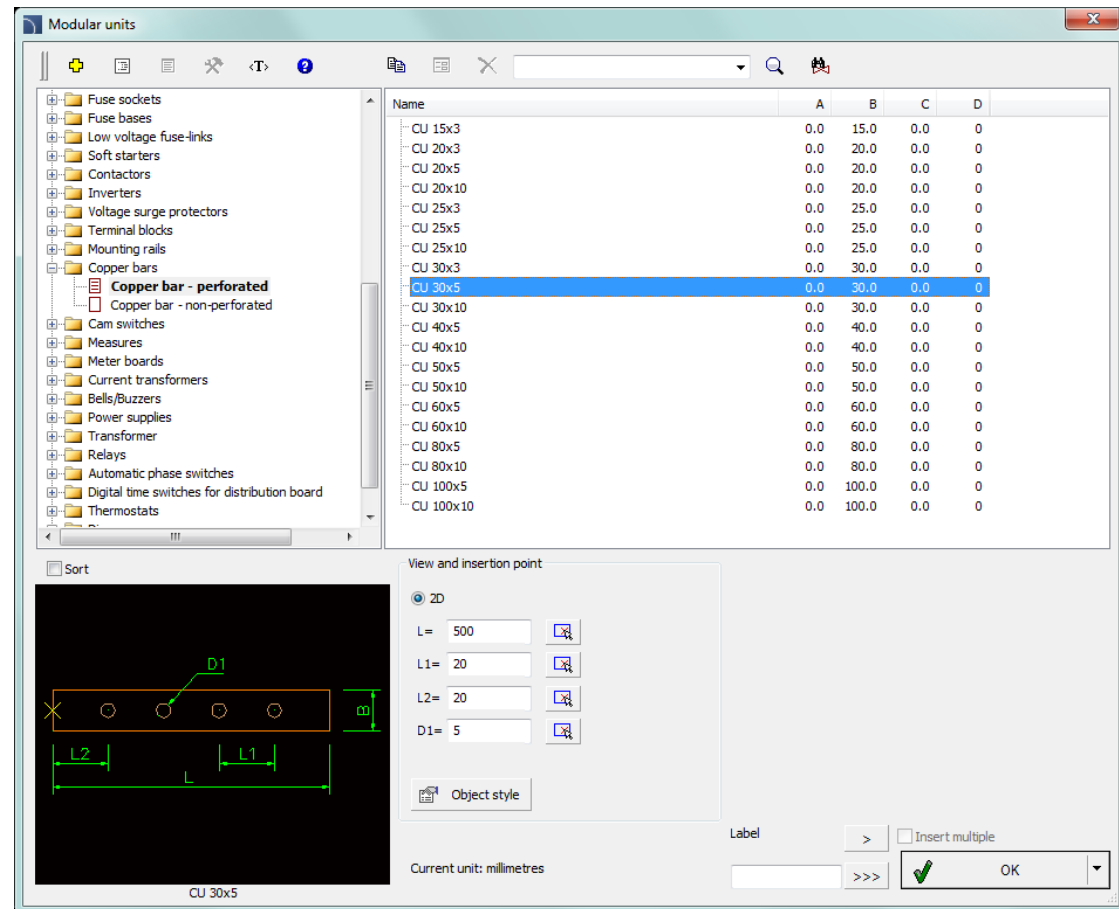## ✔ Drawing installation sequences along the polyline

New program version allows to quickly draw installations sequences along the selected polylines. This option is very useful, e.g. in the case of creating detailed technical projects on the basis of initial drawn "single-line" project with the help of polyline.
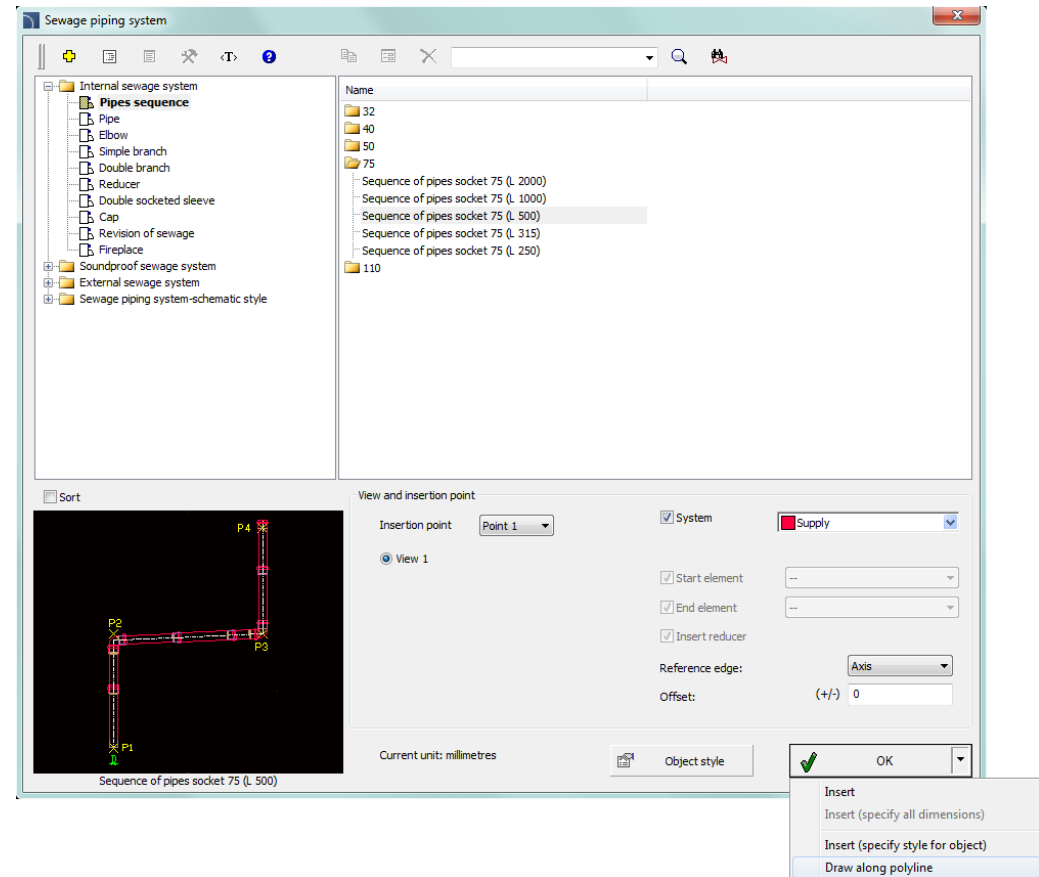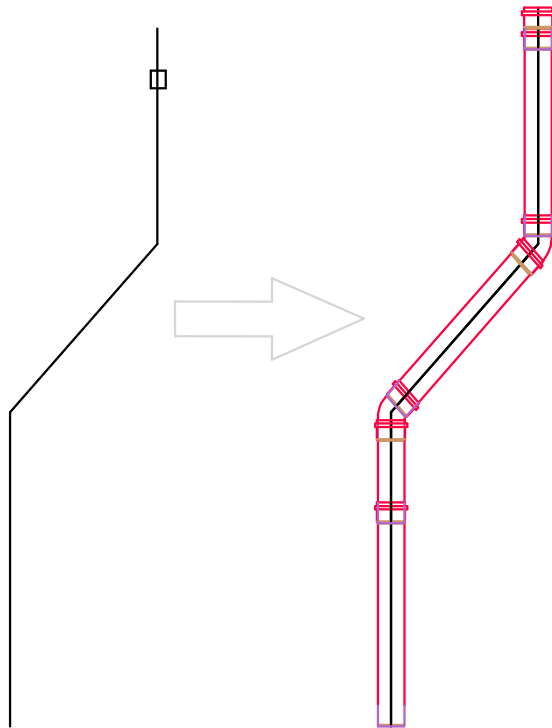
CADprofi

✓ 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.
- Telecomunication parallel joint.

CADprofi

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
- Flanged and cylindrical bushing
- Rolling bearing - Locknuts
- Slotted Round Nut
- Parts ending with outer thread

CADprofi
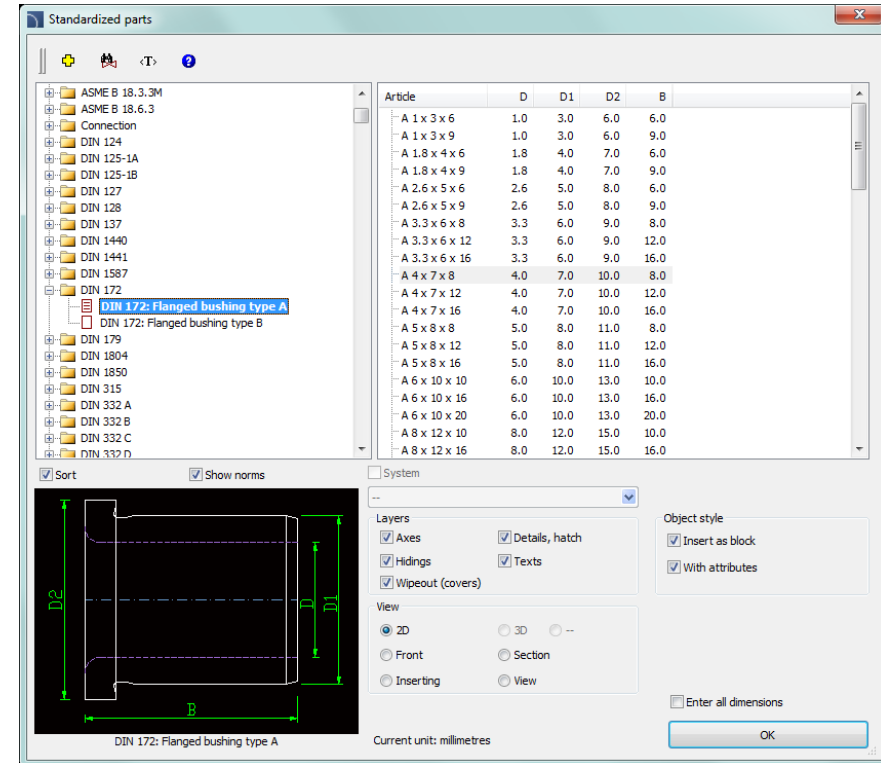
✔ Dynamic extension of steel profiles

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).
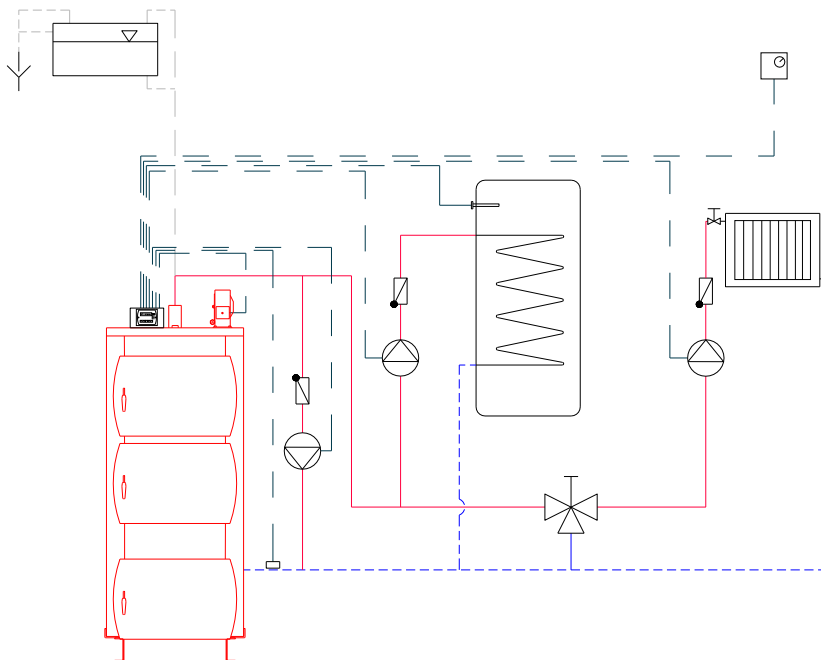
CADprofi
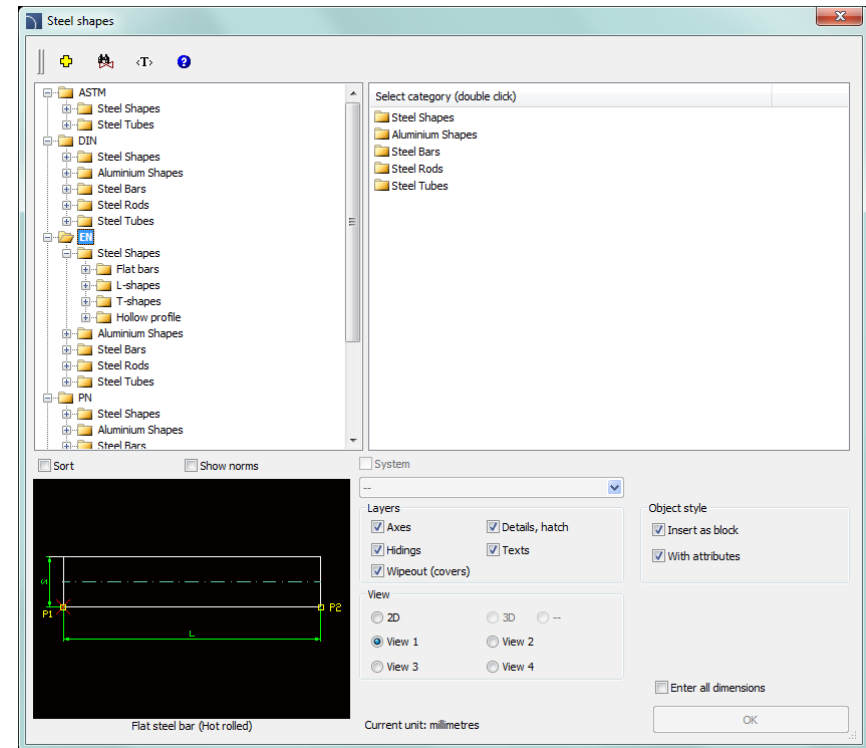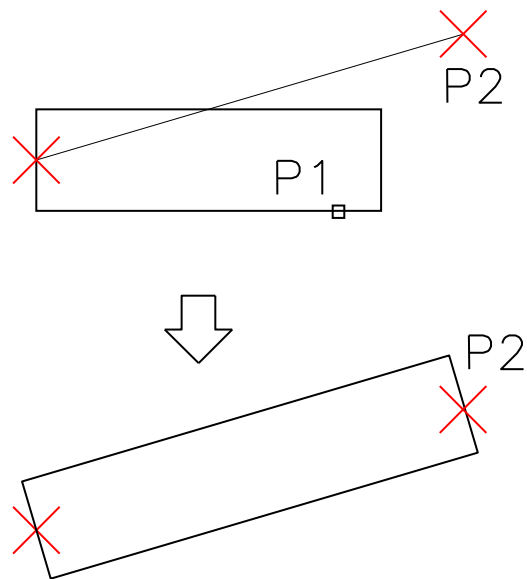
✓ New library of Heiztechnik products

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.

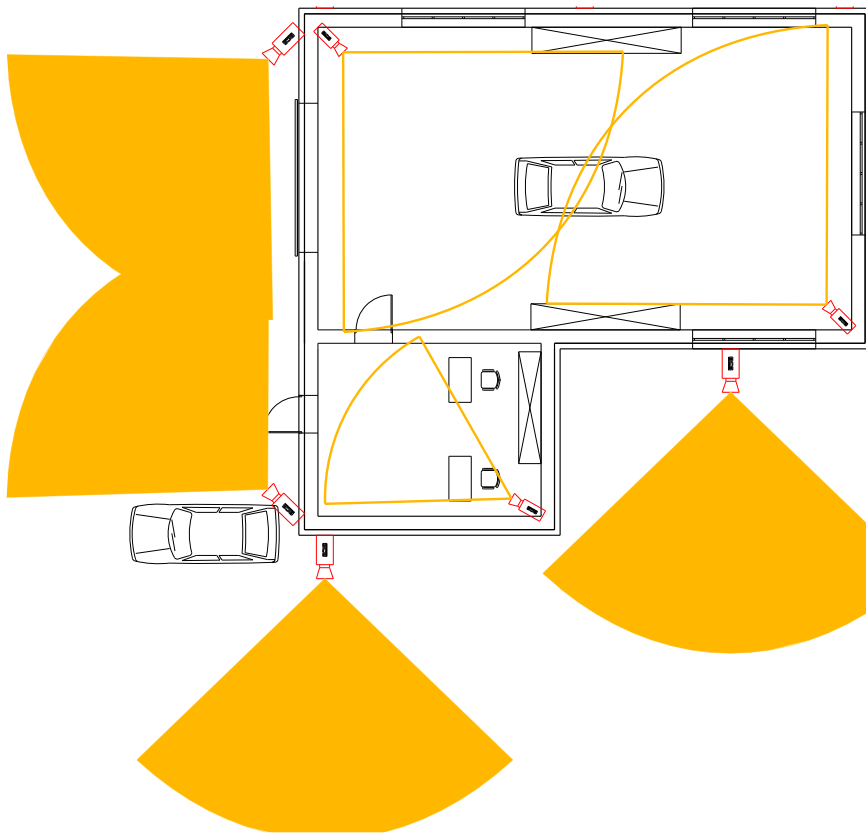Library also contains ready-made boiler schemes with selection depending on the used controller.
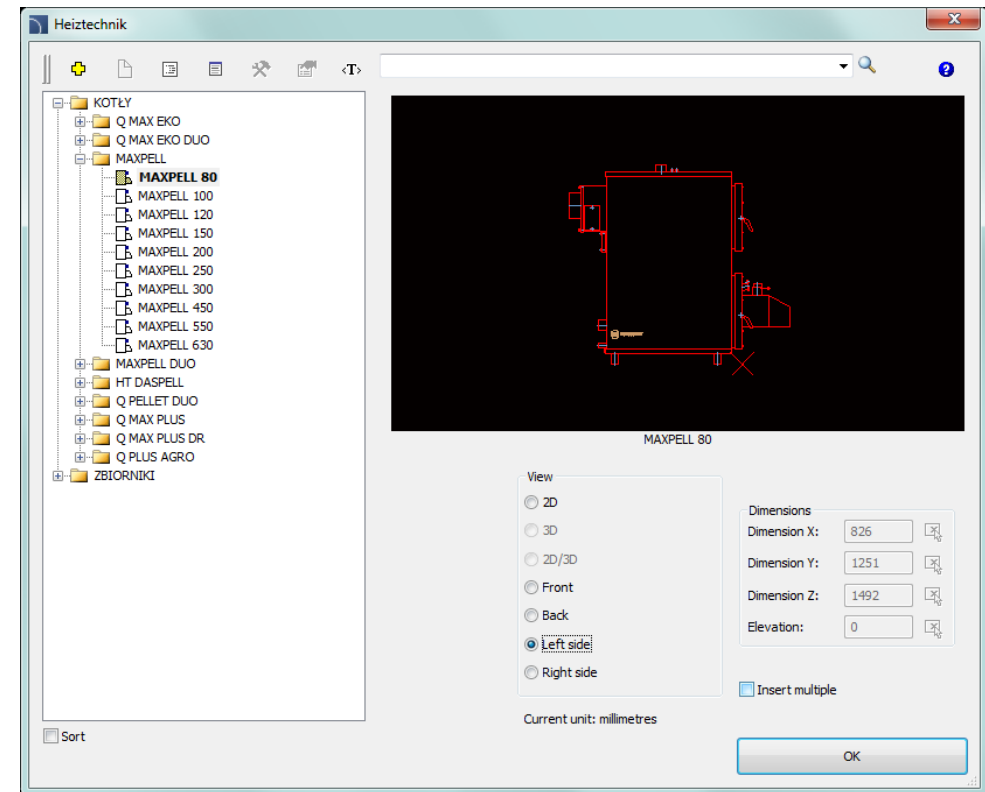
CADprofi

✓ New library of BCS products

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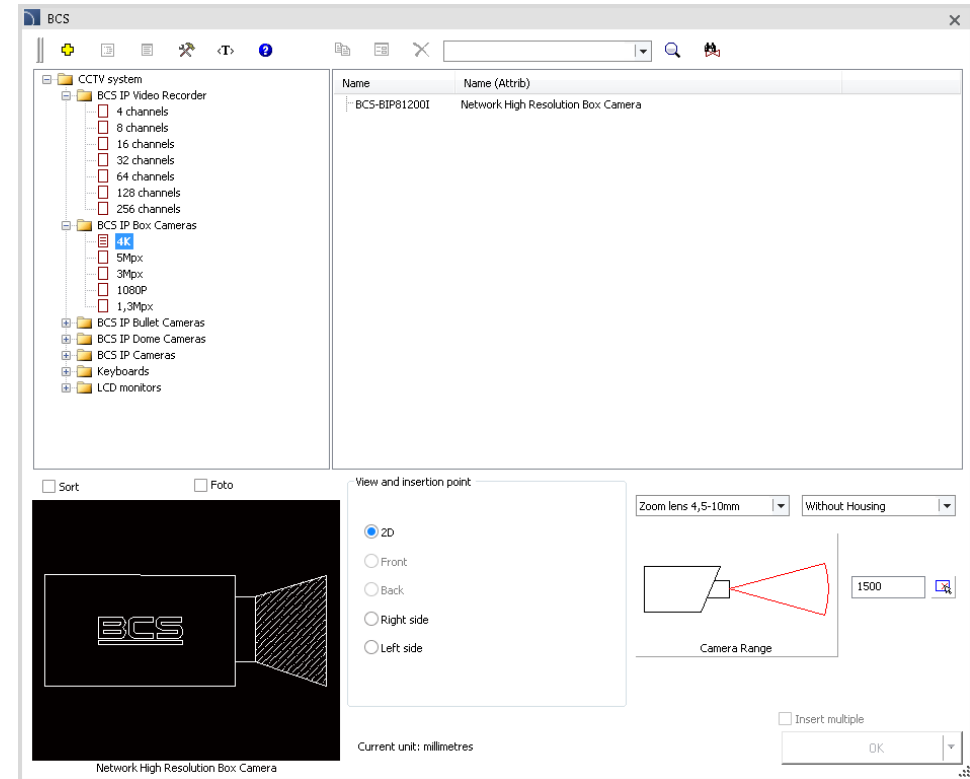
CADprofi

✓ 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).
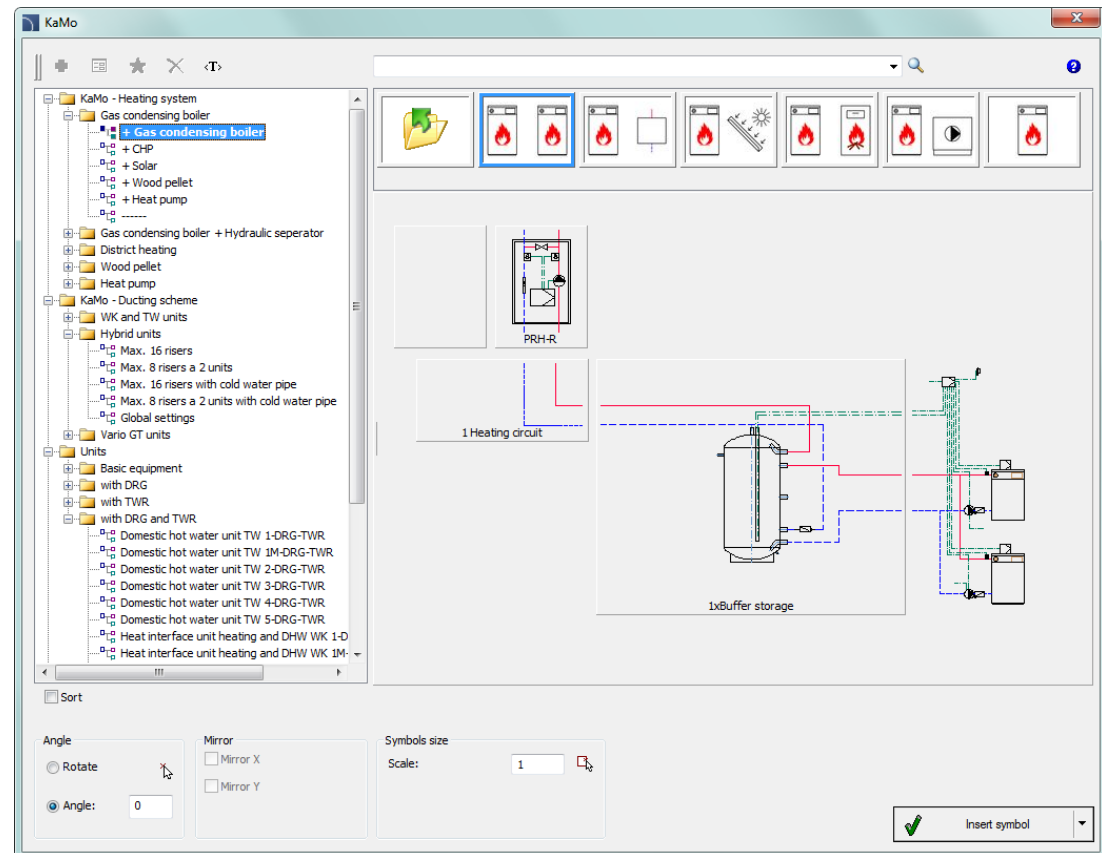
CADprofi

✓ **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 11.12 has been adjusted to work with latest CAD programs, including: ZWCAD Classic and BricsCAD V16.

CADprofi 11 currently works with many base CAD programs including: AutoCAD (since the 2000 version), BricsCAD, GstarCAD, IntelliCAD, progeCAD, ZWCAD, ARES Commander Edition and others.

CADprofi 11.07/11.09

CADprofi

Table of contents – list of new features in CADprofi 11.07:

CADprofi

## ✓ 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.
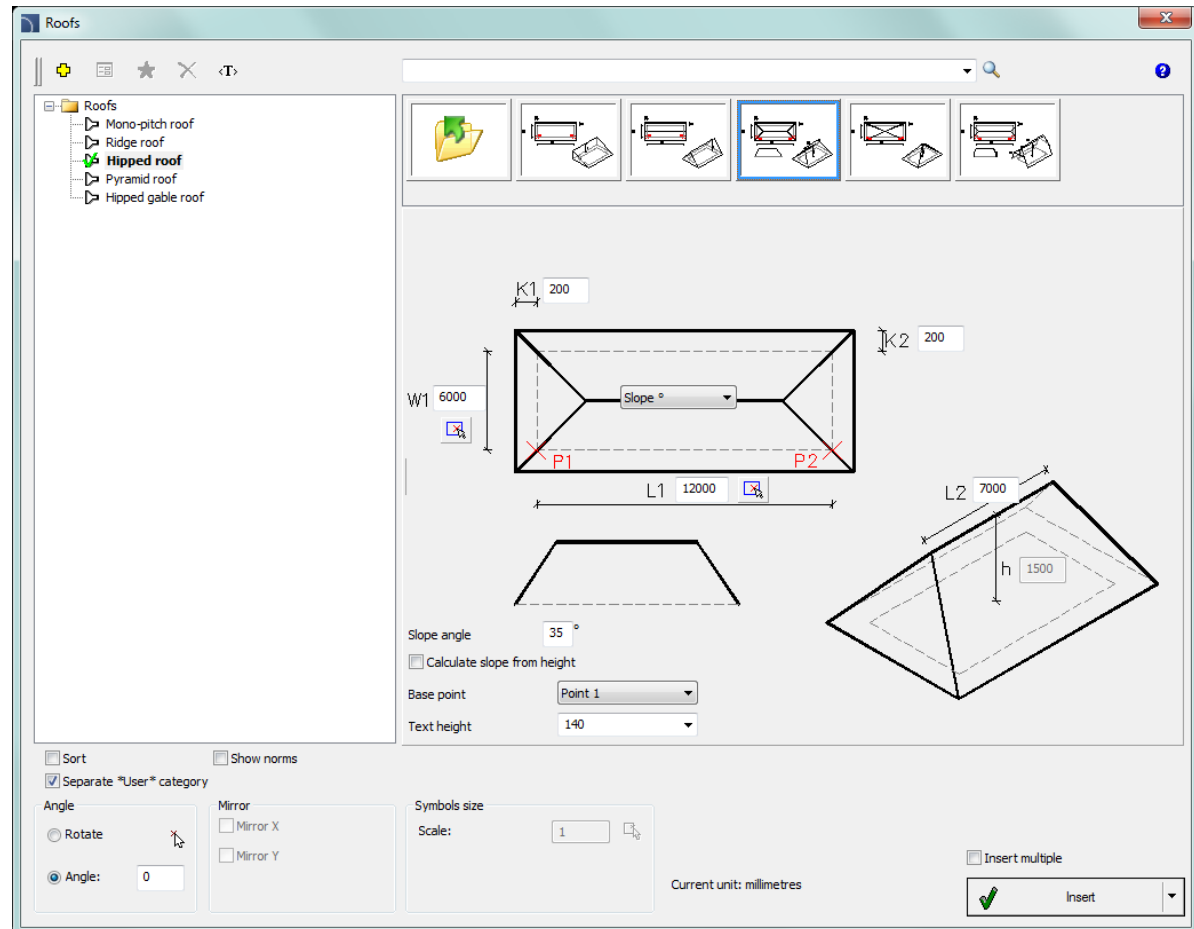
CADprofi

✔ 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.
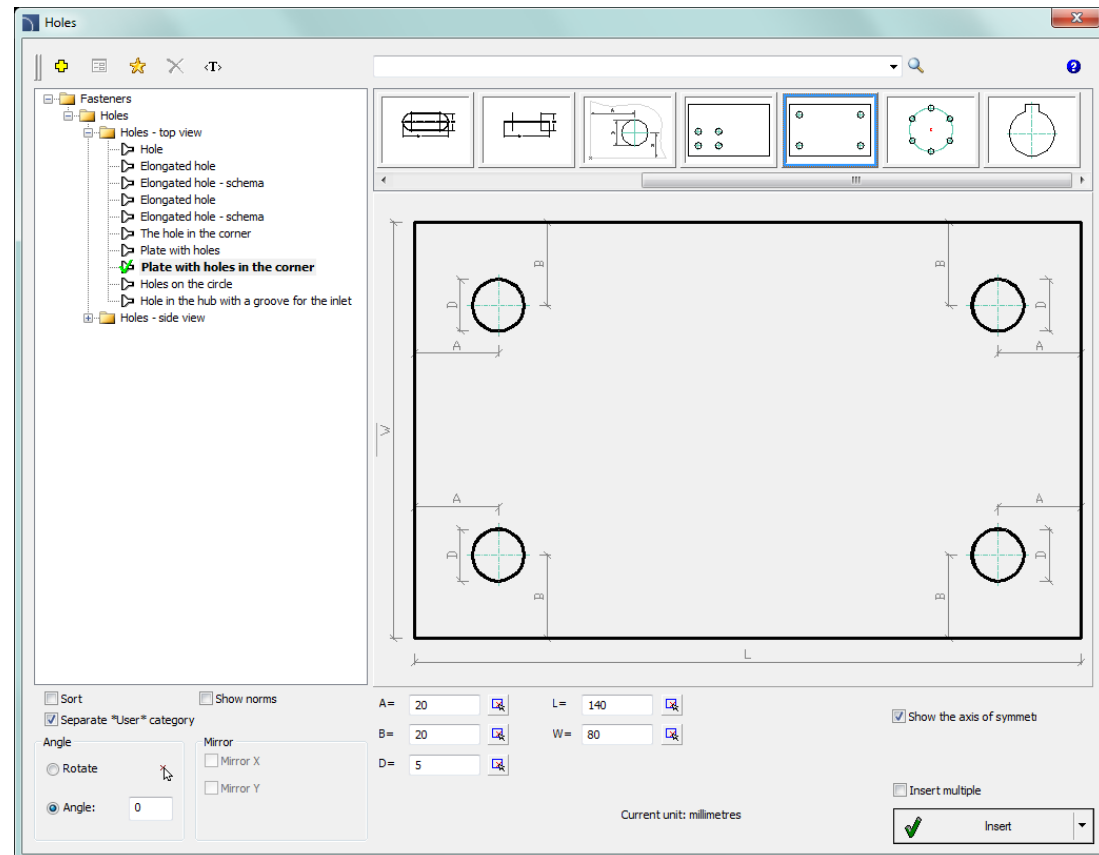
CADprofi

✓ CADprofi Mechanical – additional standards

Additional standards have been added to the program:

- DIN 705 A – Retaining ring type A.
- DIN 705 B – Retaining ring type B.
- PN 85101 – Adjusting rings.
- DIN 332 – Centering hole type D.
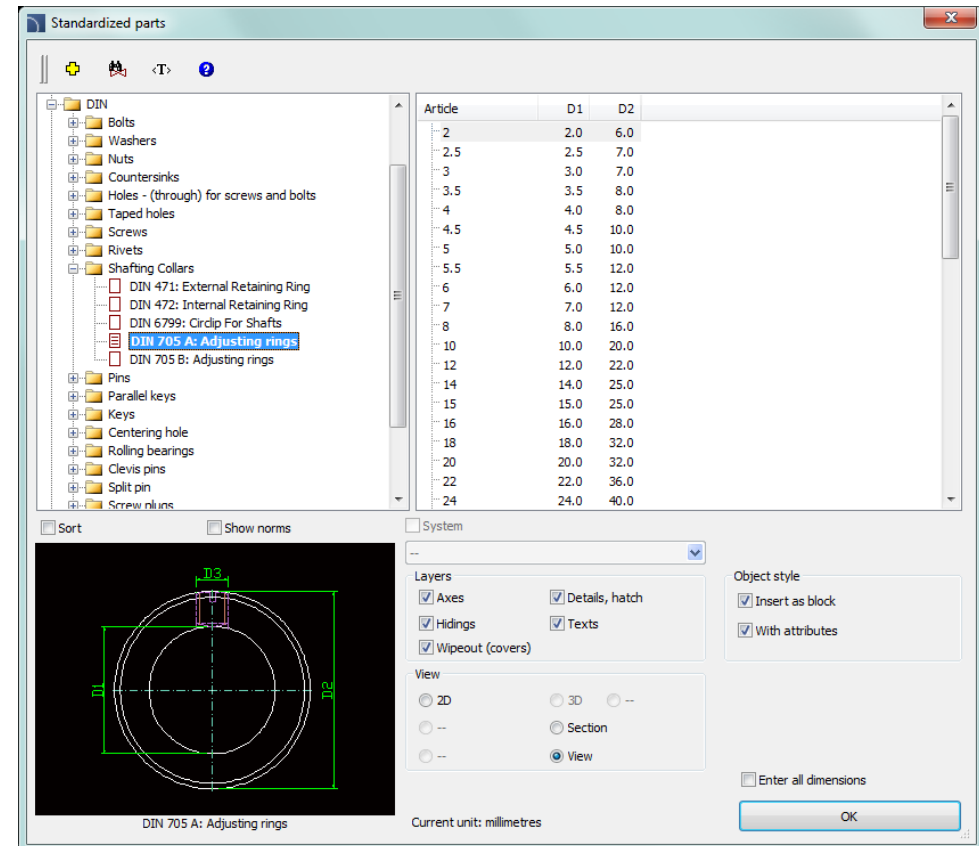
CADprofi

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

A *Sewage piping system* 🔧, which allows for convenient drawing of PCV 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 precise 2D views and in different schematic views.
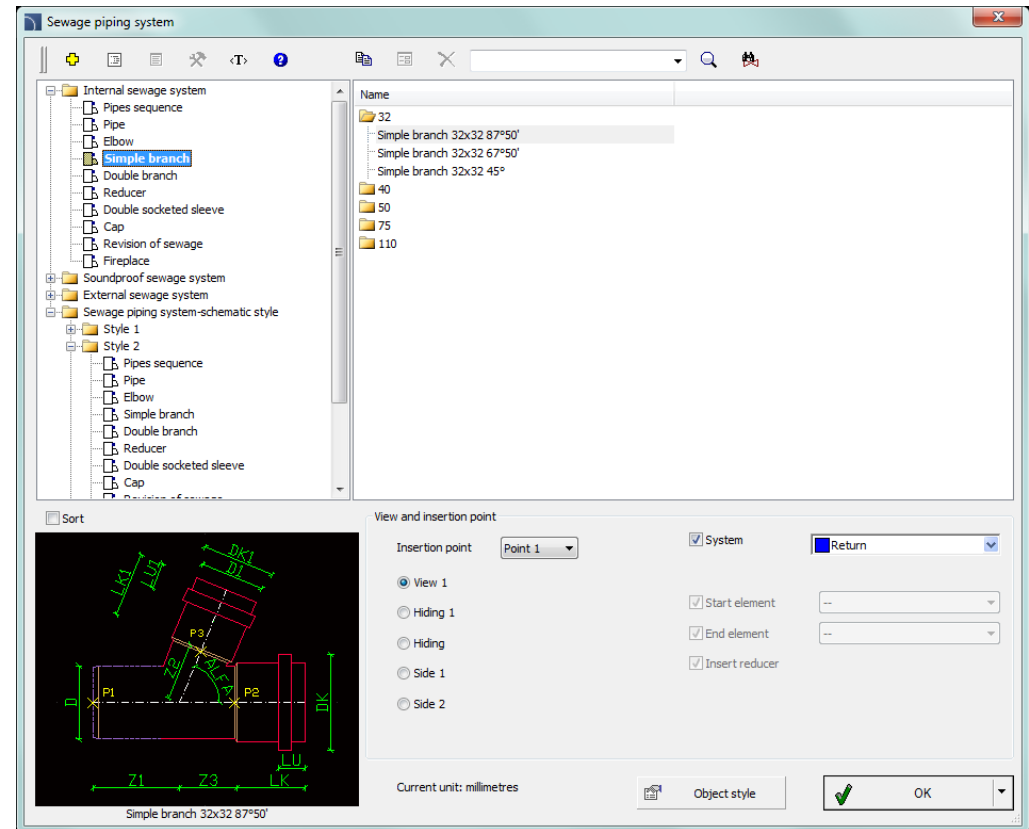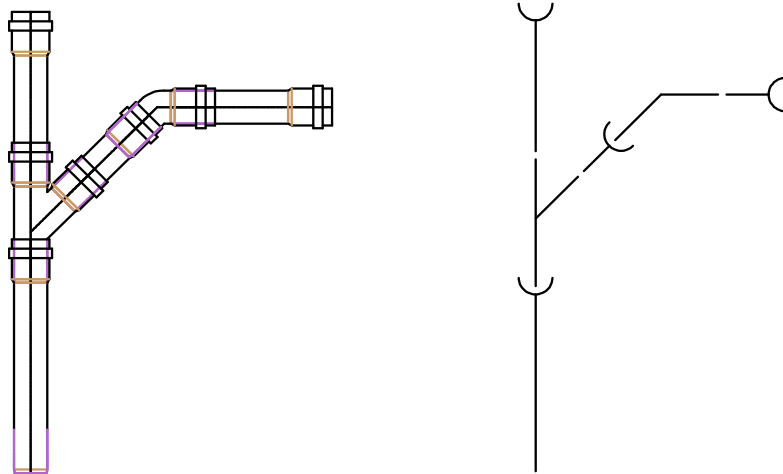
CADprofi

✓ CADprofi HVAC & Piping – steel pipes and fittings system

A System of steel pipes and fittings which allows for convenient drawing of installations with automatic insertion of appropriate elbows (12 – 108 mm.) has been added to the program.

This system can be used in drinking water, heating, cooling and solar installations.

In addition, a possibility to connect the steel pipes system with other installations (by using the threaded or flanged fittings) has been added to the program.

CADprofi
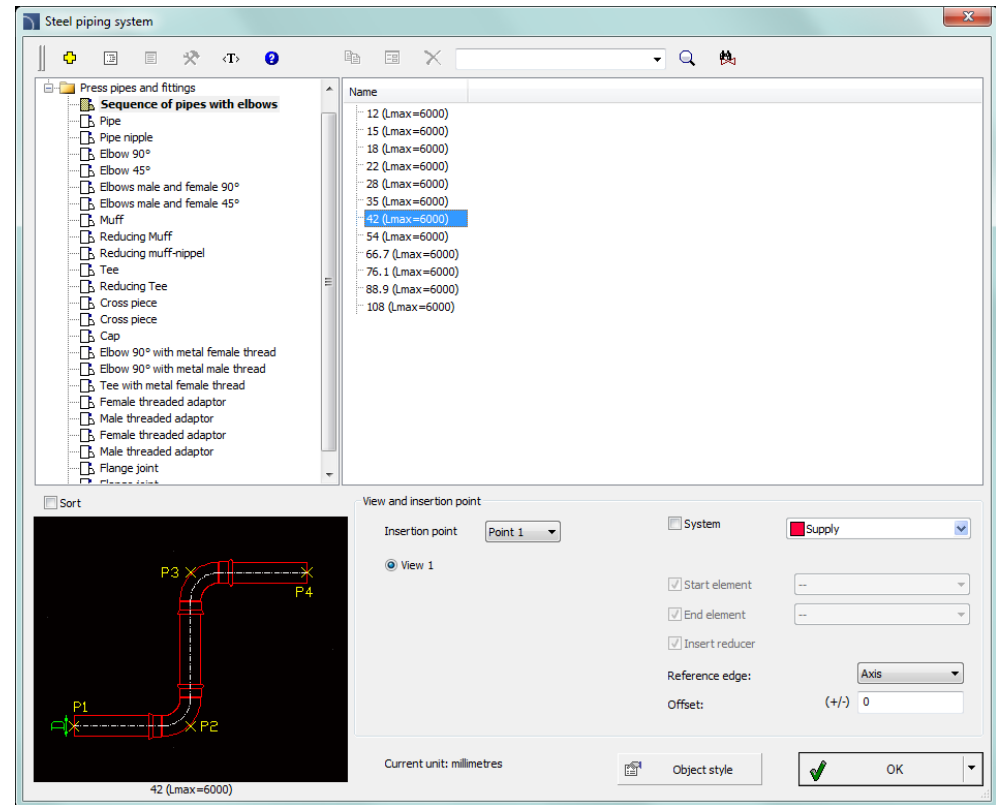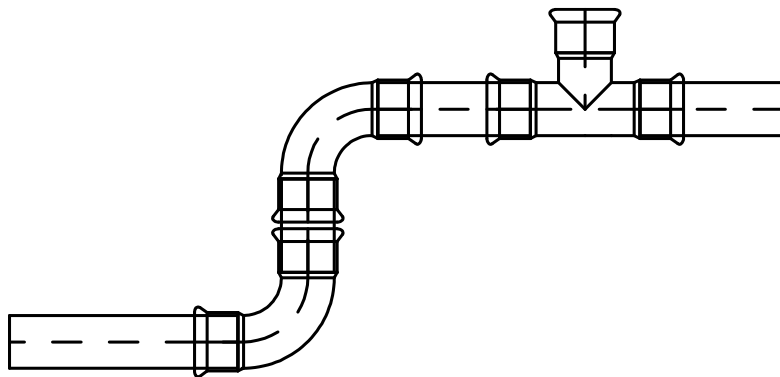
✓ Drawing strings of installations with an offset

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.

CADprofi
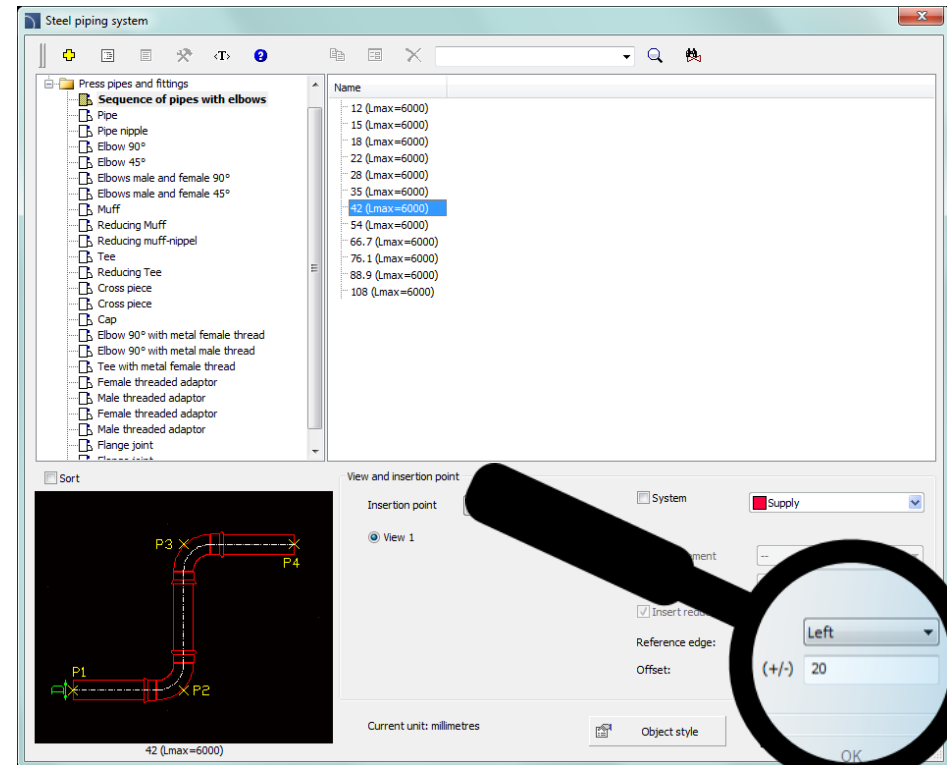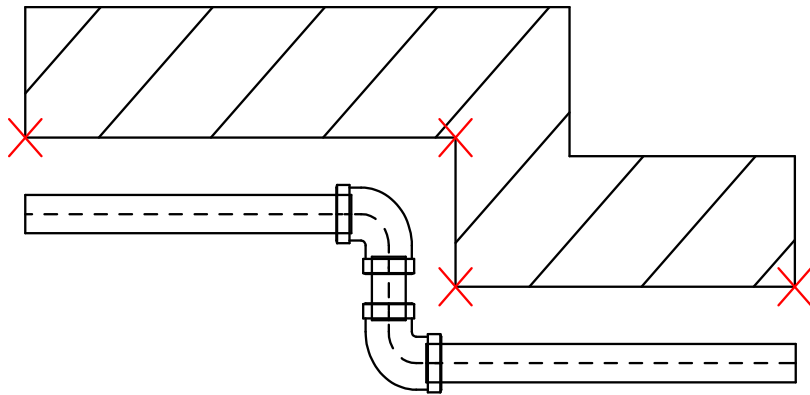
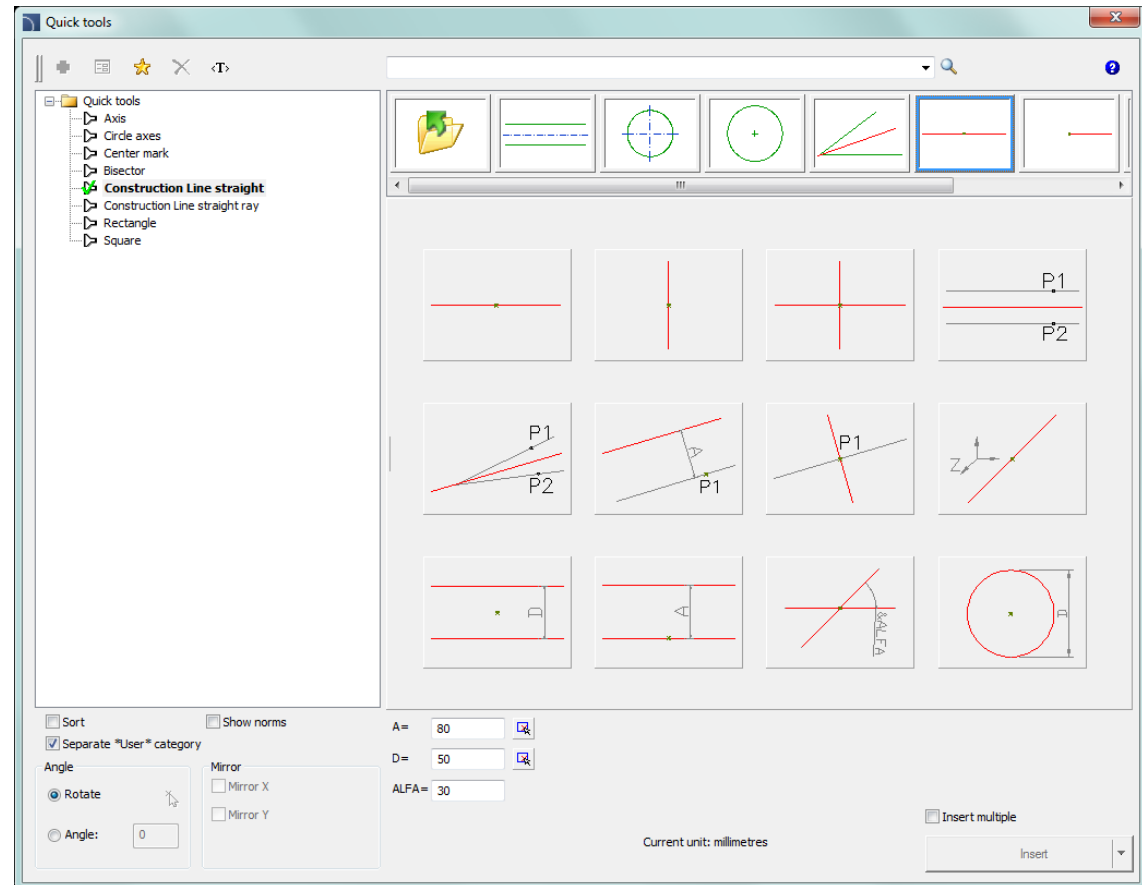## ✓ Drawing strings of installations with connection to the specified object

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.

CADprofi
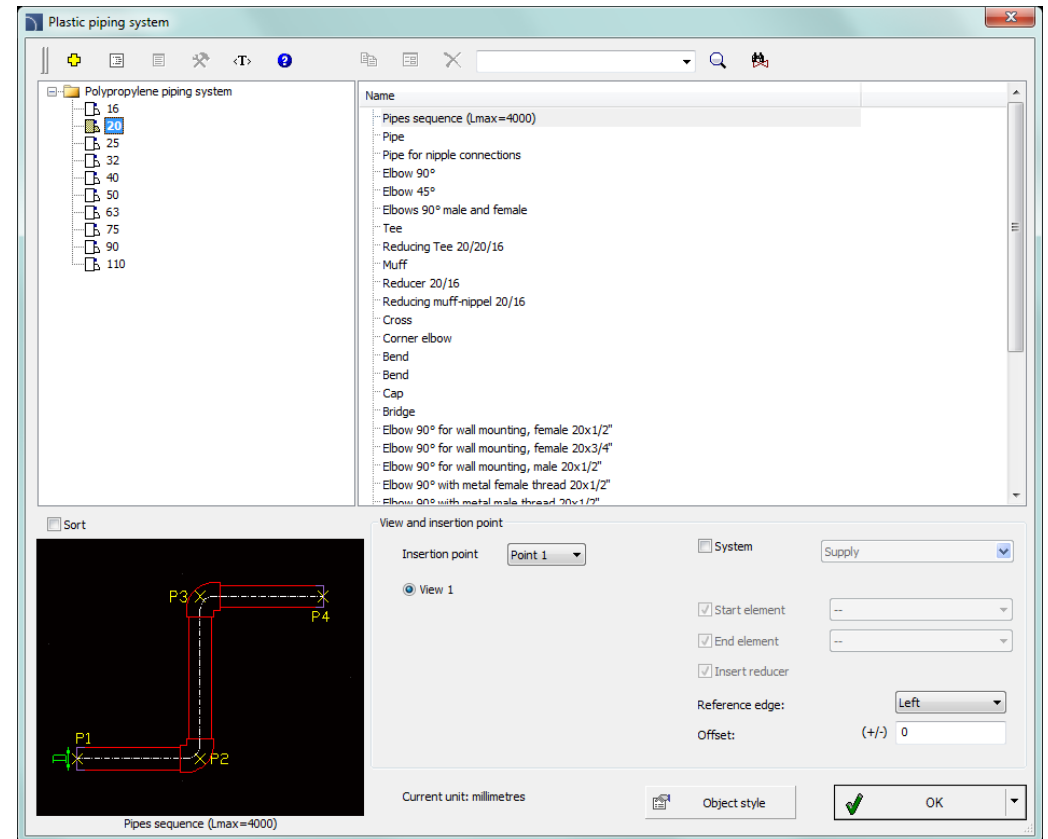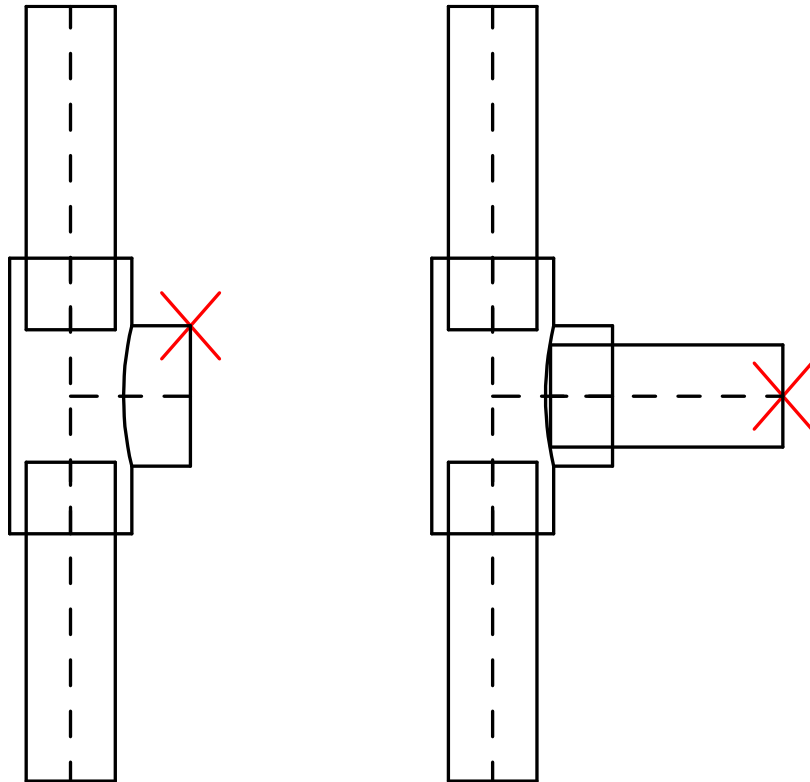
✓ Extended content of the *Quick tools* command

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.

CADprofi

✓ New BKT Elektronik library

New library of *BKT Elektronik* that enables the design of data telecom (ITC) cabinets with elements of structured cabling has been added to the program.

The manufacturer has got in his offer elements in both copper and fiber technology.

Such elements like data telecom (ICT) cabinets, panels and structured cabling, as well as elements of fiber optic equipment can be found in the library.

CADprofi

✓ **Update of manufacturers' libraries:**

CADprofi

✓ **Adjustment to many base CAD programs**

CADprofi 11.07 has been adjusted to work with latest CAD programs, including: AutoCAD 2016, ARES Commander Edition 2015 and progeCAD 2016.

CADprofi 11 currently works with many base CAD programs including: AutoCAD (since the 2000 version), BricsCAD, GstarCAD, IntelliCAD, progeCAD, ZWCAD, ARES Commander Edition and others.

CADprofi

CADprofi 11.01/11.05

Summary of main changes made to the program since the CADprofi 10.01 version.

CADprofi

Table of contents – list of new features in CADprofi 11:

We recommend to read all new features, because some of the features described in one module may also apply to other modules.
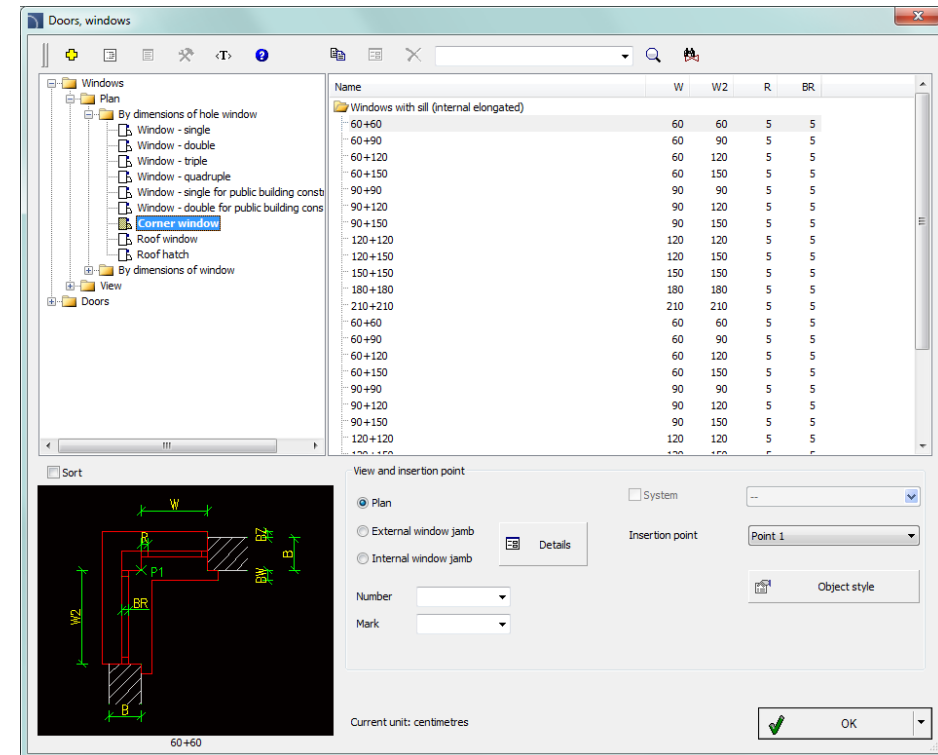
CADprofi

✓ CADprofi Architectural – extension of the woodwork library

Additional types of windows and doors have been added to the library, including:

- Quadruple, corner, roof windows.
- Roof hatches.
- Pocket doors.
- Sliding doors.
- Double folding doors.
- Swing doors.
- Folding doors.
- Interior doors with a doorstep.
- Doors with fixed side elements.
- Balcony doors.
- Revolving doors.
- Garage doors.

For doors and windows views used on sections were also added.

In the dialog window it is possible to determine the number and designation of inserted elements. These data is afterwards used during insertion of marks and specifications.
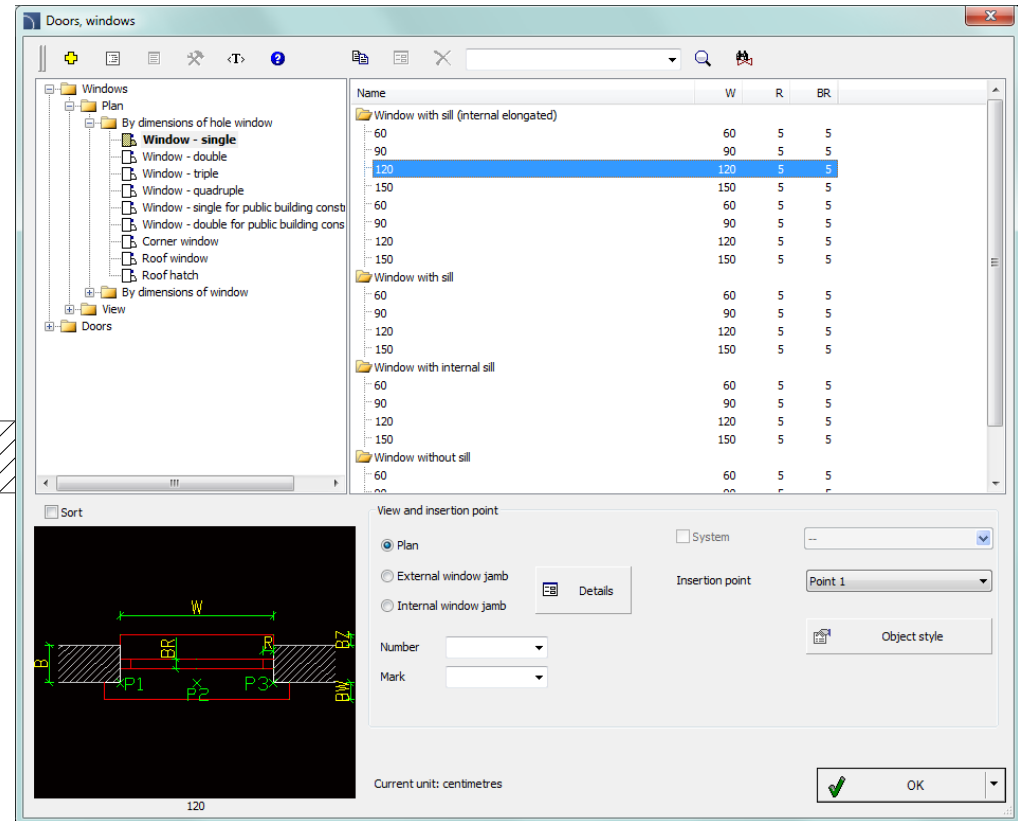
CADprofi

During insertion of windows and doors CADprofi program automatically detects the wall thickness and allows to easily specify the distance to insert objects from wall corners or other reference points. For some objects user can also specify the side placement in accordance to the wall (e.g. outdoor or indoor).

The *Quick edit* command allows to quickly change the side placement of objects that are already inserted in the drawing.
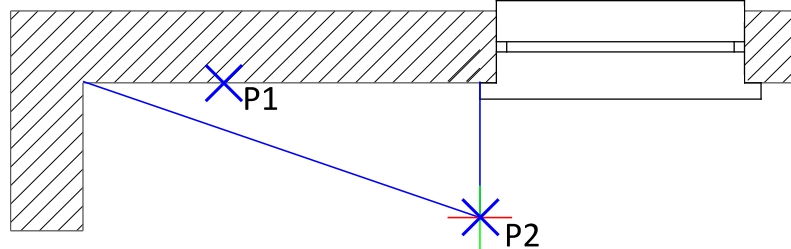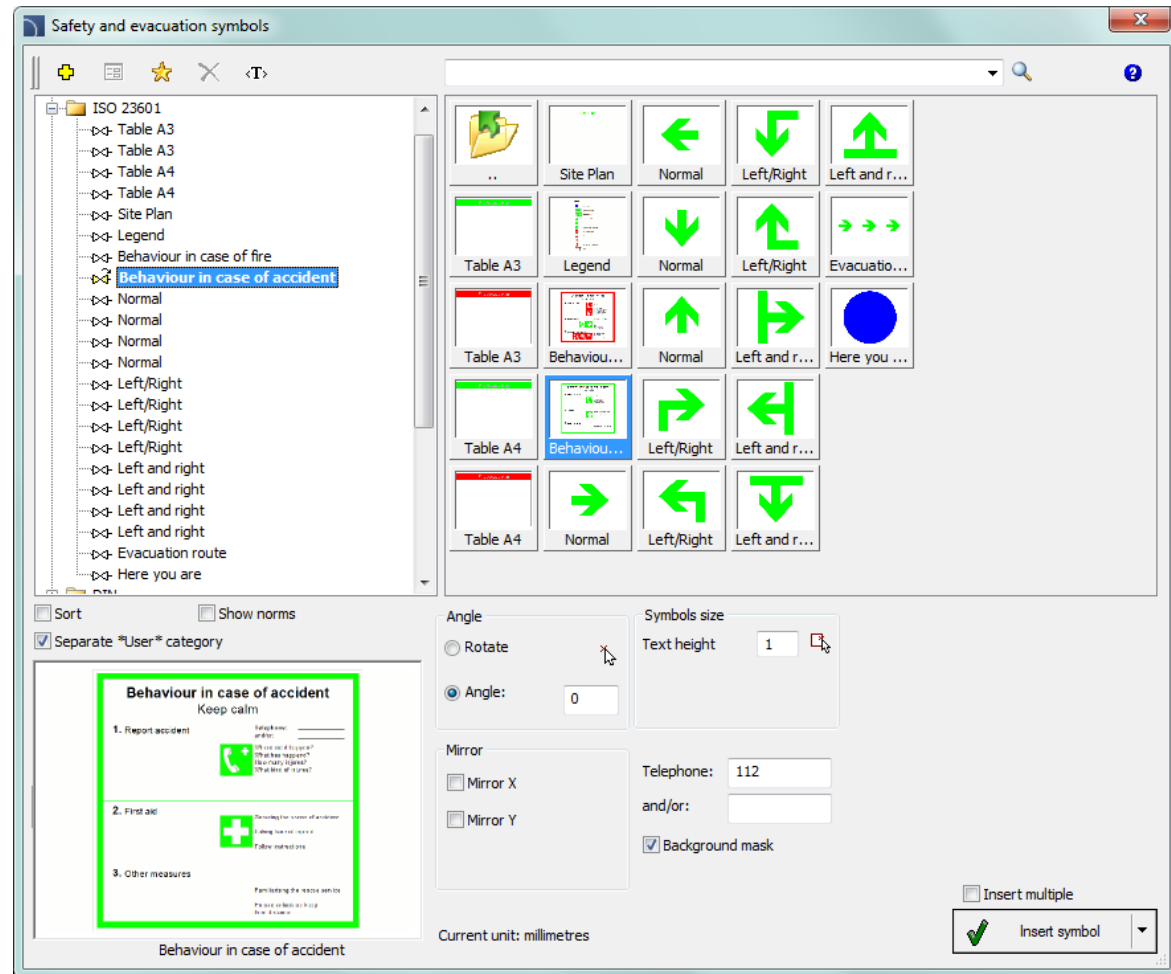

The *Quick edit* command allows to rapidly change the thickness of inserted elements.

CADprofi

✓ **CADprofi Architectural – extension of evacuation symbols library**

Evacuation library has been extended with the following standards:
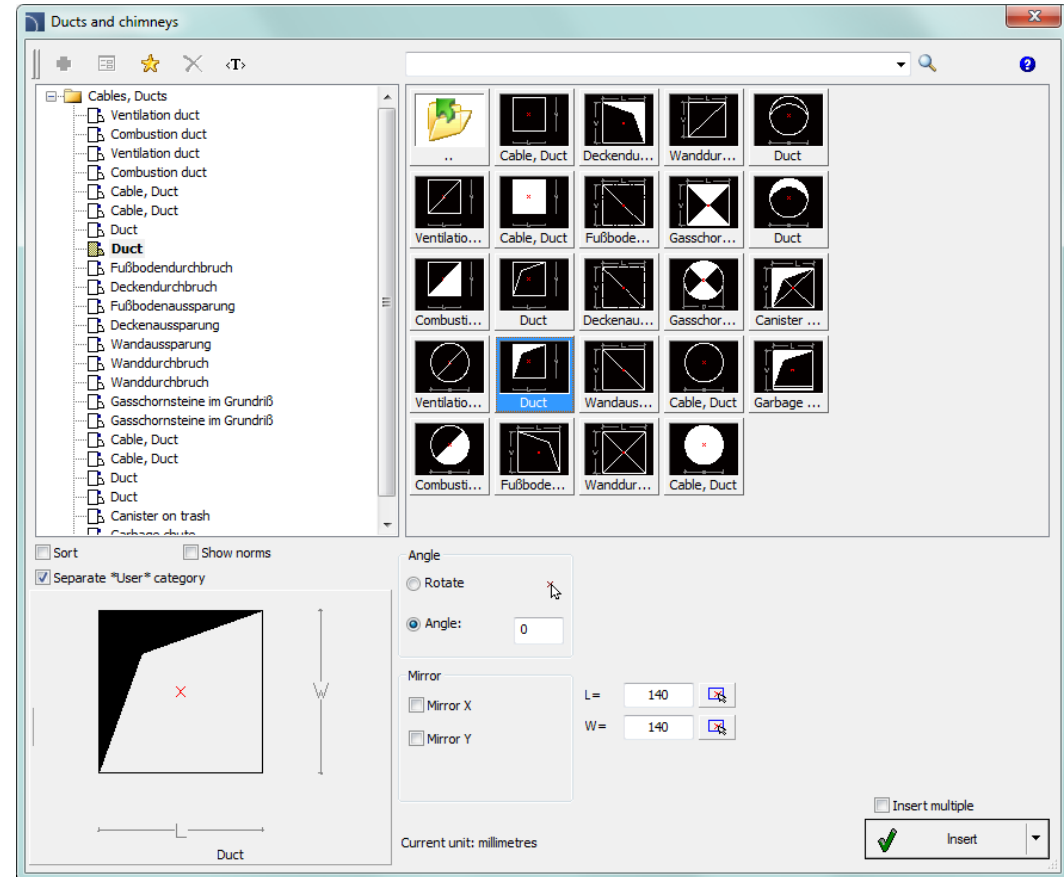- ISO 23601
- ASR A1.3
- ÖNORM - TRVB 121 O

CADprofi

✓ **CADprofi Architectural – new command *Ducts and chimneys***

The *Ducts and chimneys* ▧ command has been added to the program.

CADprofi

✓ CADprofi Electrical – sensors and cameras with field of view

Sensors and cameras from the "alarm and security systems" installations with the possibility to specify the field of view have been added to the program. This function facilitates the distribution of elements in the project.
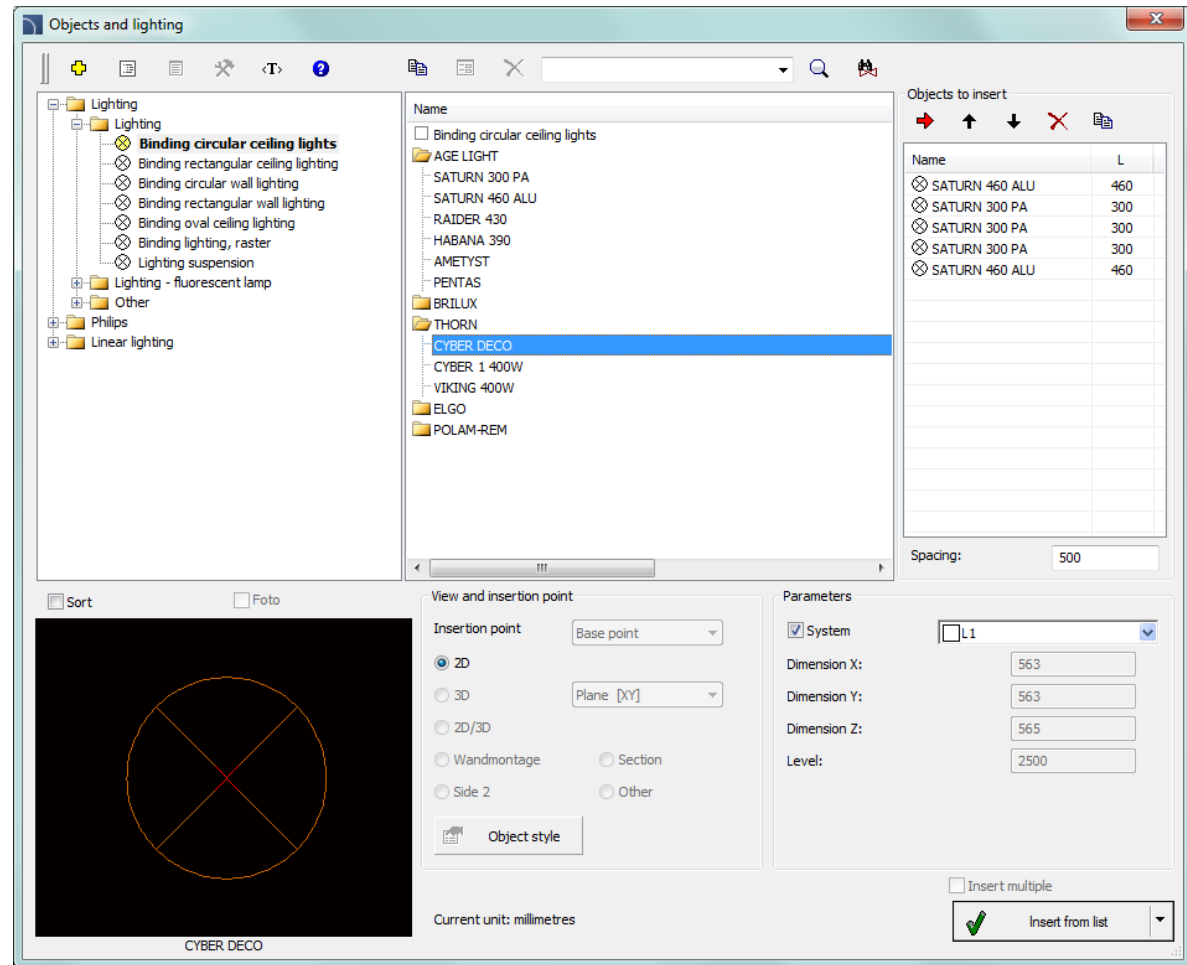
Field of view sensors can be easily hidden by turning off the visibility of the corresponding layer.
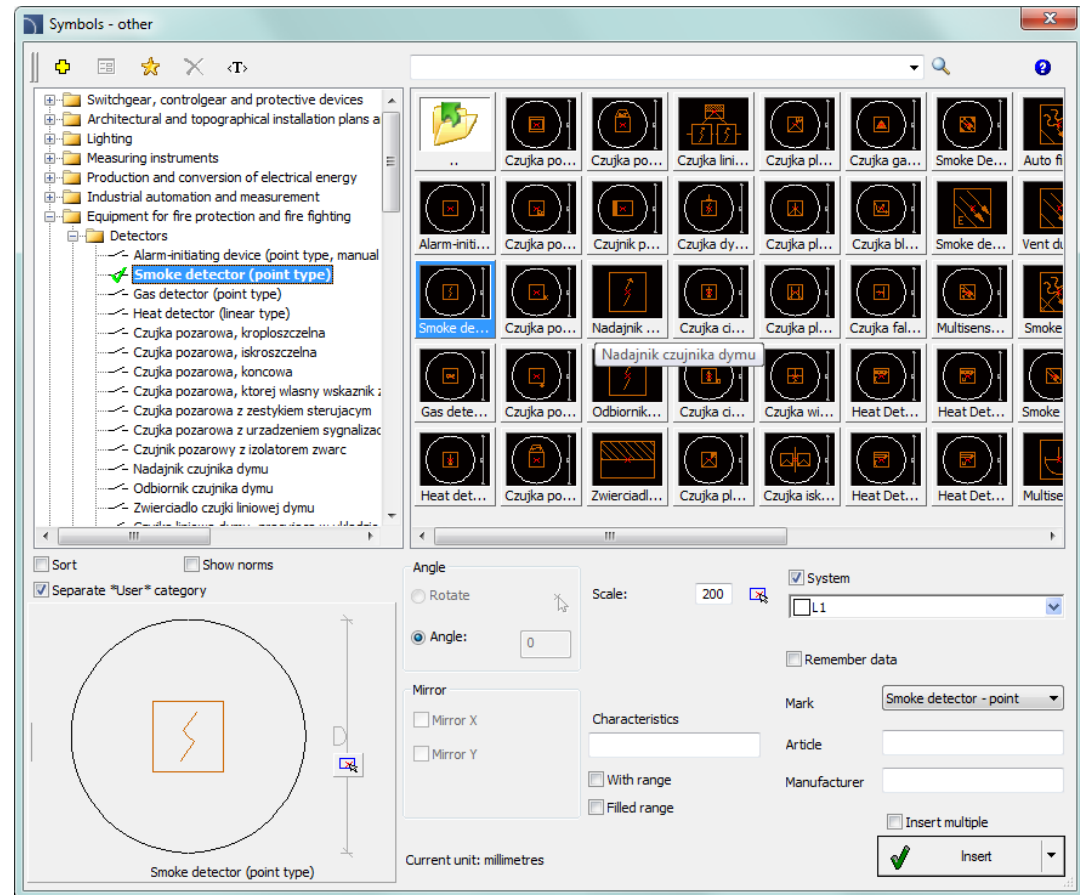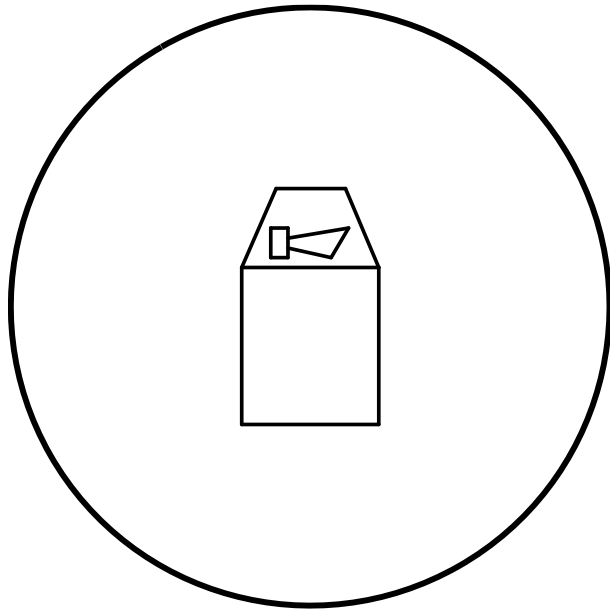
CADprofi

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

A new list, thanks to which users can insert many lighting fixture with a chosen spacing has been introduced.

CADprofi

The possibility to draw sequences of linear lighting fixtures with automatic insertion of appropriate fasteners has been added to the program.
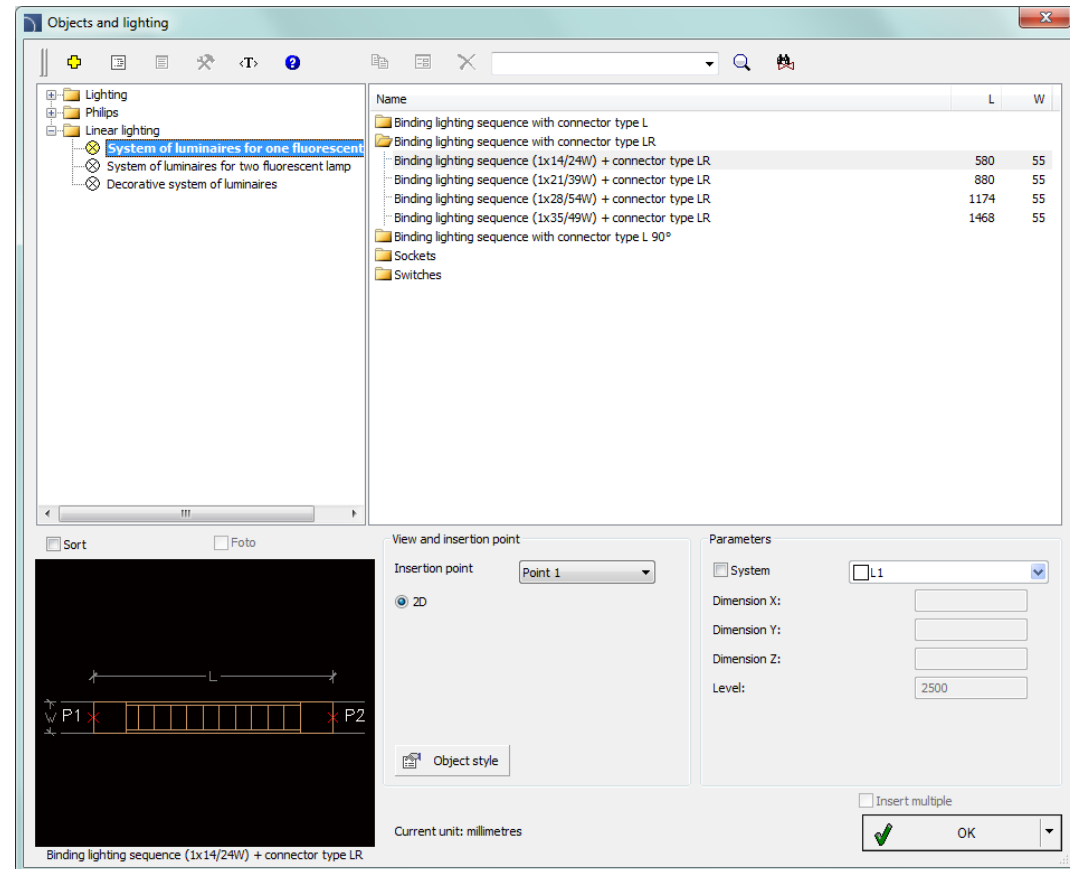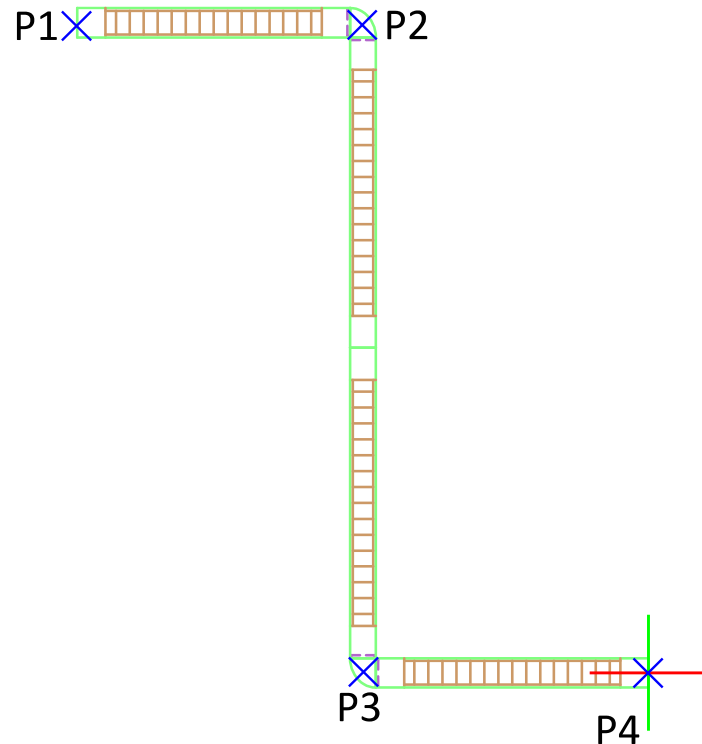
CADprofi

✓ CADprofi Electrical – changes in installation boxes schemes

New sockets and switches views, as well as new system of elements configuration have been added to the program.
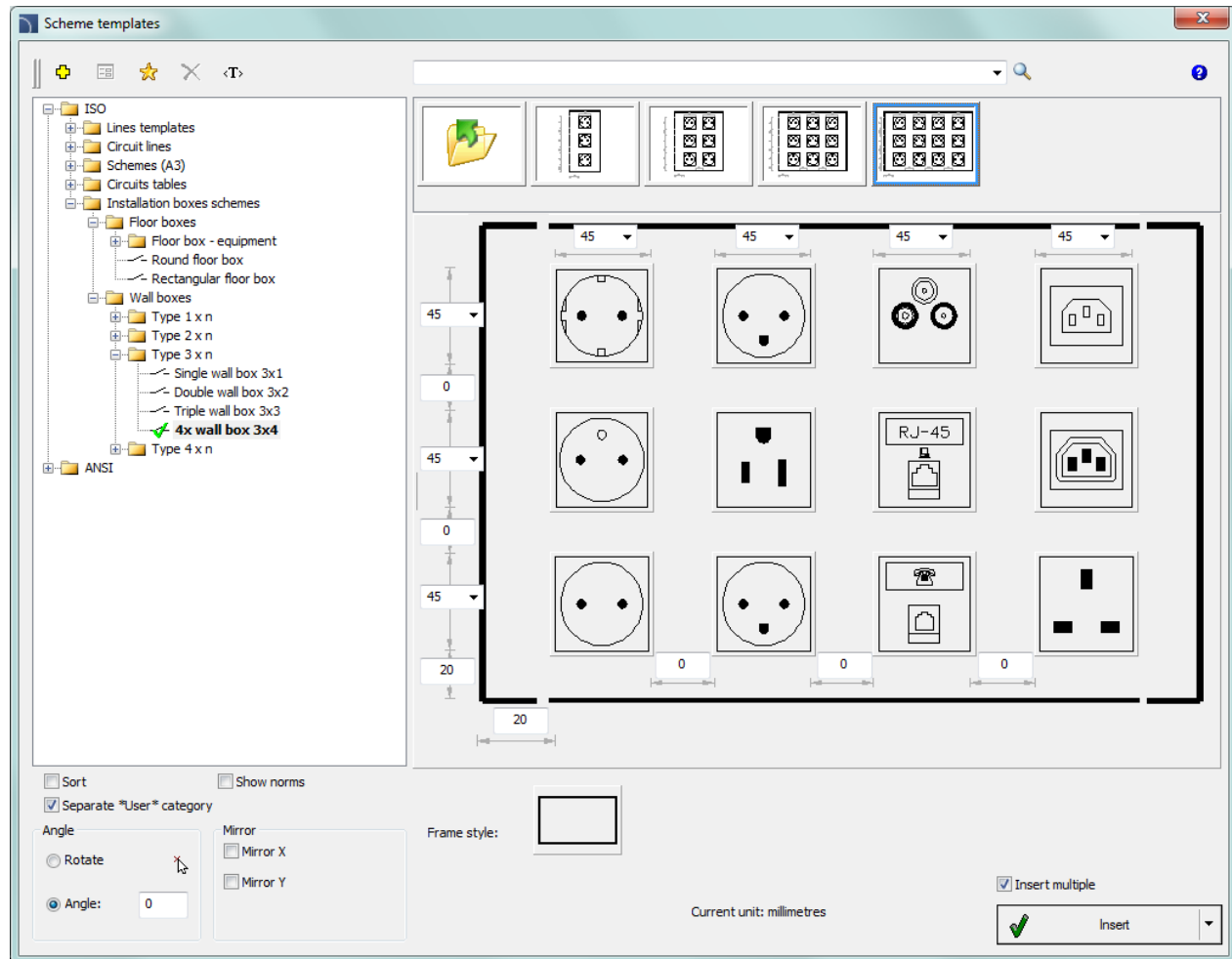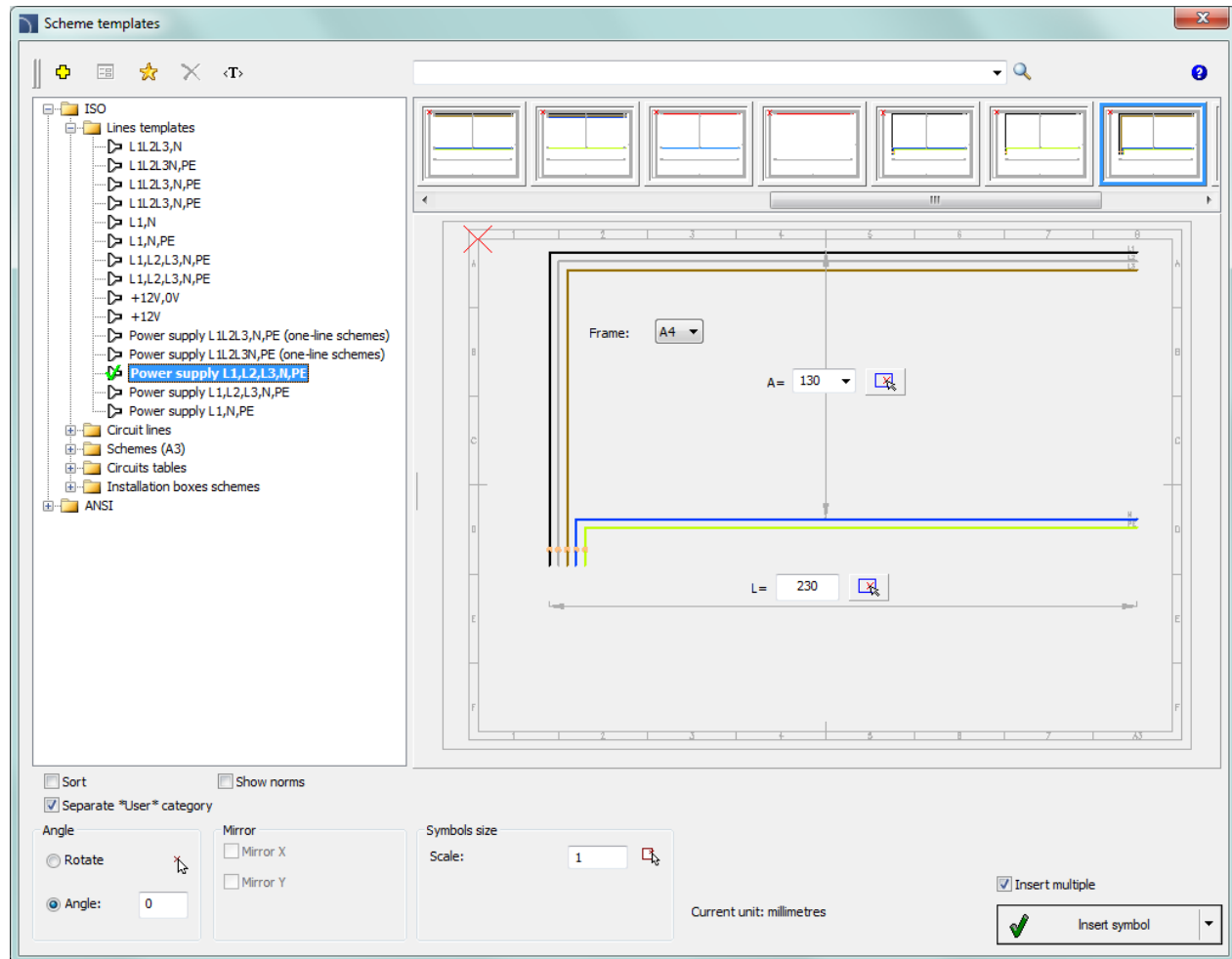
CADprofi

## ✓ CADprofi Electrical – changes in line templates and circuits

New line templates and circuits for A3 and A4 formats with the possibility to determine their dimensions have been added to the program.

CADprofi

✓ CADprofi Electrical – new schemes

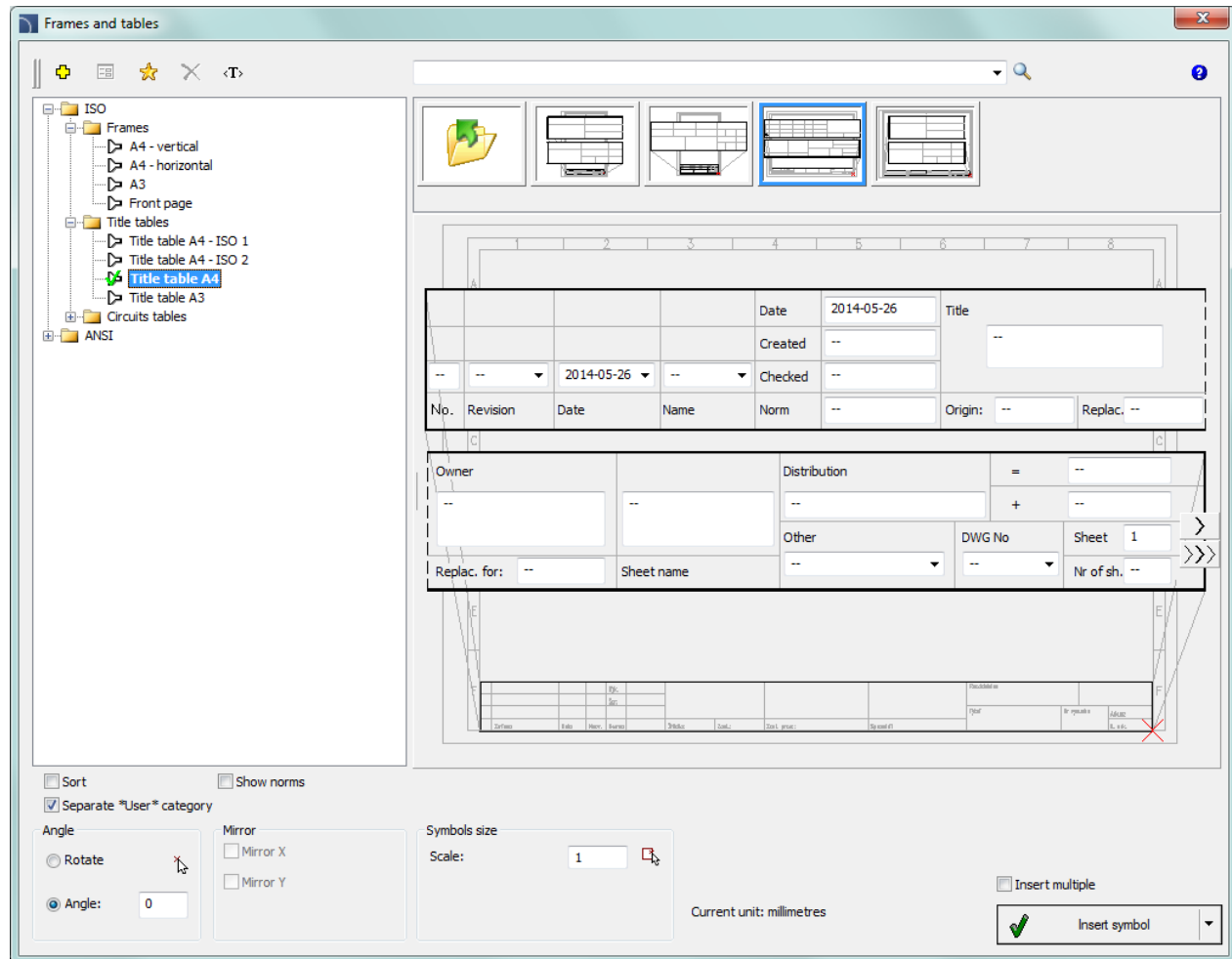New schemes have been added to the *Scheme templates* command:
- lighting control schemes with a dimmer,
- lighting control schemes with a digital time switch.
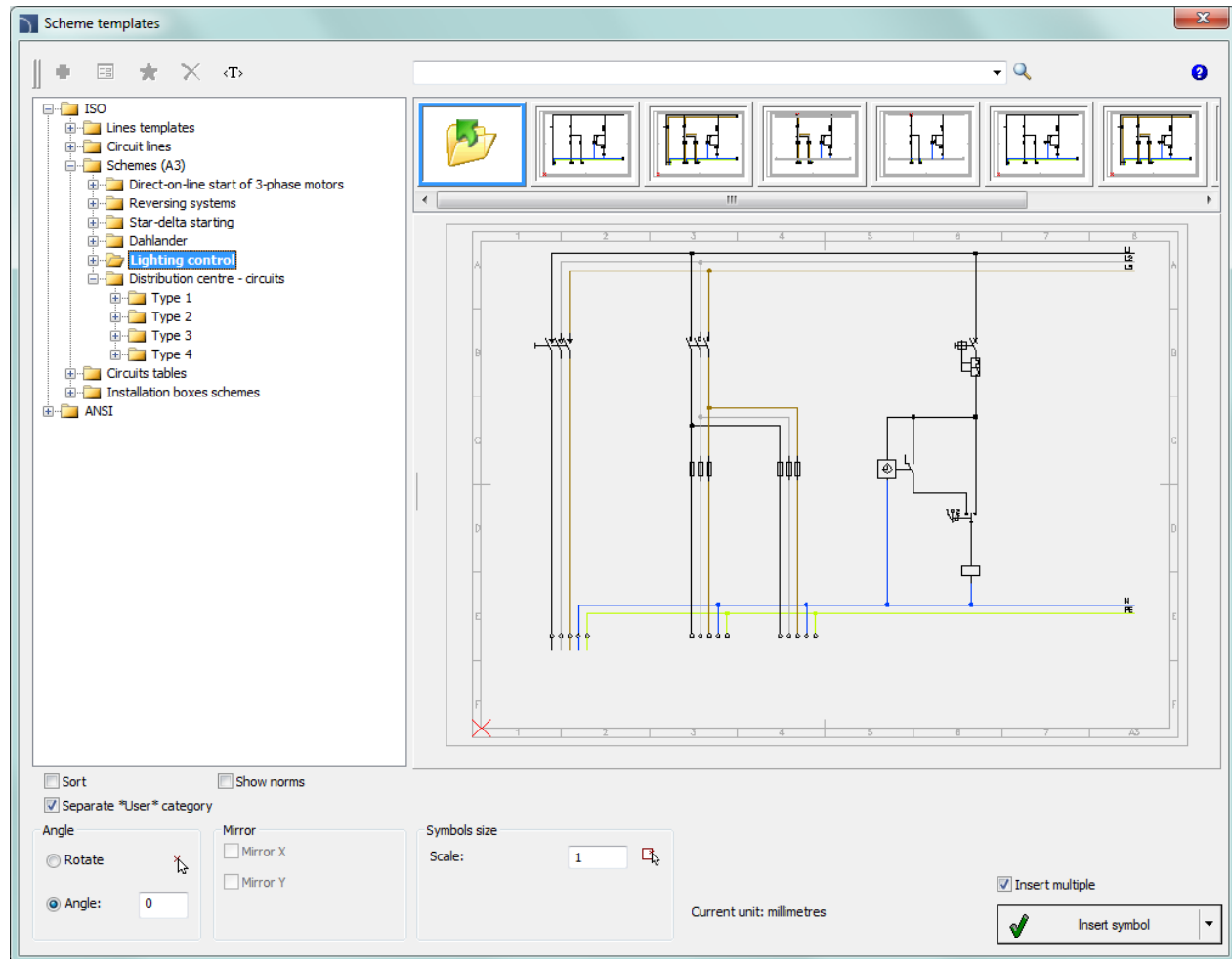
CADprofi

✓ **CADprofi Electrical – extended *Frames and tables* command content**

On the users request, new electrical circuit tables and a new frame in A4 format have been introduced.
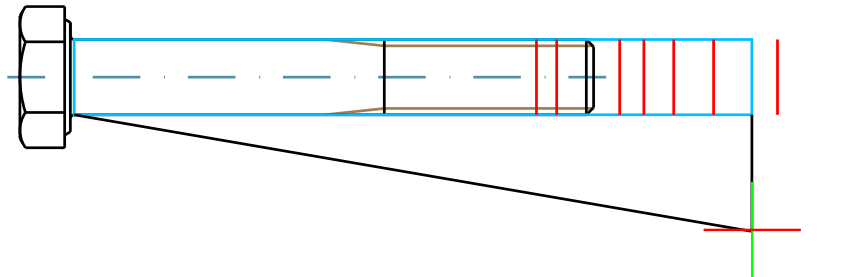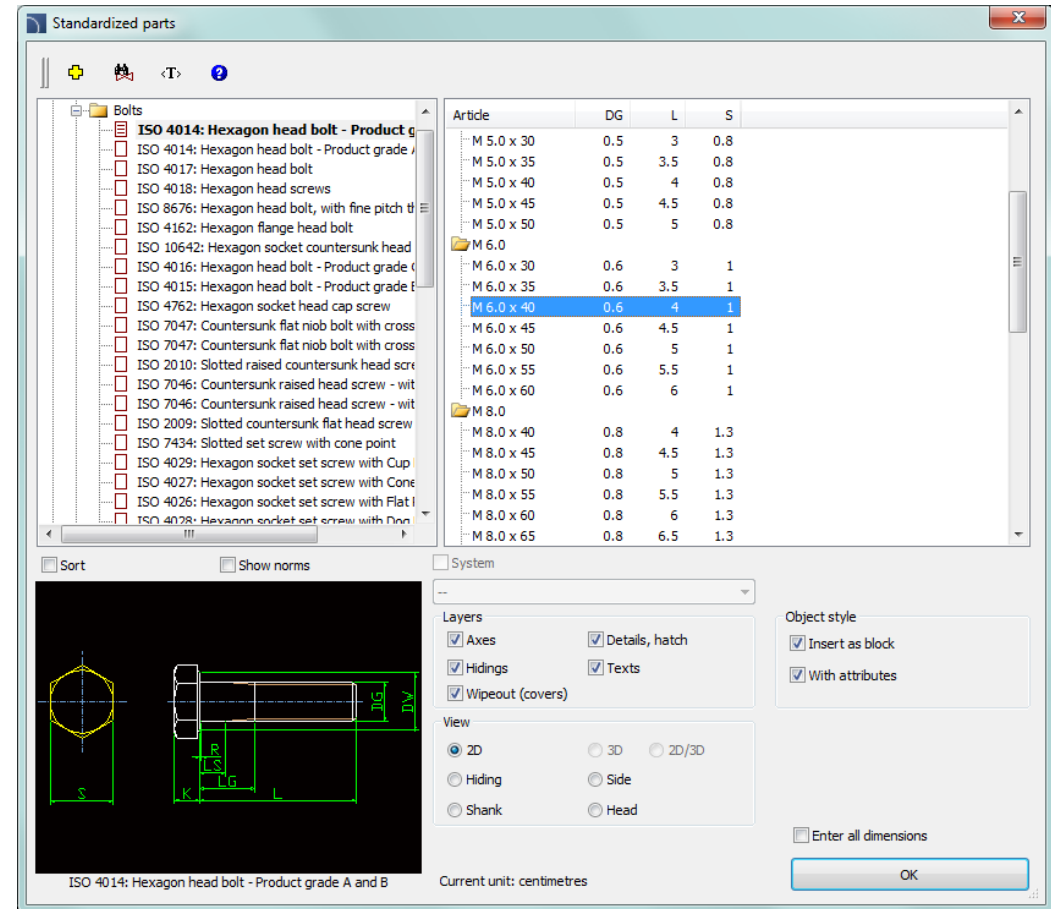
CADprofi

✓ CADprofi Mechanical – new procedure of inserting screws, pins, bolts, rivets etc.

During insertion of elements to the drawing it is possible to dynamically select the length from the type of series. Thanks to this feature it is much easier to choose the right element that meets the project requirements.

Thanks to the *Quick edit* command user can easily change the length of elements that are already inserted in the drawing.
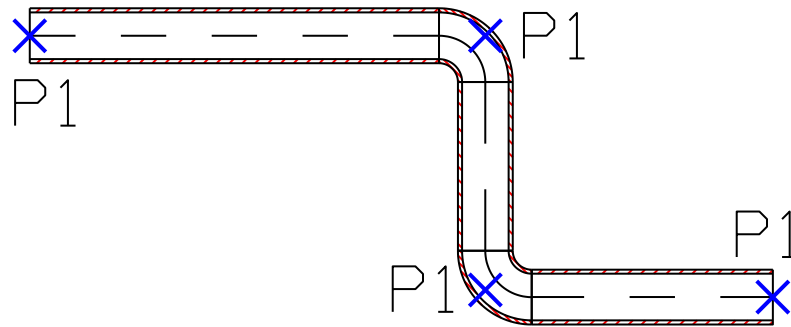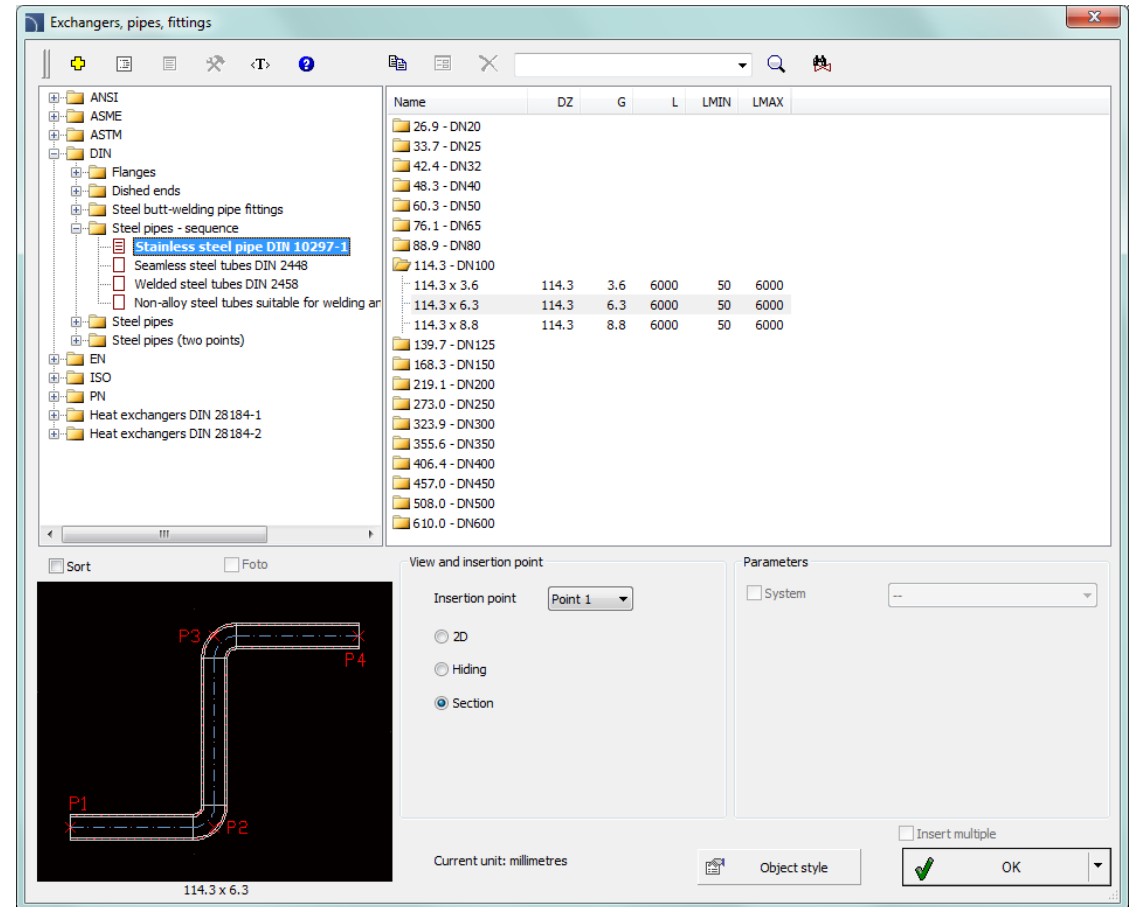
CADprofi

✓ CADprofi Mechanical – drawing sequences of pipes

The possibility to draw sequences of pipes with automatic insertion of appropriate bends has been added to the program. sequences of pipes can be drawn in DIN and ASME standards (in these standards the bends libraries are available).
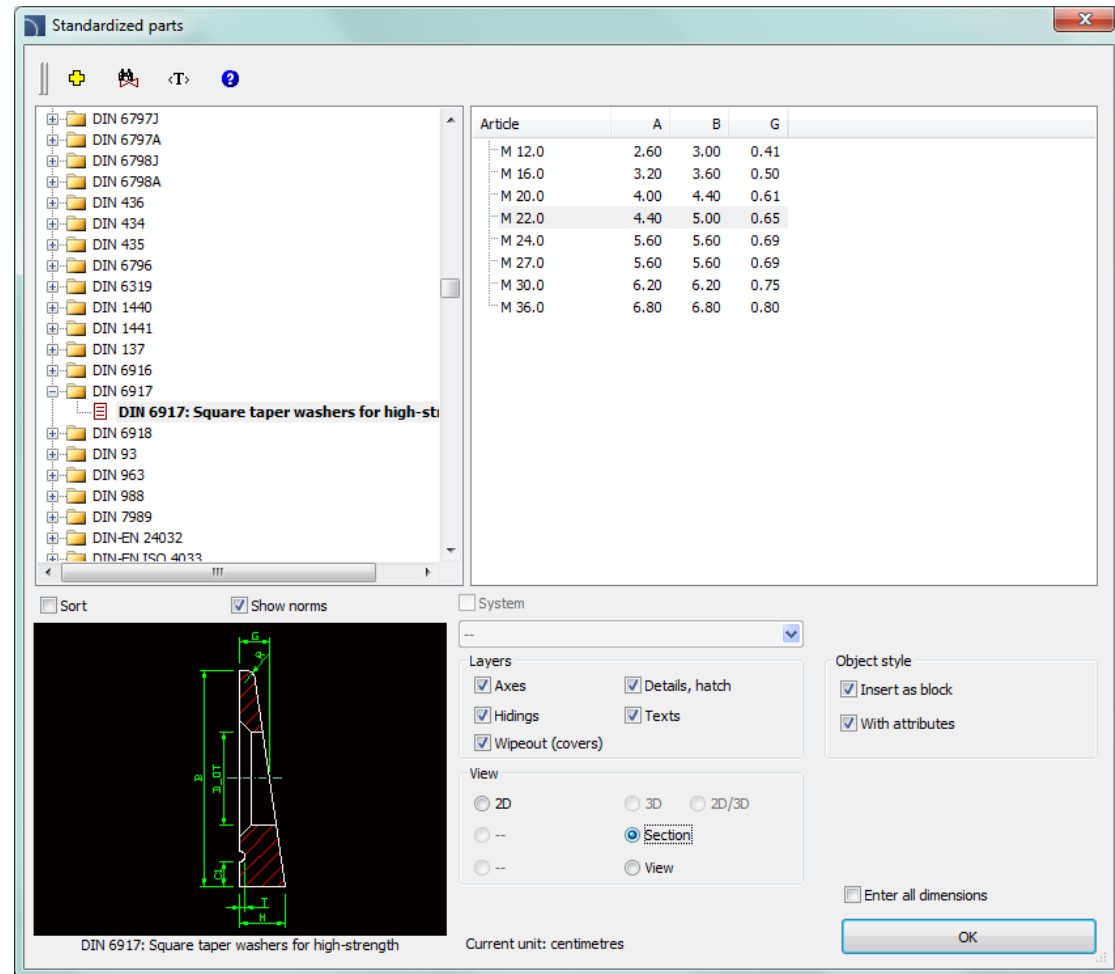
CADprofi

✓ CADprofi Mechanical – additional standards

Additional standards have been added to the program, including:

- DIN 1441 – Washers for clevis pins.
- DIN 6914 – High-strength hexagon head bolts with large widths.
- DIN 6915 – Steel hexagon nuts width large width.
- DIN 6917 – Square taper washers for high strength.
- DIN 6918 – Square taper washers for high-strength.
- DIN 66 – Countersink for countersunk head screw.
- EN ISO 4033 – Hexagon nuts.
- EN ISO 4036 – Hexagon thin nuts unchamfered.
- EN ISO 8674 – Hexagon high nuts.
- ISO 4018 – Hexagon head screws.
- The DIN 1025-3 has been updated – Hot rolled I-beams - HEA-serie.

CADprofi

✓ CADprofi Mechanical – modular aluminum profiles

Elements of modular aluminum profiles have been added to the program. They can be used to prepare different constructions, including:
- workstations (furniture),
- single and multi-axis linear guides,
- machinery and equipment bodies,
- transport systems.
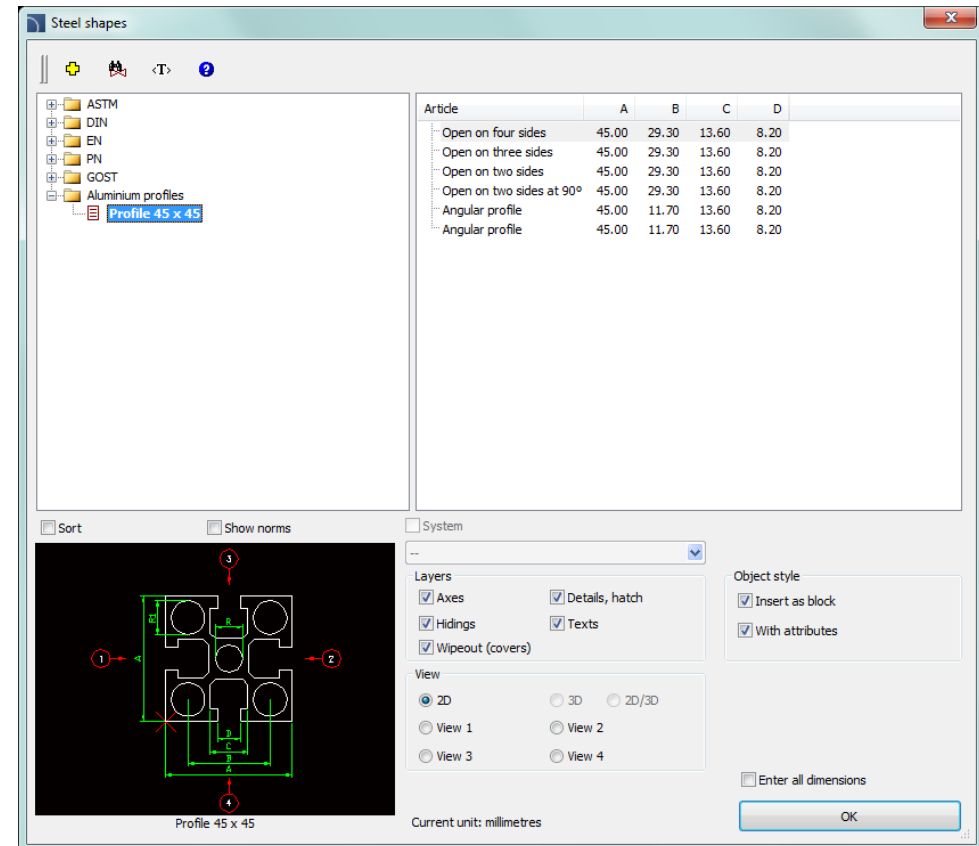
CADprofi

✓ **CADprofi Mechanical – additional standards regarding apparatus construction**

Extension of standards regarding the apparatus construction:

- DIN 2440 – threaded steel pipes,
- DIN 2462 – stainless steel pipes,
- DIN 2618 – branch saddles,
- DIN 2617 – dished ends.
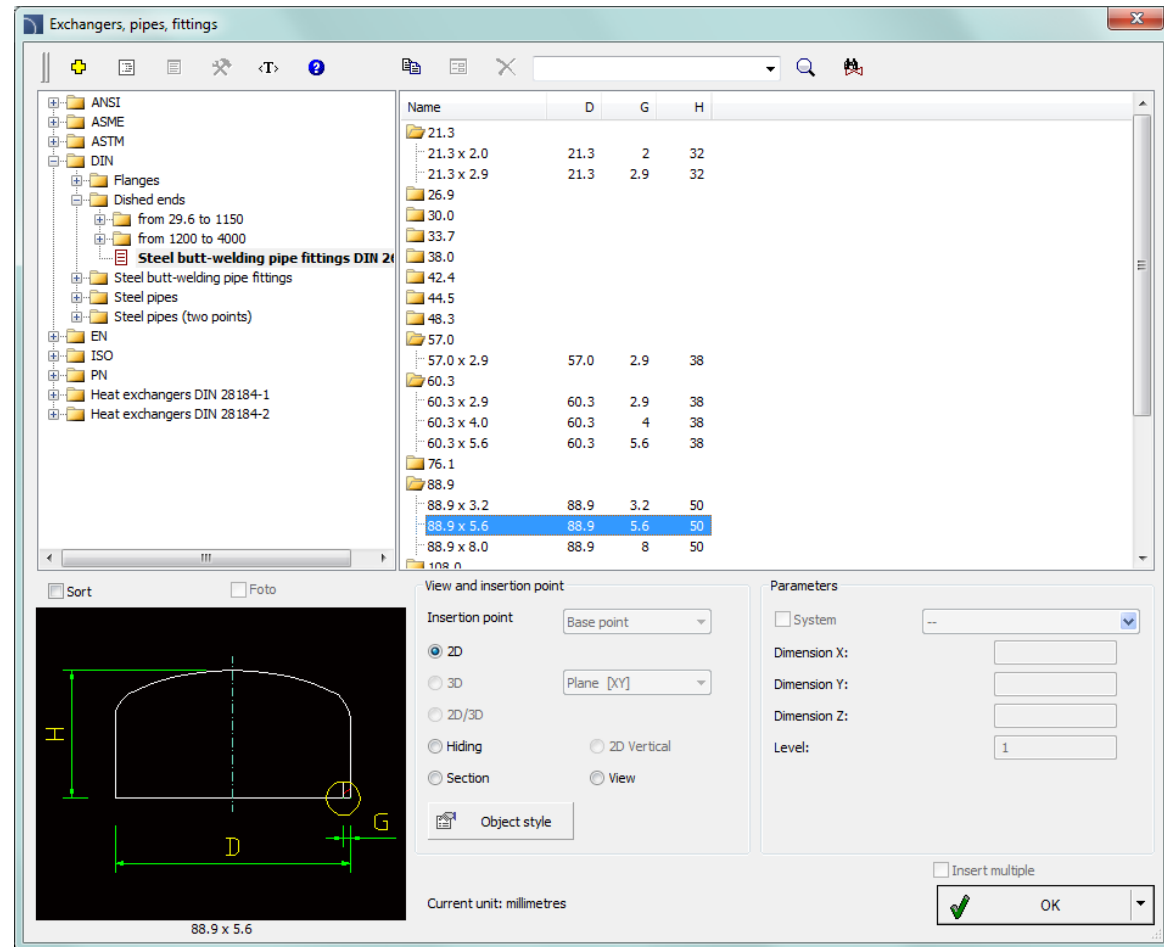
CADprofi

✓ CADprofi HVAC & Piping – a system of threaded pipes and fittings

A *system of threaded pipes and fittings* ⬛ has been added to the program.

This command allows to draw sequences of piping installations with automatic insertion of fittings in a convenient way. It is possible to insert a variety of fittings, including tees, reductions, joints, pipe joints and others from 1/8" to 4".
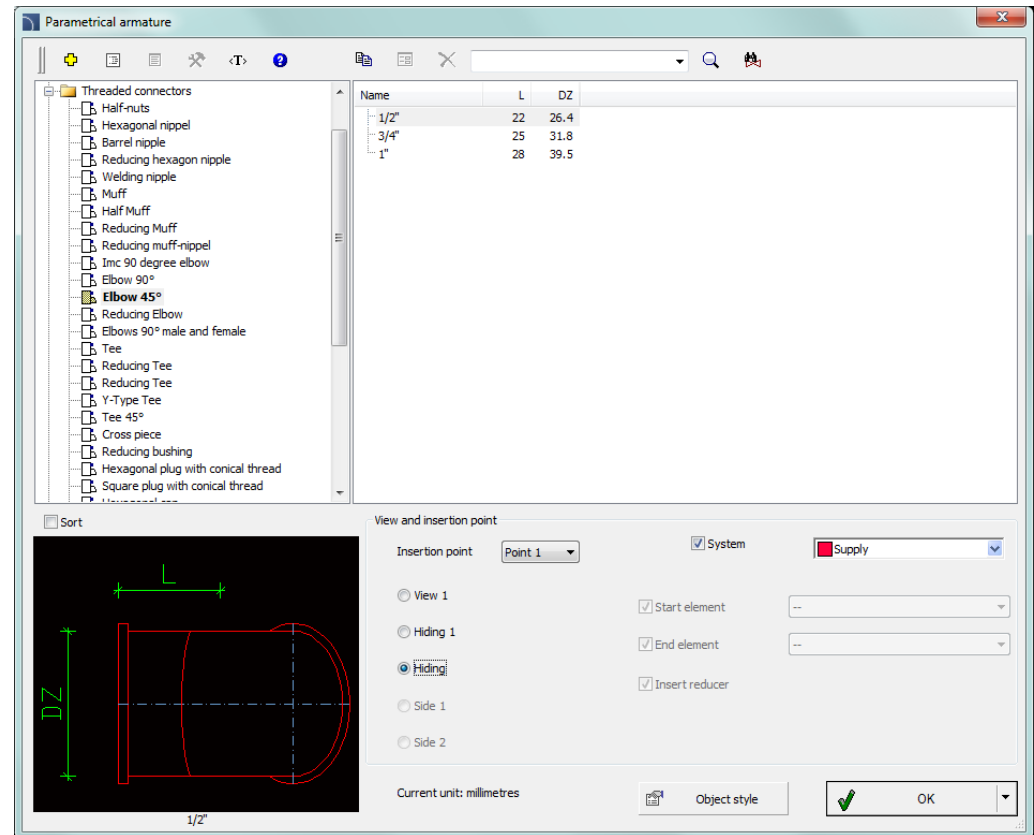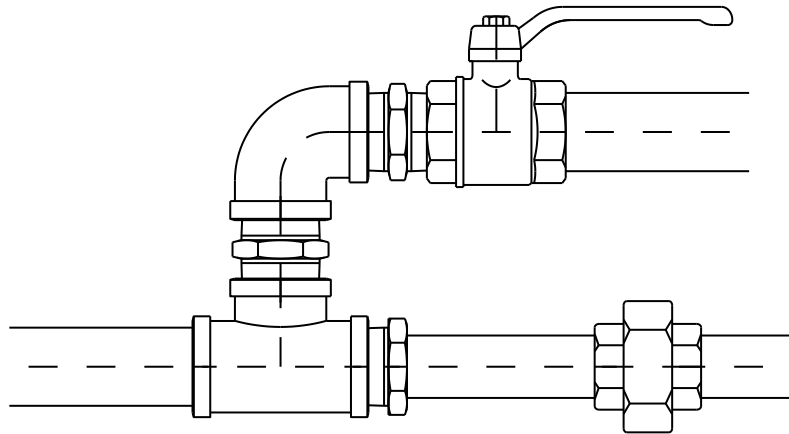
CADprofi

CADprofi HVAC & Piping – copper (CU) pipes and fittings

A *system of copper (CU) pipes* with automatic insertion of bends with a diameter of 6 - 108 mm has been added to the program. It is also possible to draw installations of soft copper.

This command contains all necessary copper fittings, as well as fittings that allow connection with steel threaded pipes.

Steel threaded pipe

Copper pipe
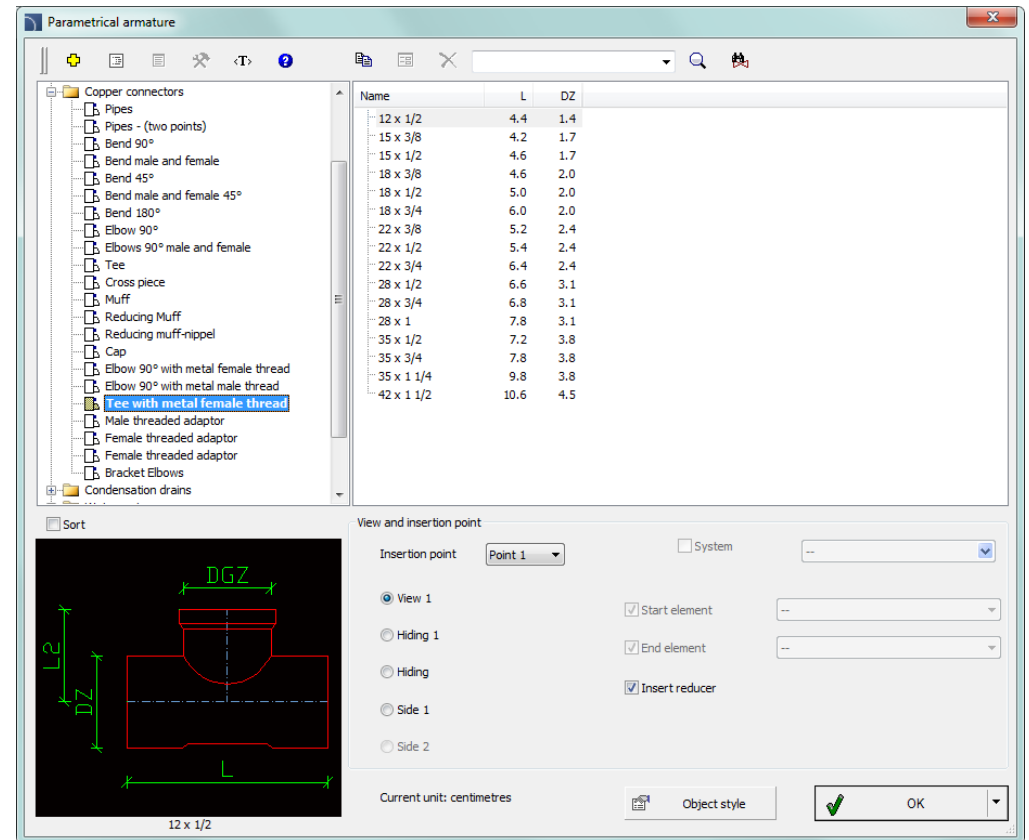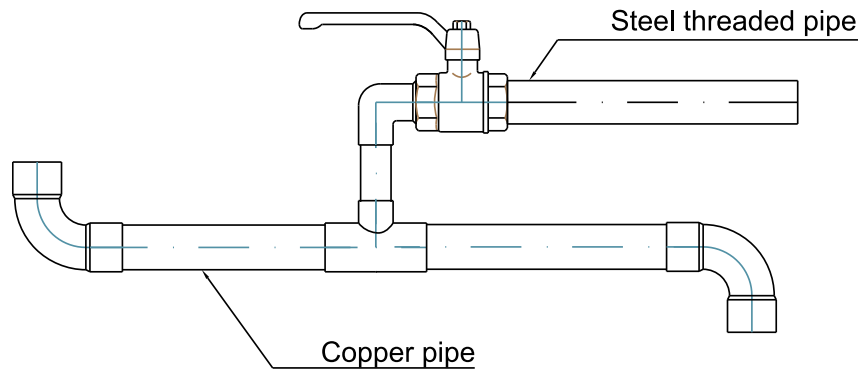
CADprofi

✓ **CADprofi HVAC & Piping – a system of pipes, fittings and polypropylene armature**

A *system of polypropylene pipes* that allow to easily draw sequences of PP installations with automatic insertion of bends with a diameter of 16 to 110 mm has been added to the program.

In addition, a possibility to connect various system diameters of pipes and fittings with threaded pipes by using welded-threaded fittings have been introduced.
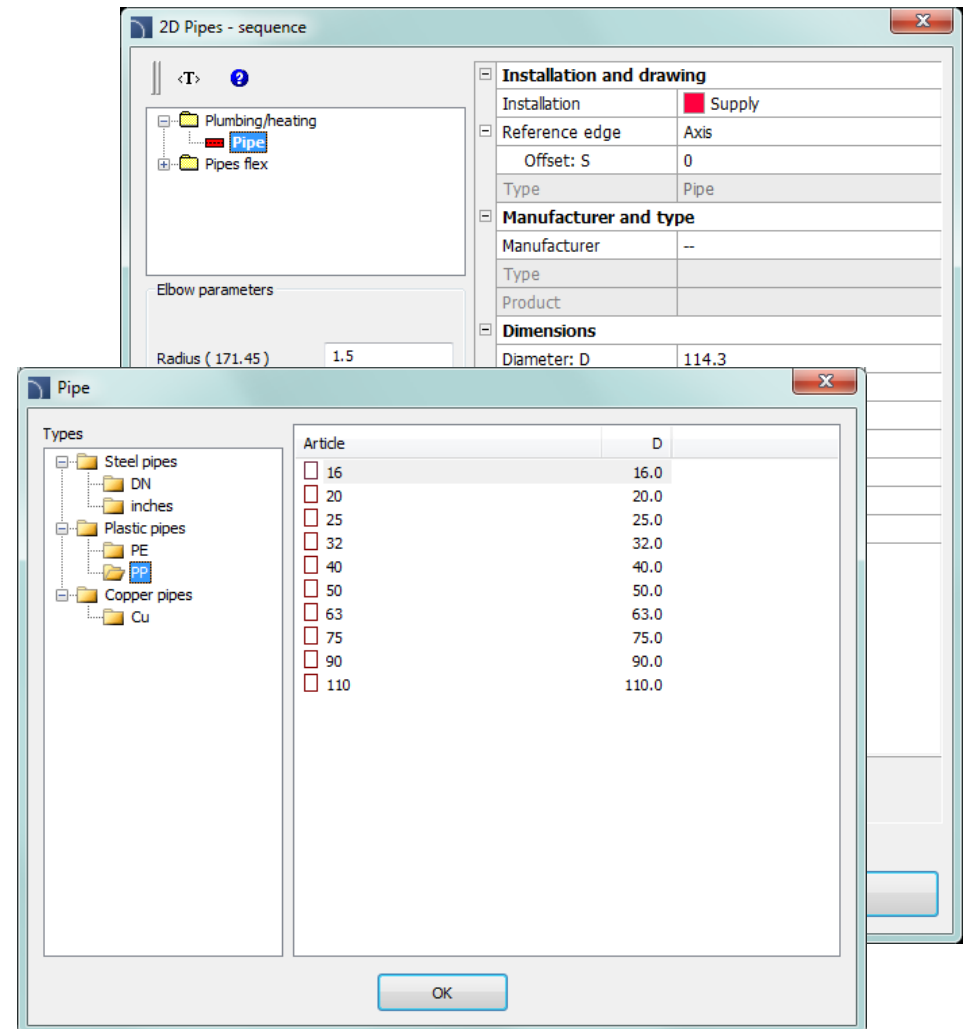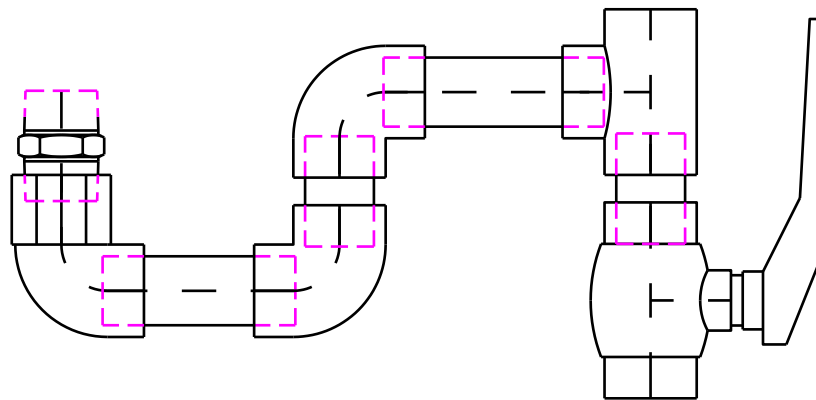
CADprofi

✓ CADprofi HVAC & Piping – an additional type of a circular line

An additional style of drawing pipes (with hidden endings) has been added to the program. This style can be used for example when drawing installations with folded pipes.
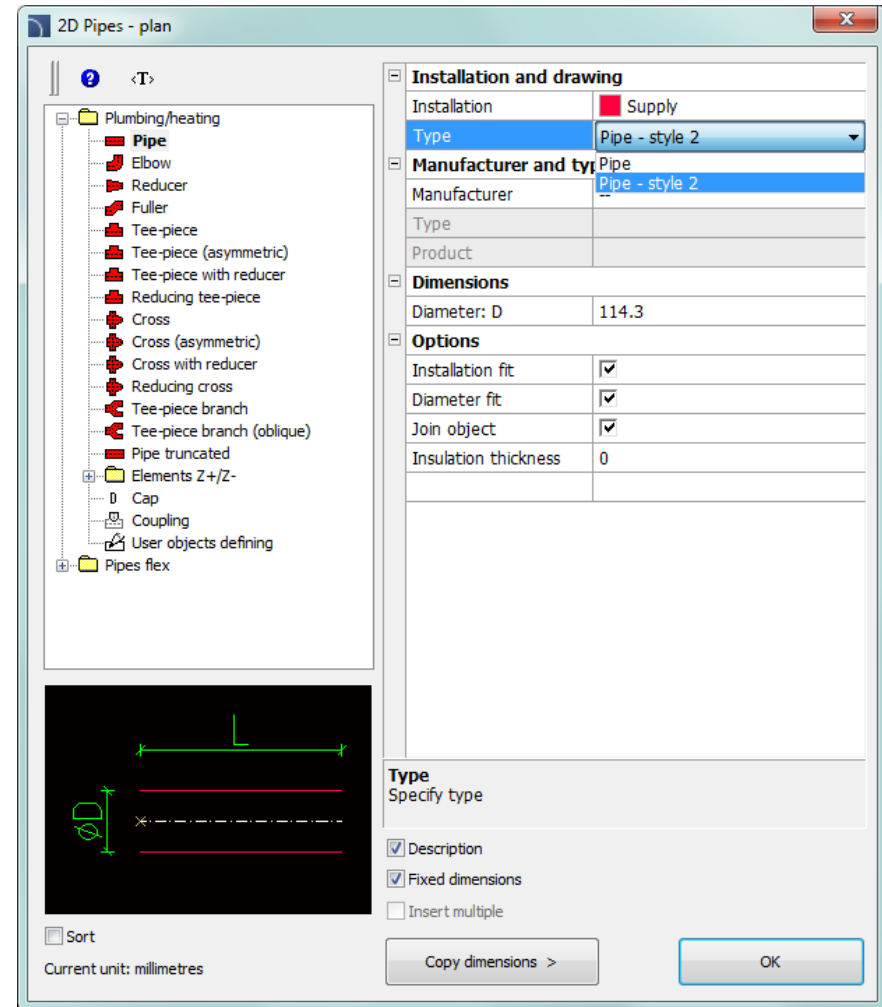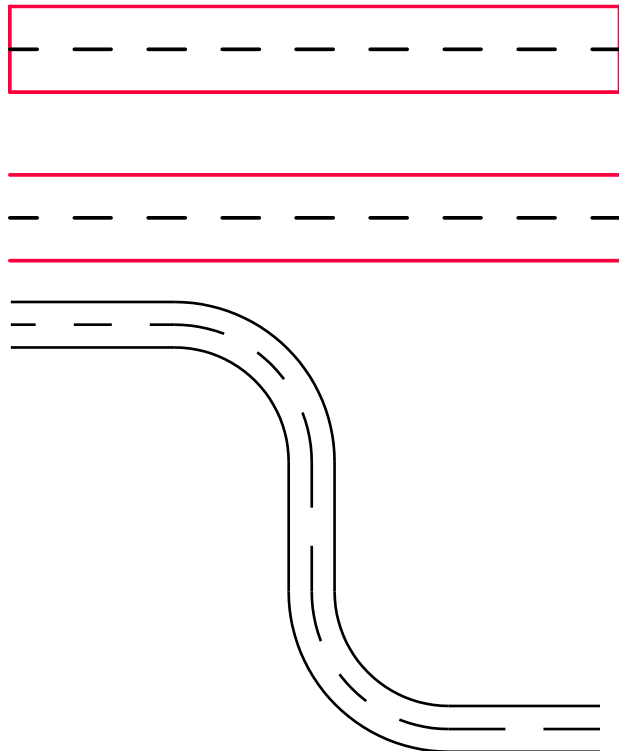
CADprofi

✓ CADprofi HVAC & Piping – oil and gas burners

Various burners (oil, gas and dual fuel), as well as the gas pressure regulator have been added to the program.

CADprofi

✔ **Dynamic determination of objects insertion "direction"**

For certain elements (such as elbows, tees) it is possible to dynamically determine the direction of insertion.
This option makes it much easier to draw installation sequences.

CADprofi
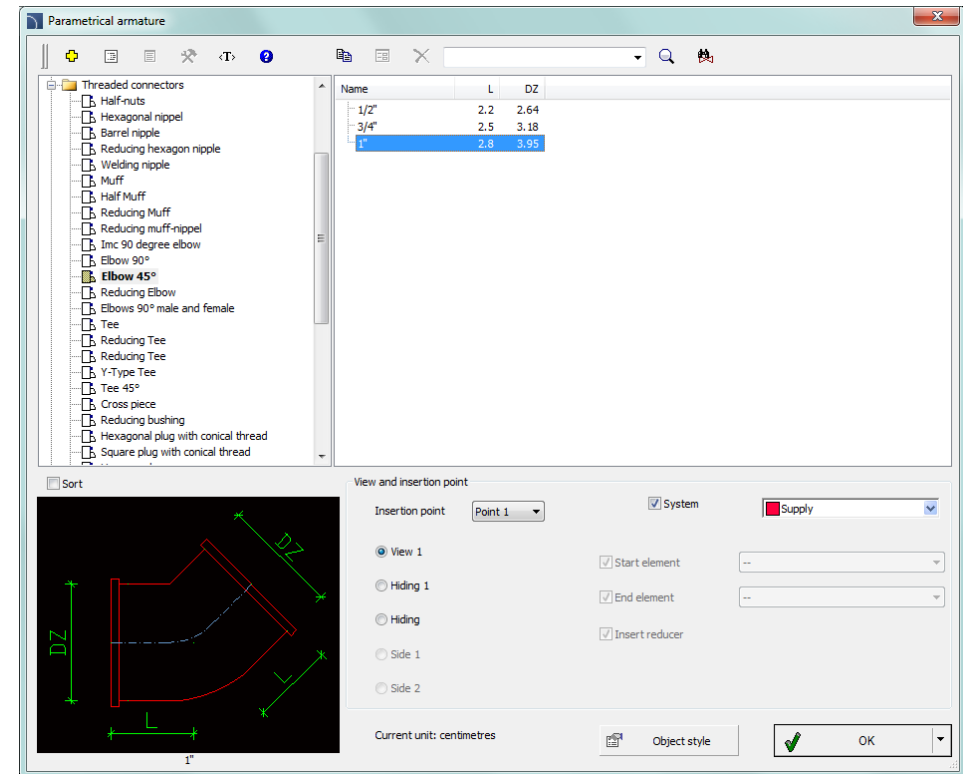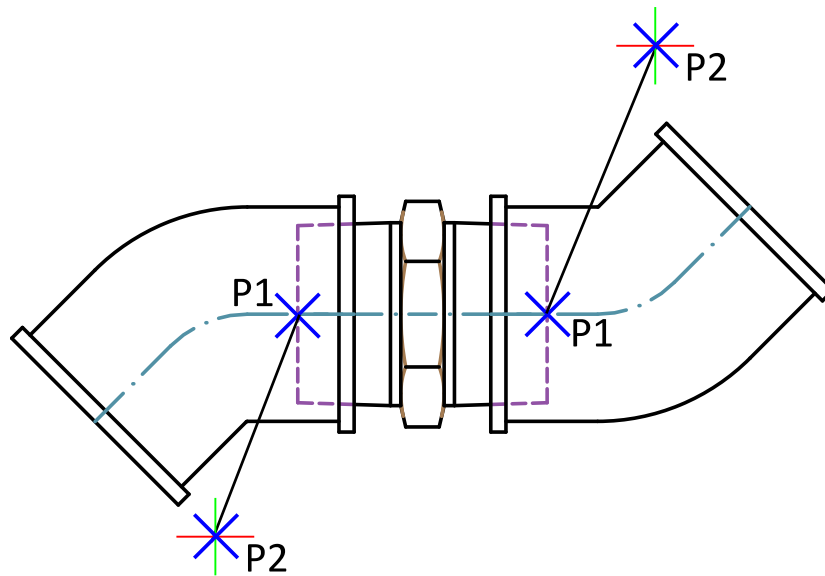
✔ Improved 'in extension' option

When inserting multiple objects (e.g. symbols, fittings, windows etc.) user can use the "in extension" option, which makes it easier to determine the position of objects that lie along the selected line. After indicating the line, user can determine the object insertion distance from the beginning of the line or from any reference point. This feature speeds up precision insertion of elements without the need of drawing construction lines or using editing commands.

200

Reference point
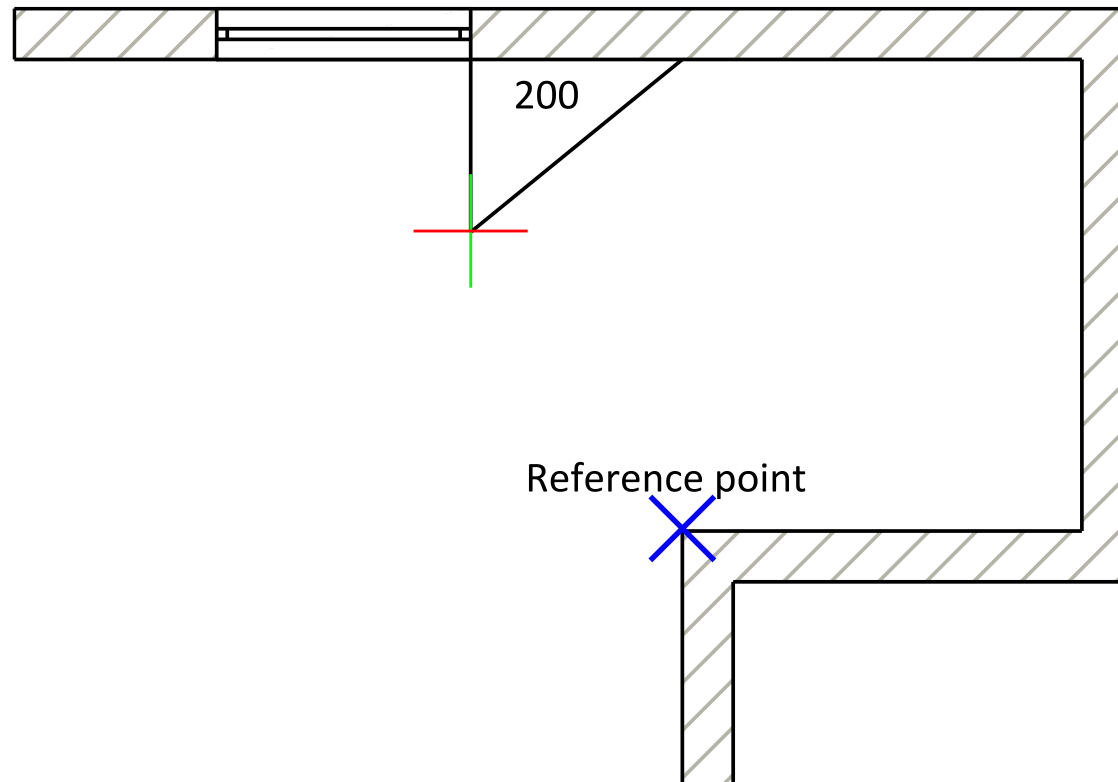
CADprofi

✓ User symbols - adding symbols to the libraries

Program allows user to define his own symbols and add them to standard CADprofi libraries.
So far, the symbols creator allowed to add symbols to a separate library. Currently symbols are added directly to each individual program commands, and their operation is similar to the operation of all program symbols.

To add user own symbols, a special creator is being used, which allows user to create and expand the database of their blocks in a simple way.

Additionally, there is a possibility to create "scalable" symbols i.e. those for which user can independently determine the X, Y and Z dimensions.

CADprofi
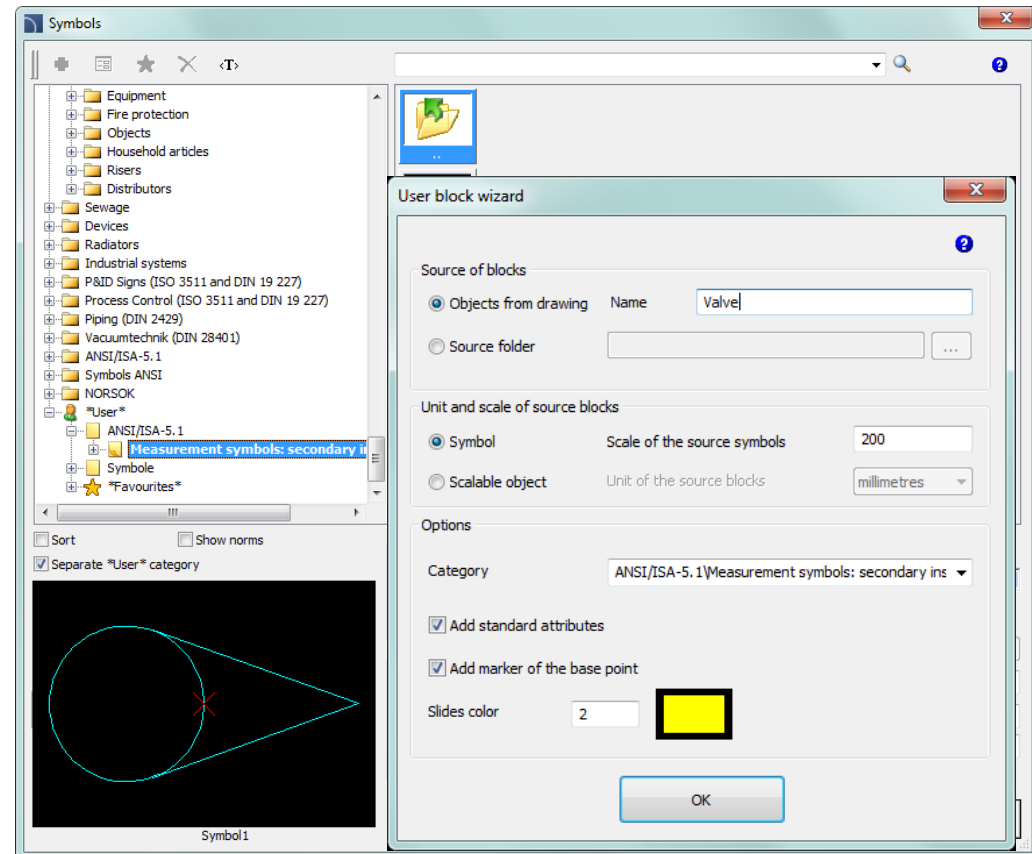
✓ User symbols – edition

Symbols that are defined by the user can be edited in a simple way. In the edit window, user can adjust many symbols parameters, including insertion method, break line points (if the symbols is inserted in the line) and others.

CADprofi
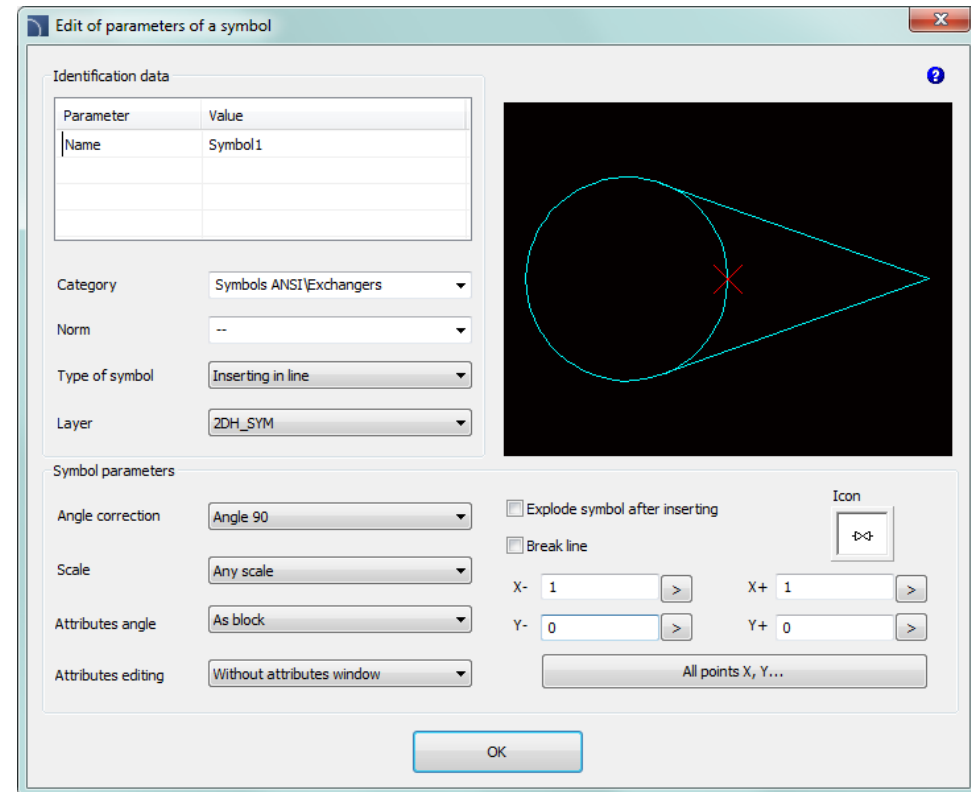
✔ Organizing user databases

In parametrical libraries user has got the possibility to expand the database with their own product types. Parameters of these products can be freely edited, and currently also organized (it is possible to specify their order appearance in the library).
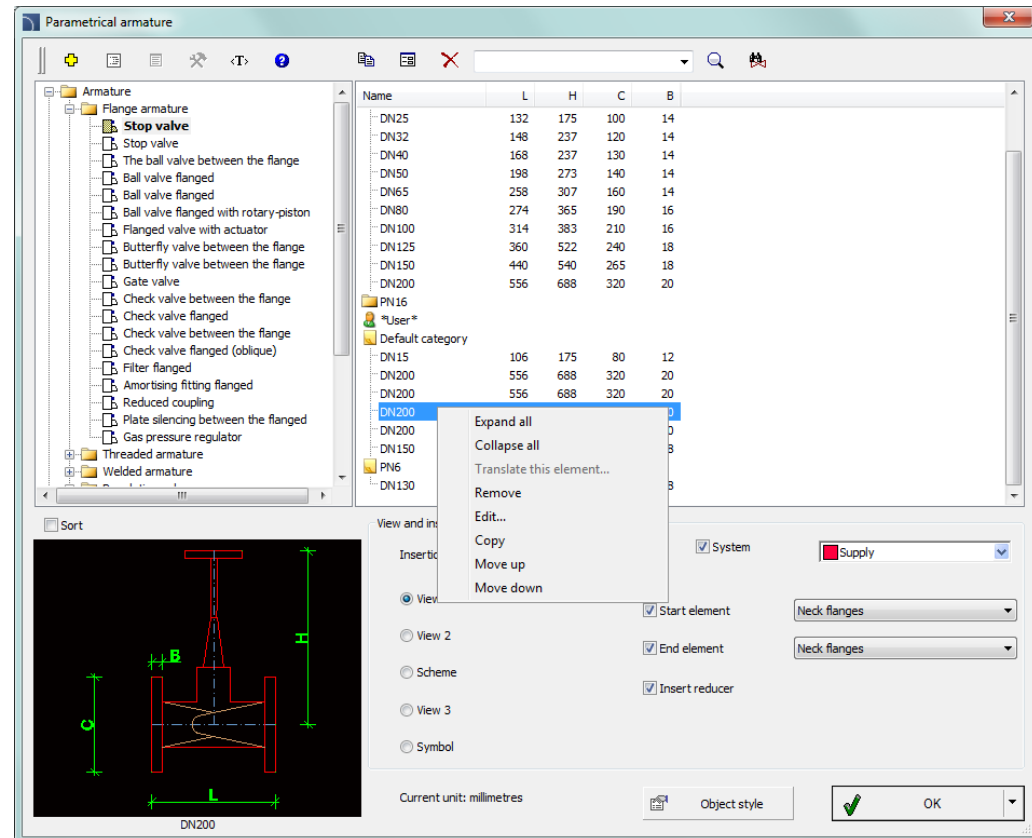
CADprofi

✓ New layer option - layer colour depends on the selected system

In the program it is possible to use the automated layers management. Extended layer structure allows user to place objects from different systems on different layers. Currently it is possible to match the objects colour to the system colour.

CADprofi
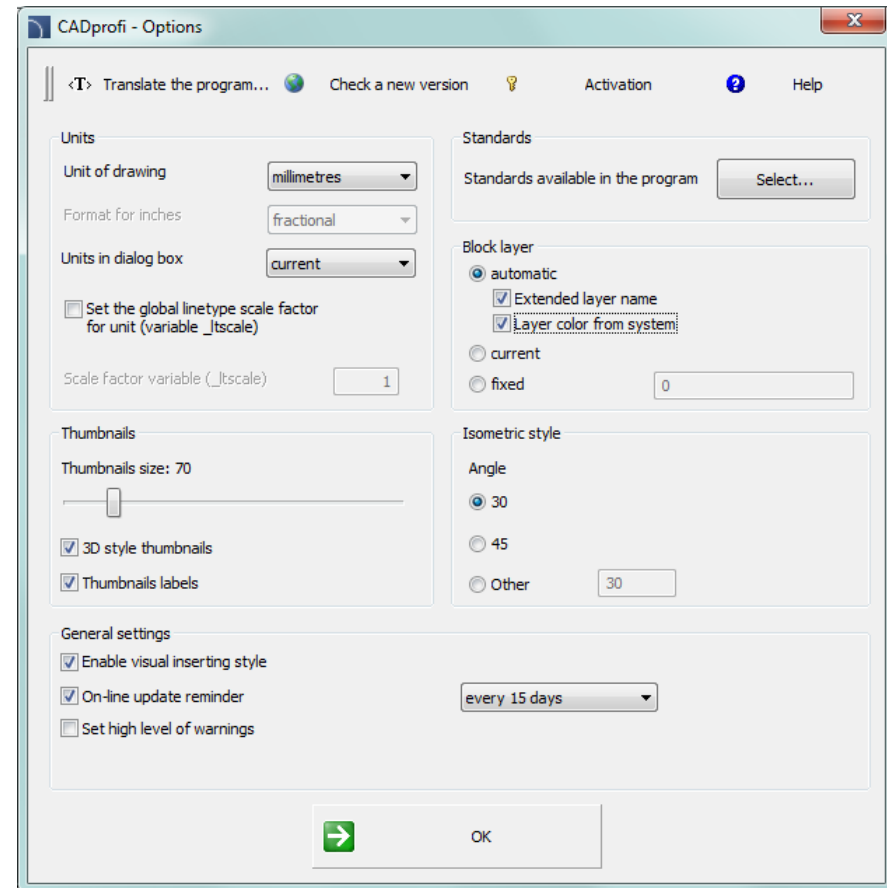
✓ Changes in the creation of bill of materials

Currently columns that are used to print can be organized by the "drag and drop" method and they can be deleted with the Delete key.

New types of specifications have been added to the *Bill of materials* command thanks to which user can quickly add them to the drawing.

New direct printing modules of specifications, working in both 32 and 64 bit CAD programs have been added to the program.

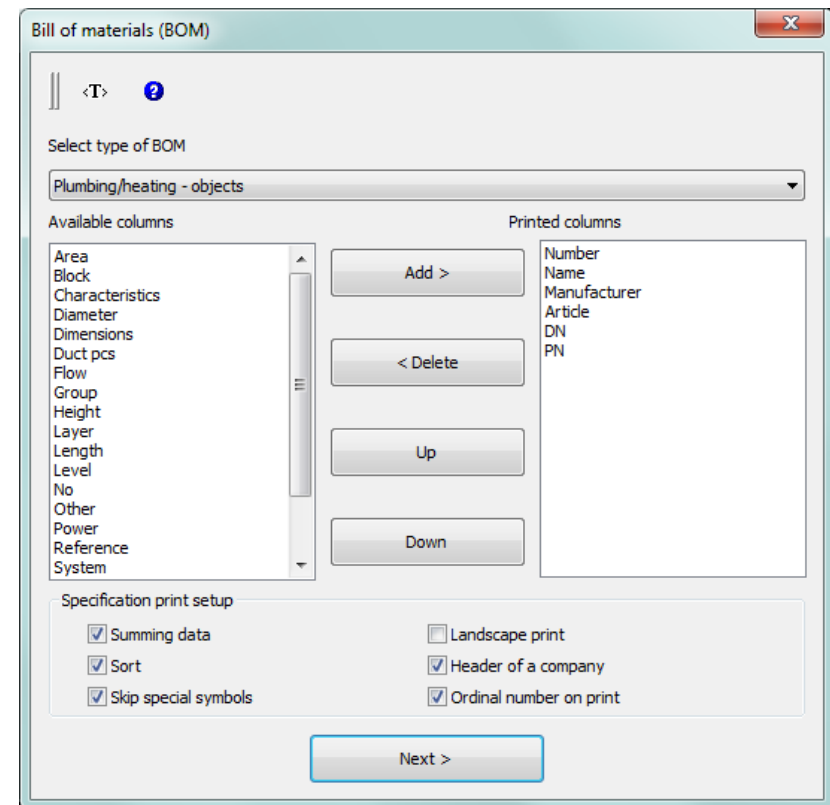| No	Mark	Name	Sume	Weight	Note
--		Neck flanges	2pcs.		
--		Neck flanges	2pcs.		
--		Neck flanges	2pcs.		
--		Neck flanges	2pcs.		
S-4		Butterfly valve between the flange	1pcs.		
S-3		Gate valve	1pcs.		
S-2		Filter flanged	1pcs.		
S-1		Stop valve	1pcs.		

Bill of materials (BOM)

<T> ❷

Select type of BOM

Plumbing/heating - objects ▾

Available columns
- Area
- Block
- Characteristics
- Diameter
- Dimensions
- Duct pcs
- Flow
- Group
- Height
- Layer
- Length
- Level
- No
- Other
- Power
- Reference
- System

Add >
< Delete
Up
Down

Printed columns
- Number
- Name
- Manufacturer
- Article
- DN
- PN

Specification print setup
- ☑ Summing data
- ☑ Sort
- ☑ Skip special symbols
- ☐ Landscape print
- ☑ Header of a company
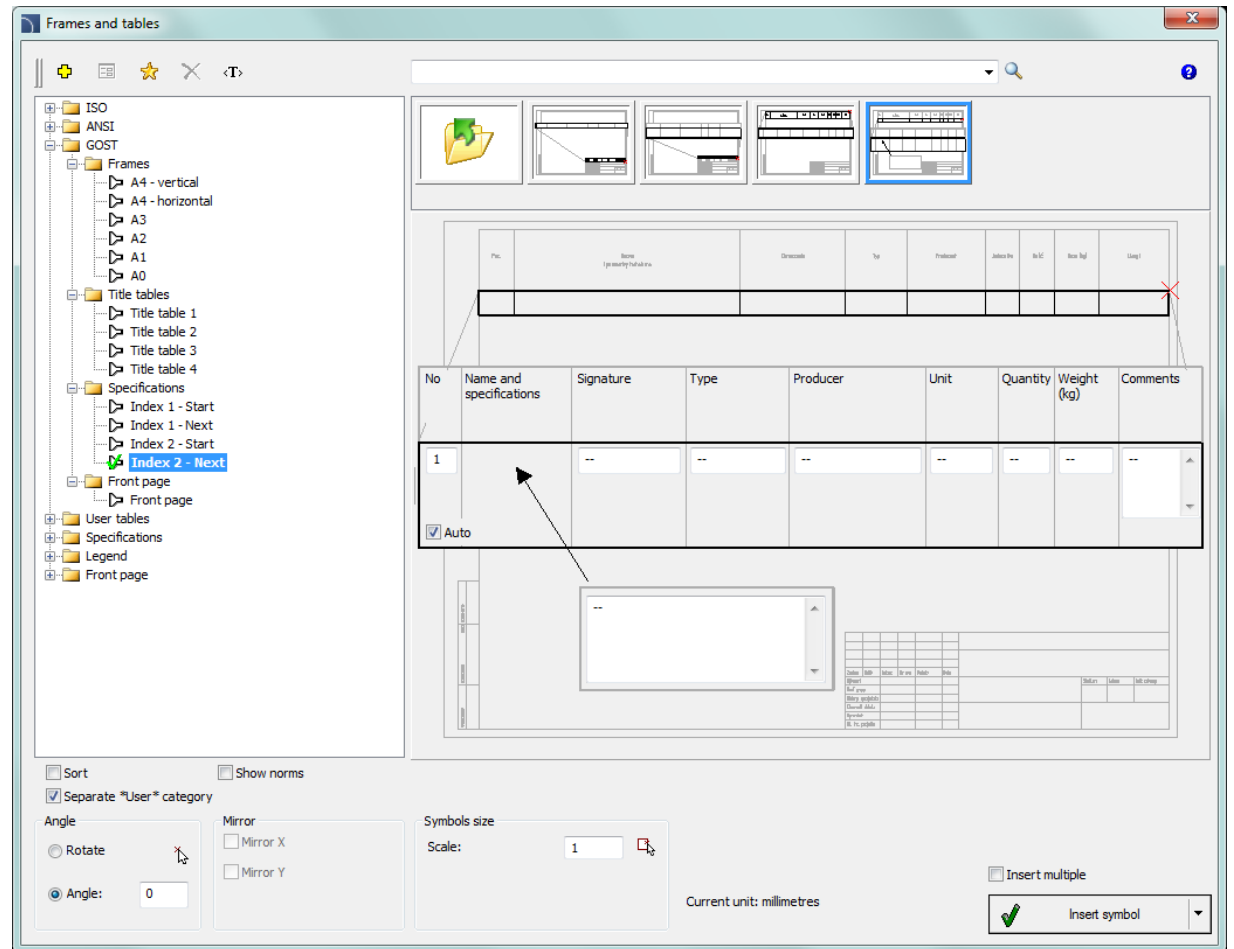- ☑ Ordinal number on print

Next >

CADprofi

✓ **Extended *Frames and tables* command content**

Additional elements have been added in the *Frames and tables* command, including:
- frames,
- tables,
- specifications (tables used for quick creation of different lists),
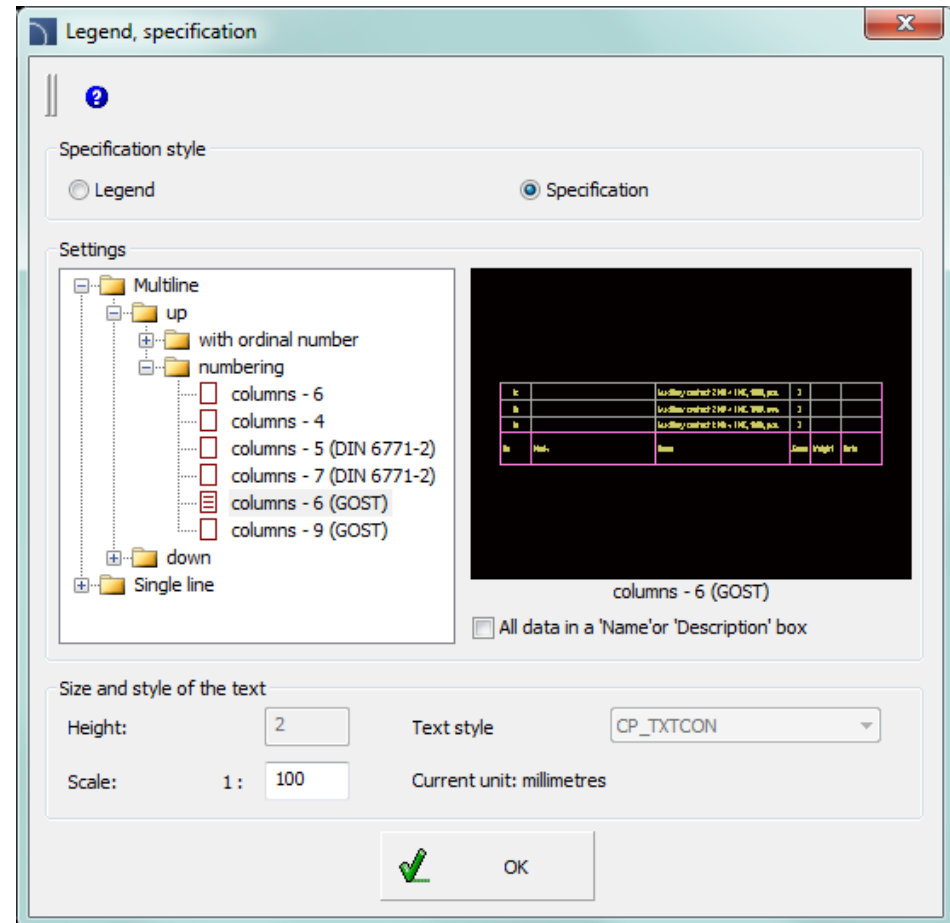- front pages.

In addition, the *Frames and tables* command introduced the possibility to enter multiline texts.

CADprofi

✓ Extended *Bill of materials* command content

Additional specifications which automate the creation of specification tables have been added to the *Bill of materials* command.
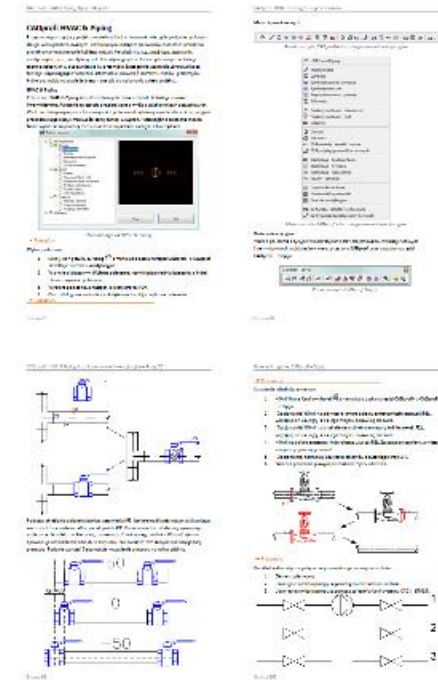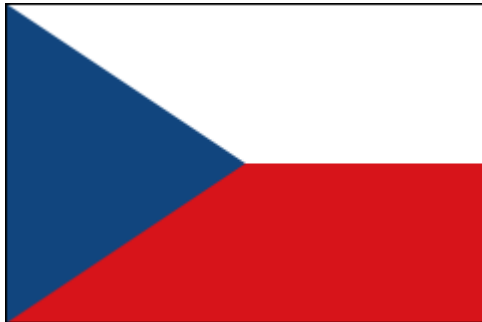
CADprofi

✓ **User manual is available in Czech language**

Full documentation in the Czech language, including the manual in the pdf format and program help system has been prepared for the new program version. Additionally online help is also available at www.cadprofi.com.

CADprofi

✓ Wavin library – improved drawing of plumbing installations

Until now during the plumbing designing it was necessary to insert individual elements from the library. Currently, in the Wavin library there is a possibility to automatically draw sequences of installations.

This option greatly improves drawing, because the program automatically inserts all the necessary pipes and elbows along the indicated points.

During drawing program will adjust the drawn angle to the existing bends (15°, 22°30', 30°, 45°, 67°30', 87°30').

CADprofi
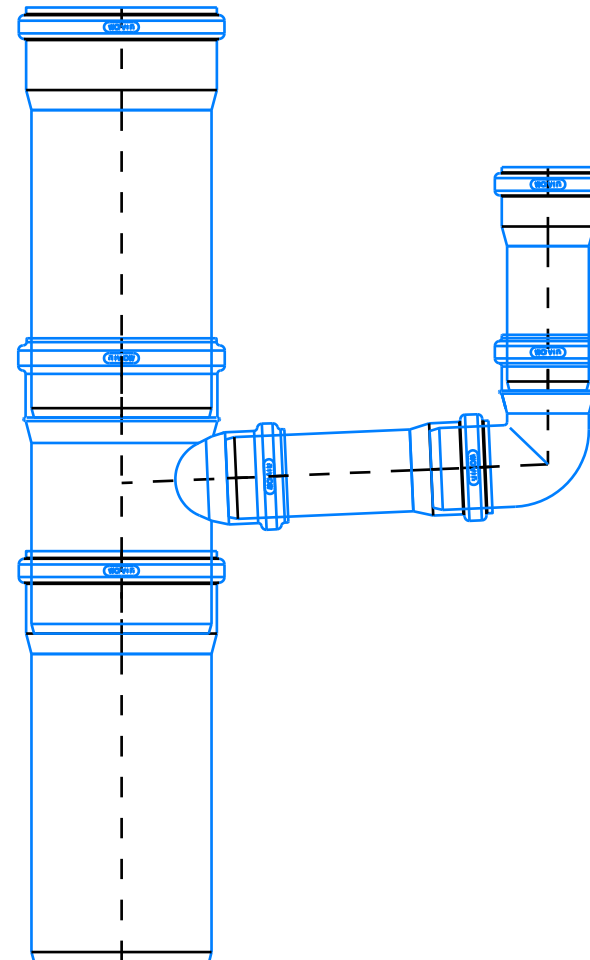
✓ New library of Chemowent products

Chemowent products, that are used in the chemical resistant ventilation systems have been added to the program. The library contains a set of elements that allow to design any installations:
- ventilation lines with a circular and rectangular cross-sections,
- fittings, including: bends, tees, reducers, air intakes and others,
- armature (deflectors, flaps),
- various types of chemical resist fans.

CHEMOWENT®
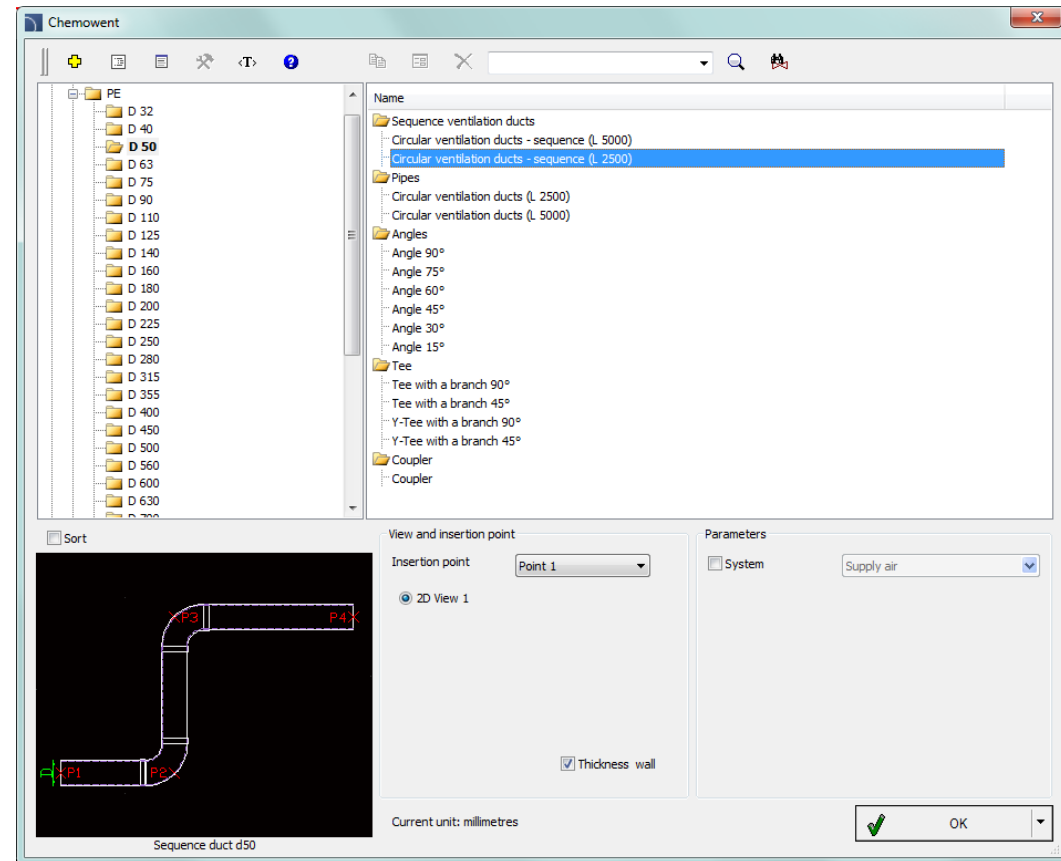
✓ New library of BH-Res products

BH-Res products that are used to design ventilation with the Climaver mats have been added to the program. The library contains a set of BH-Res products, including:

- ventilation ducts with a rectangular cross-section,
- elbows,
- departures,
- double branch bend and simple tees with rectangular or circular departure,
- symmetric and asymmetric reductions,
- offsets,
- caps,
- circular connectors,
- Plenum boxes with side nipple or upper nipple,
- H profiles (that allows to connect Climaver ducts with cables made of sheet metal).
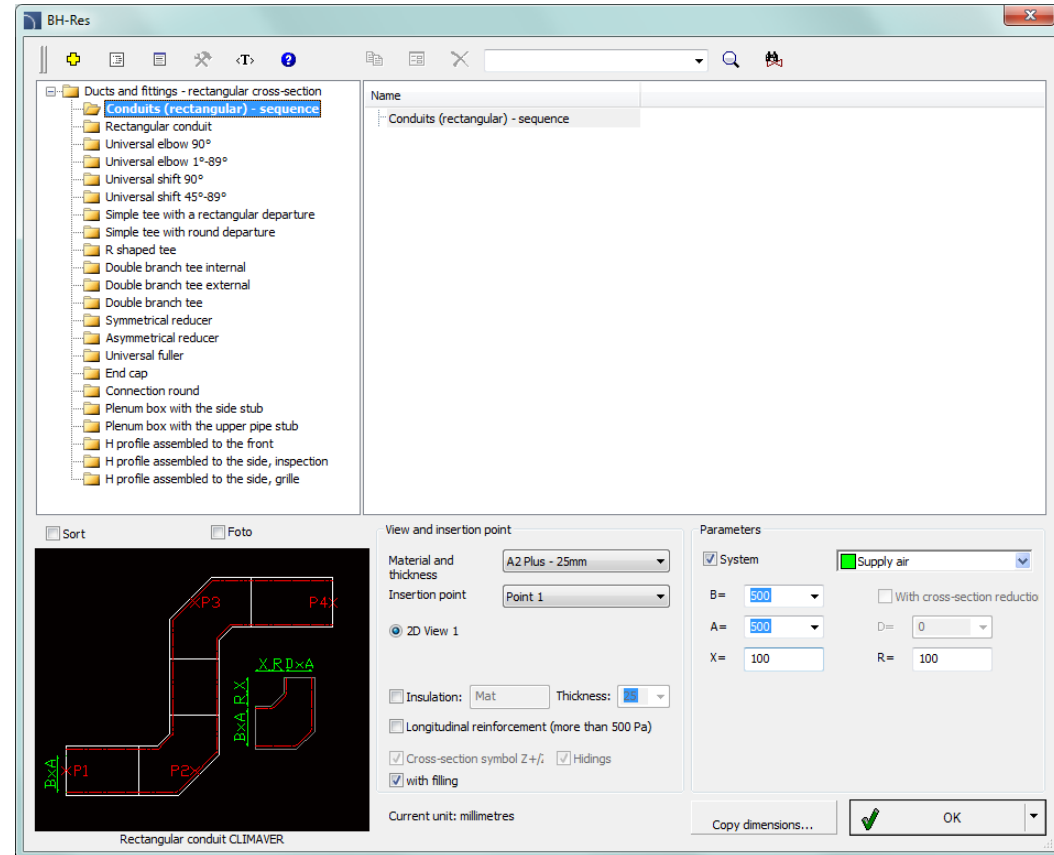
✓ **Update of manufacturers' libraries:**

CADprofi

✓ **Adjustment to many base CAD programs**

CADprofi 11.05 has been adjusted to work with latest CAD programs, including: AutoCAD 2015, BricsCAD V15, GstarCAD 2015, ZWCAD 2015+ Professional and others.

CADprofi 11 currently works with many base CAD programs including: AutoCAD (since the 2000 version), BricsCAD, GstarCAD, IntelliCAD, progeCAD, ZWCAD, ARES Commander Edition and others.