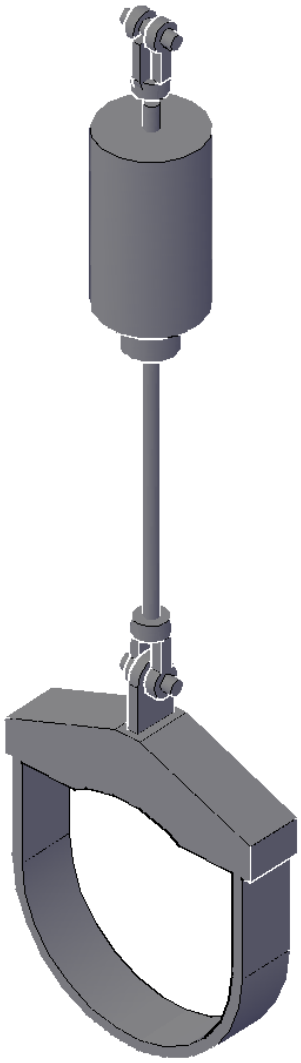
LICAD plug-in



for

AutoCAD

and

AutoCAD Plant 3D

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System requirements

- for Licad4Acad: AutoCAD Version 2013 up to 2017
- for Licad4Plant3D: AutoCAD Plant 3D Version 2013 up to 2017
- **LICAD Version 10.0**

Installation

Start the installation program and follow its instructions.

This version of the plugins is using the new AutoCAD plugin technique. This requires that the files are stored in folder that AutoCAD is looking at for plug-ins.

AutoCAD will load the plugin automatically if it's recognized.

This doesn’t require neither configuration nor manual loading plugins.

The installation directory is:

[commonappdata]\Autodesk\ApplicationPlugins\ LISEGA LICAD3D.bundle

[commonappdata] is normally: "C:\ProgramData\Autodesk\ApplicationPlugins"

Insertion of LISEGA supports

Two variants are available for placing LISEGA components.

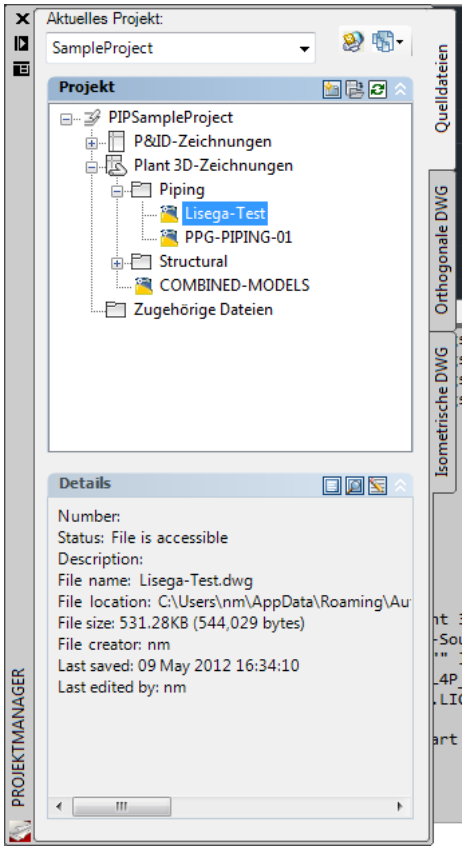
The first possibility is the interactive process by which LICAD[1] program is directly accessed during the creation of the support in the 3D model.

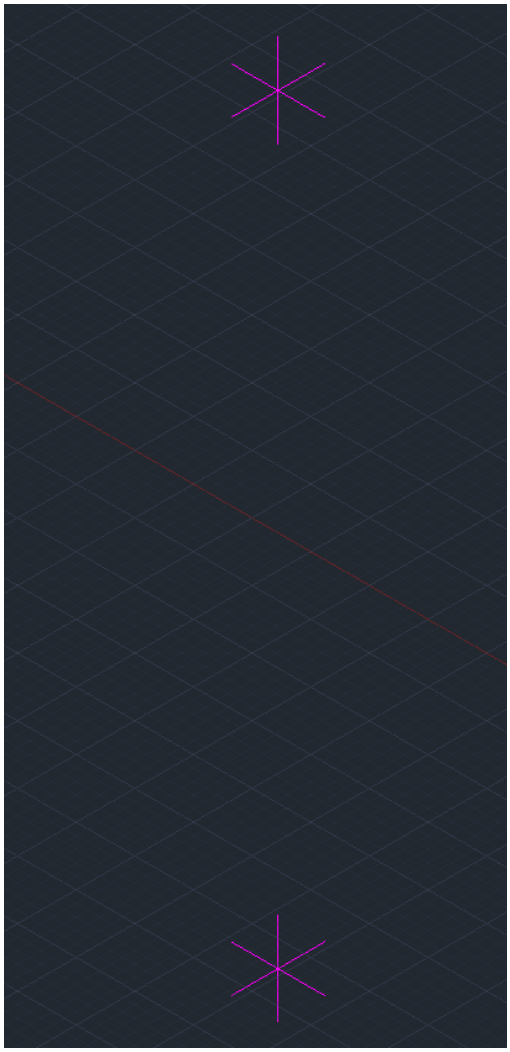
The second possibility is the import[2] of L3D files created with LICAD. The information contained in the L3D file is then transferred to corresponding 3D objects.

Variant 1:

Example of the command „LICAD“ of the plug-in Licad4Plant3D_V18 under Plant 3D 2011.

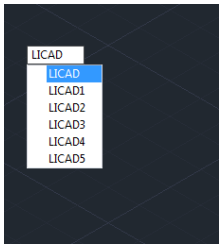
An empty drawing file is used here to draw attention to the essential points. A support is to be placed between the two 3D crosses displayed here.





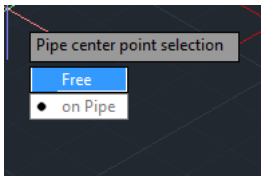
[1] For this, the LICAD program must be installed on the computer
[2] The installation of LICAD is not necessary for this.

Configuration 1 is used. This can be carried out by the command „LICAD“ and subsequent request for the configuration number or by the command „LICAD1“, which already has the number in the name.



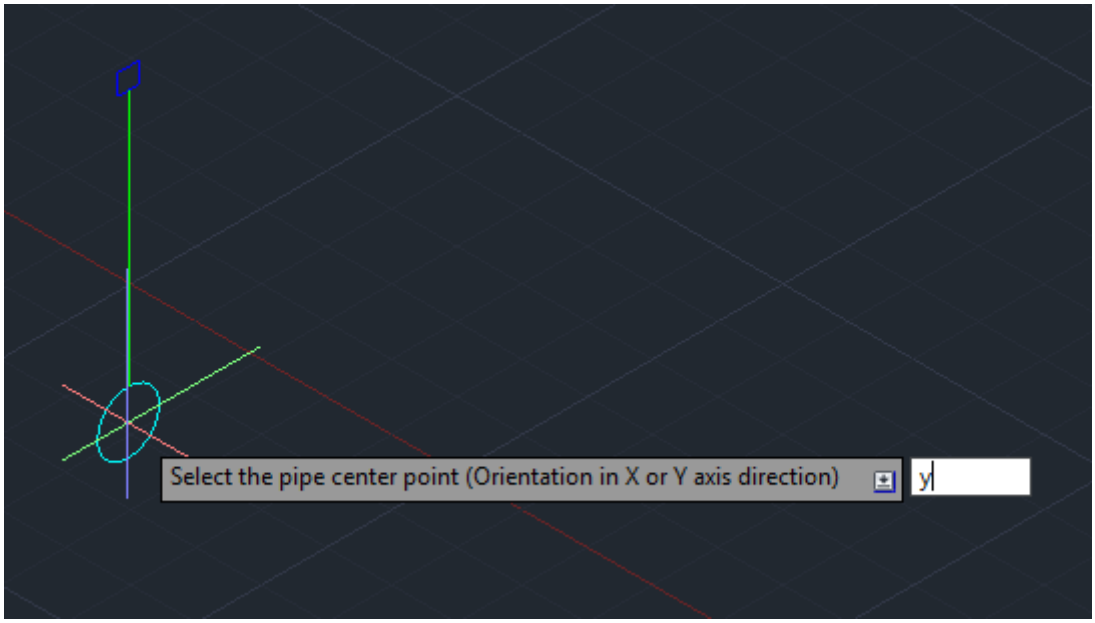
As the “LICAD1” command was activated, the request for the configuration number is skipped over.

The question is then put as to whether the support is to be free or placed on the piping.

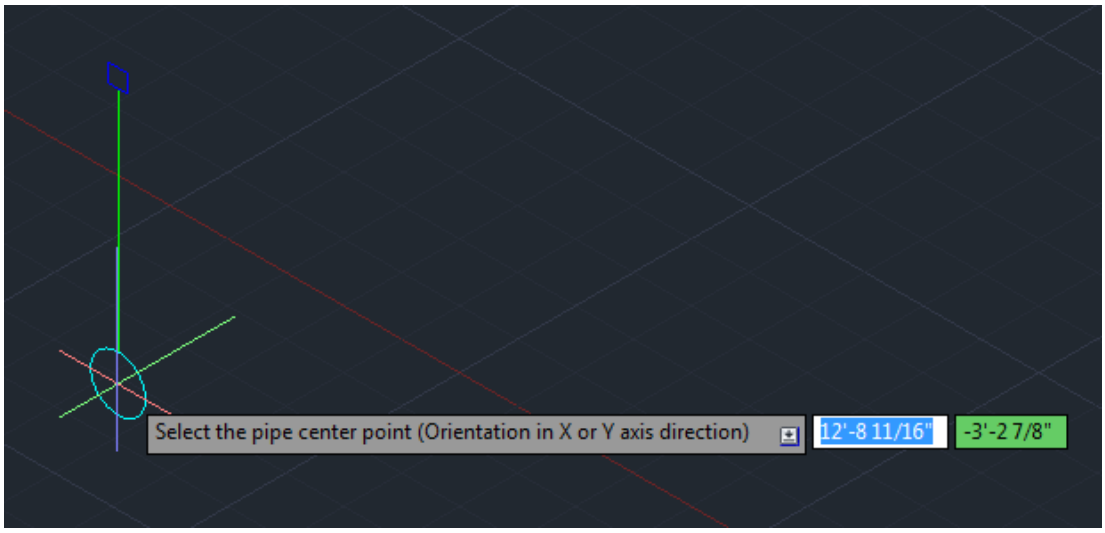


As an empty drawing was used in the example, the „on pipe“ option does not function, so the „free“ option was chosen. During the pipe center point input, the positioning of the clamp in the direction „X“ or „Y“ axis can be decided on. The specification is the „X“ direction.

After the entry of „Y“ instead of a point the clamp is correspondingly displayed rotated by 90° (see the two following illustrations).

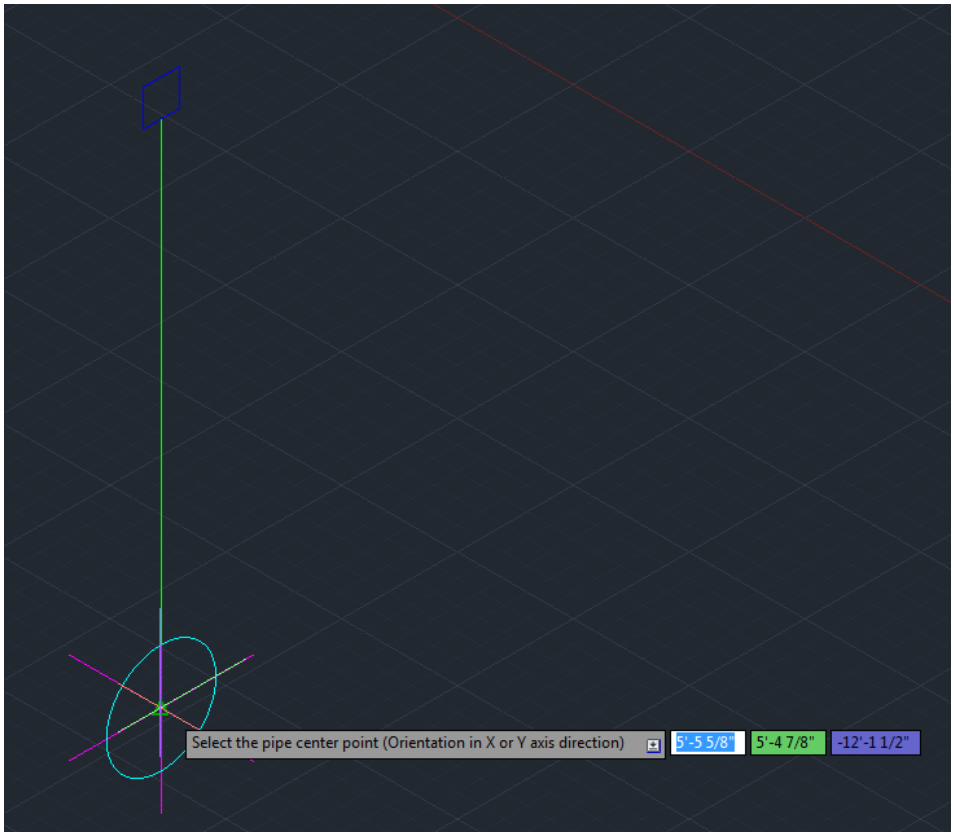


After confirmation of the entry the clamp rotates in the „Y“ axis direction.

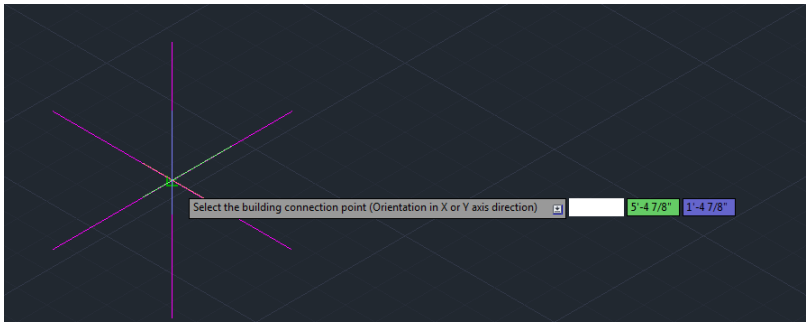


By entering the letter „X“, and following confirmation, the positioning of the clamps is again carried out in the direction of the X axis. Now the pipe center point is determined here on the intercept of

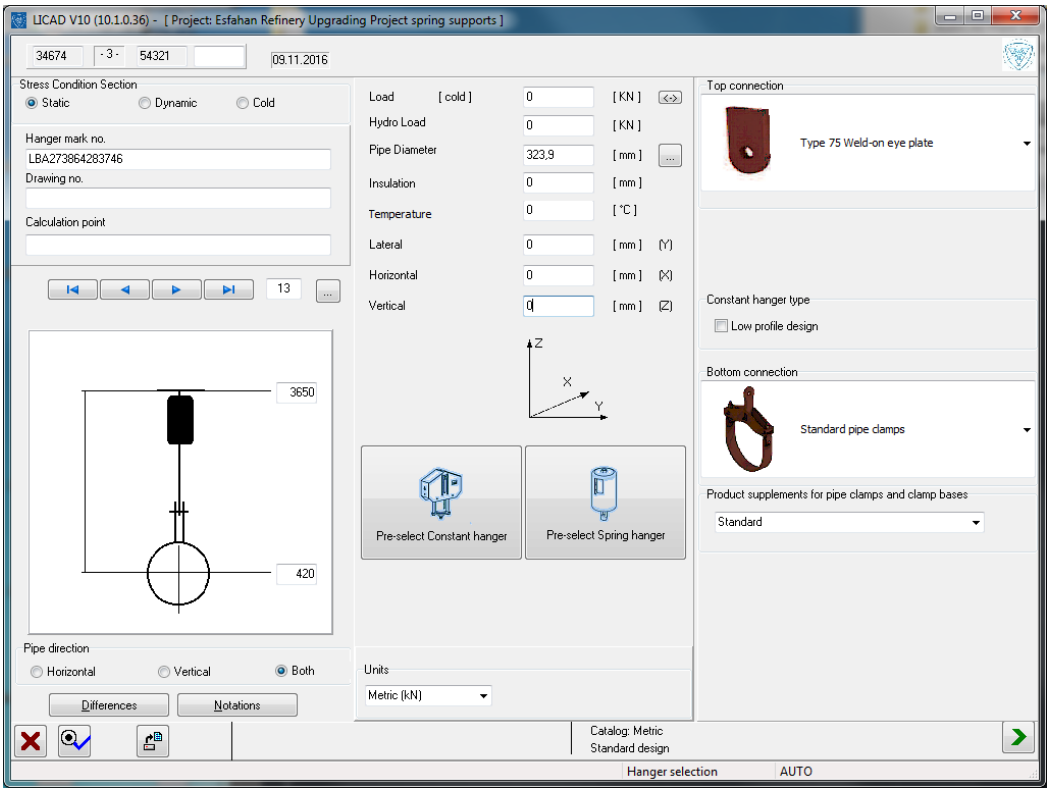
the lines of the lower star.



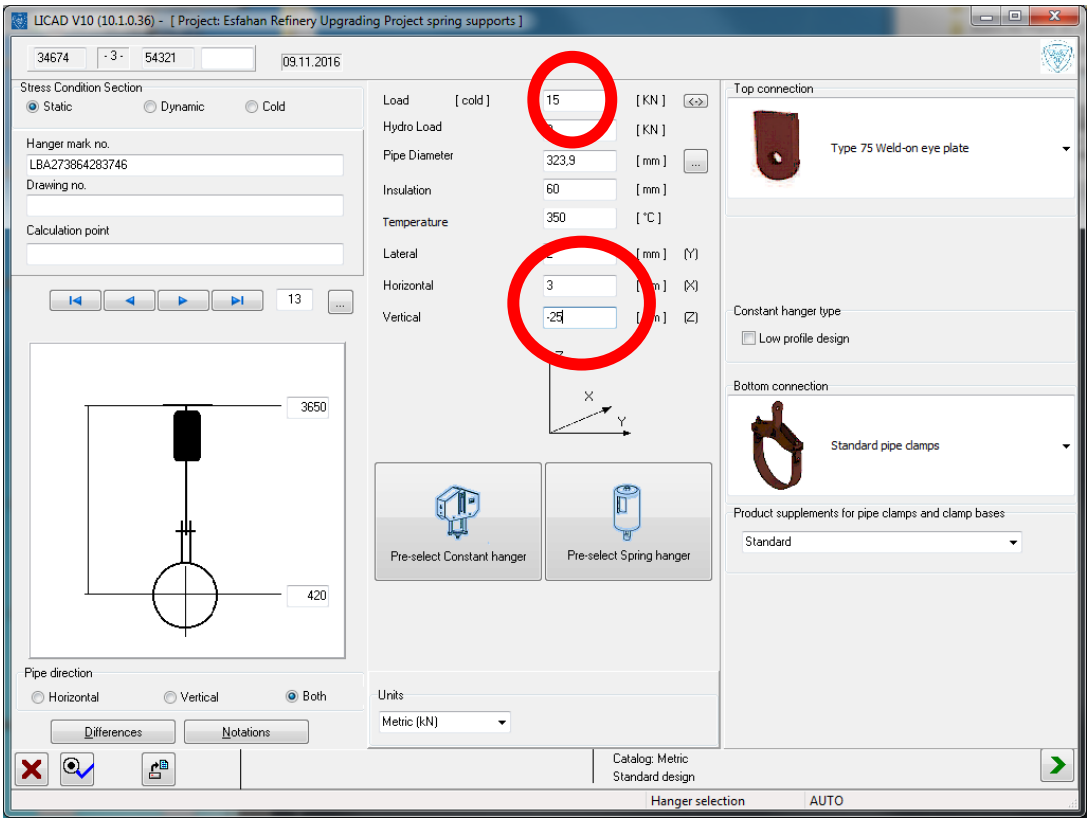
After that the upper attachment point of the support to the intercept of the lines of the upper star is determined.



After confirmation of the structural attachment point the LICAD program is automatically started. There the relevant data available (the configuration selected in LICAD is No. 13, the elevation numbers are entered) are already in the input fields. As the free mode was selected, no pipe data are on hand. In the „on pipe“ mode the data for the diameter, temperature and insulation would have been taken over.



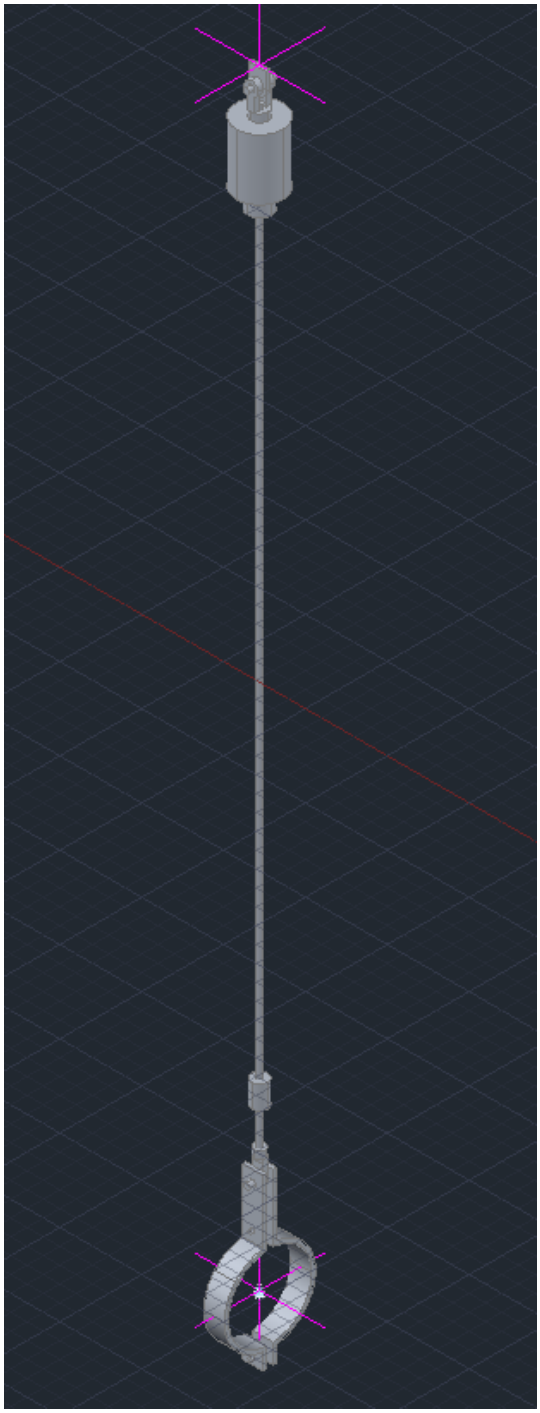
The missing data needed by LICAD for the design can now be simply supplemented.



On completion of all inputs, only the button at the bottom right with the green arrow now has to be pressed. LICAD then assembles the components required and supplies the information to the plug-in.

The plug-in reads this information and generates from it the whole support out of the individual components composed from 3D bodies.

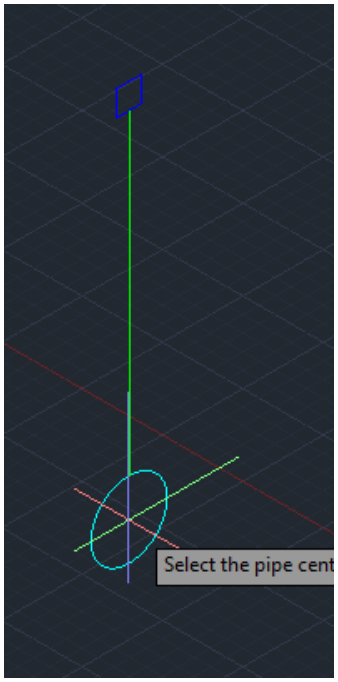
The result of this example looks as follows:



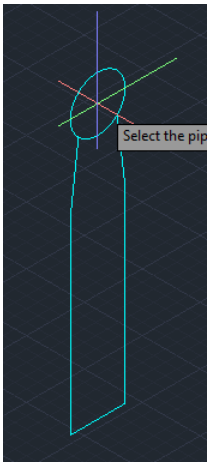
Configurations available

For the commands LICAD, LICAD1, LICAD2, LICAD3, LICAD4 and LICAD5 the following configurations are currently available.

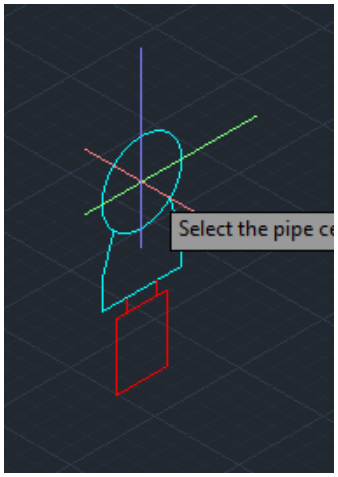
Configuration 1:
(Simple suspension for horizontal pipes)



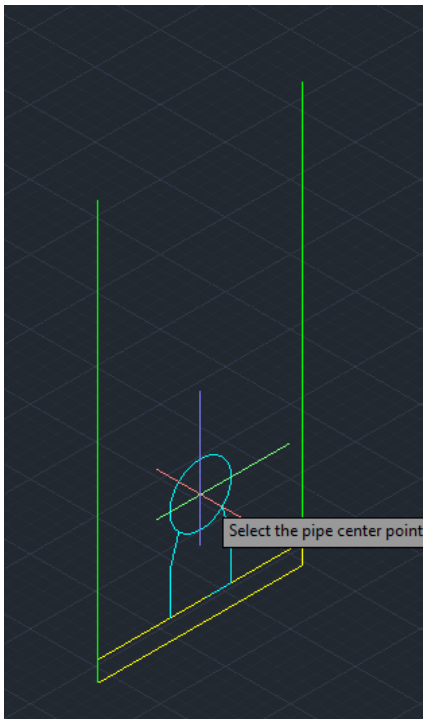
Configuration 2:
(Clamp base / pipe shoe for horizontal pipes)



Configuration 3: (Clamp base with spring support for horizontal pipes)

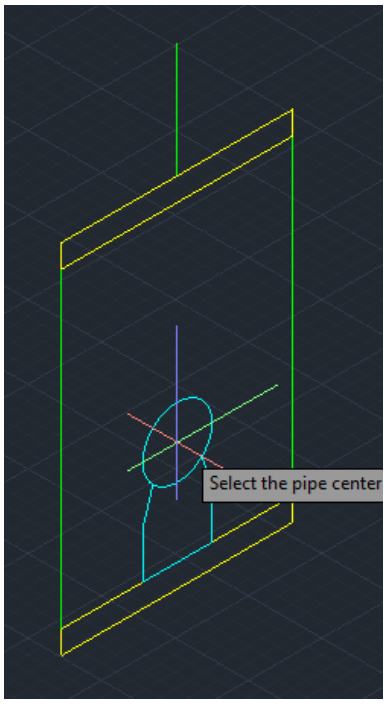


Configuration 4 (for horizontal pipes):

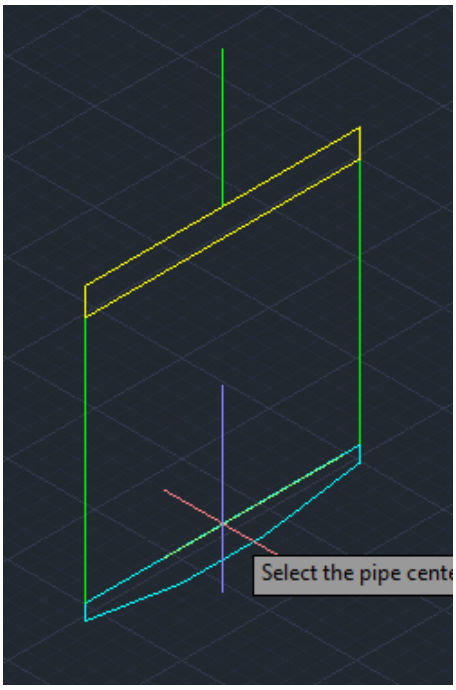


Configuration 4 (for vertical pipes):

Configuration 5 (for horizontal pipes):

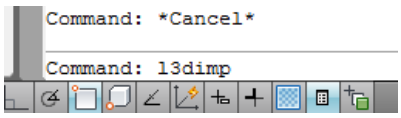


Configuration 5 (for vertical pipes):

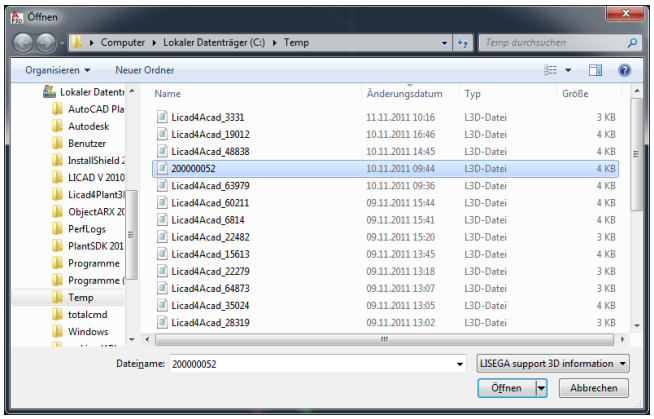


Variant 2: Import of L3D files

Command input:

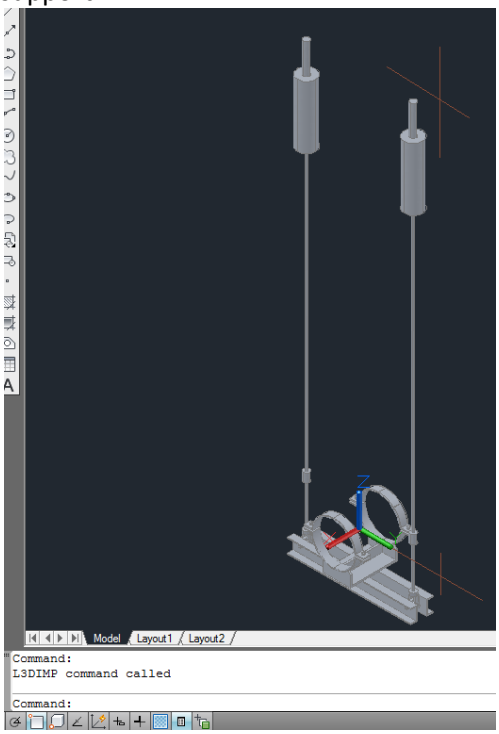


1. An „open file“ dialog appears, in which files of the type „LISEGA support information (*.L3D)“ can be selected.



Select a file and press the „open“ button.

2. The plug-in reads the information from the L3D file and creates from it the 3D model of the support.



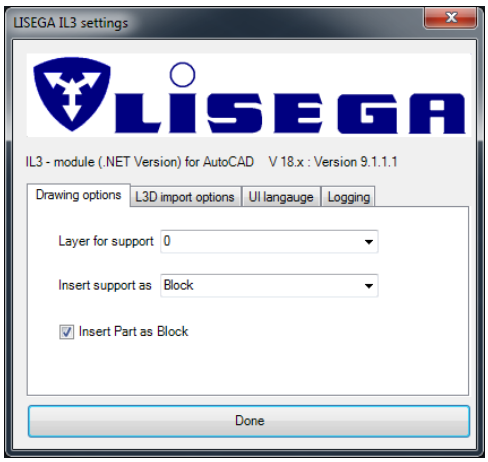
Commands available

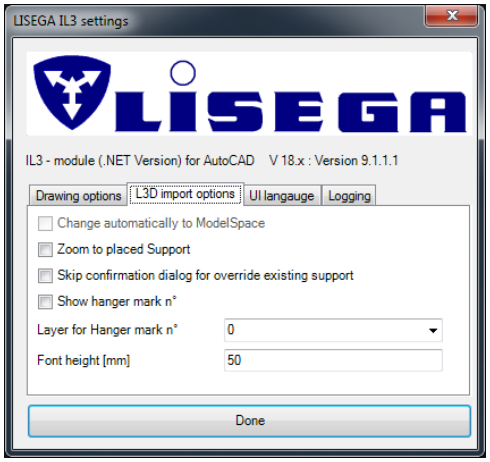
The group denotations of the commands go as follows “L4P_.“ for the Plant3D plug-in and „L4A_.“ for the AutoCAD plug-in. This way, ambiguities in the commands are avoided. The commands can be used without group denotations if only one plug-in (Licad4Acad or Licad4Plant3D) is loaded in each case. If both plug-ins have been simultaneously loaded the group denotation must be placed at the front so that the name is distinctly clear (e.g.: L4A_.LISET or L4P_.LISET)

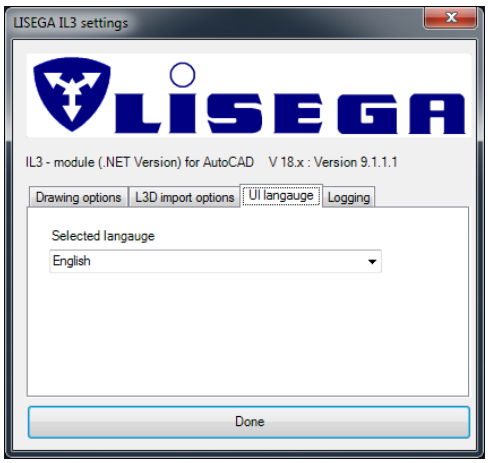
The actual commands have the same name in both plug-ins:

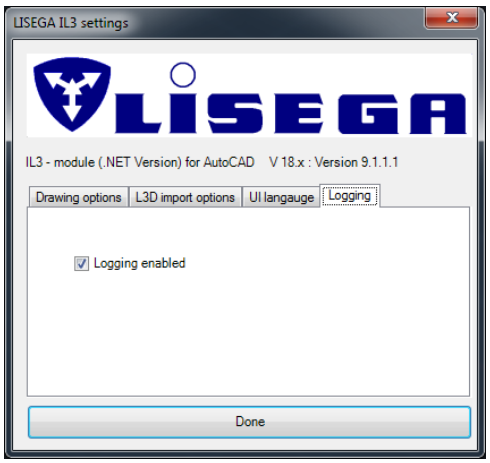
LISET

The settings for the plug-in can hereby be displayed and if necessary altered.



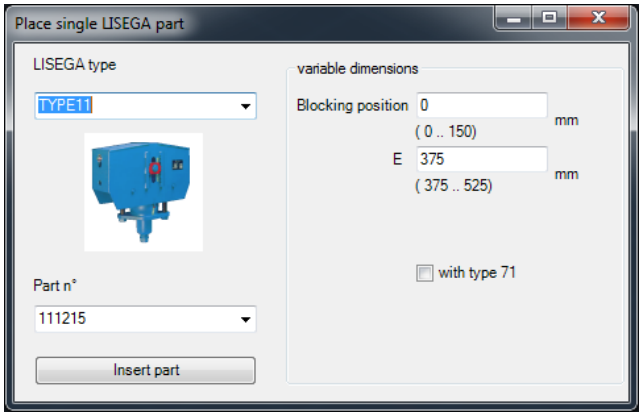






LIPART

With the aid of this command individual components from the LISEGA catalog can be inserted into the 3D model.



LICAD, LICAD1, LICAD2, LICAD3, LICAD4 & LICAD5

These commands always start the LICAD program after requesting the necessary information in AutoCAD/Plant 3D. A distinction is only made with regard to the preselection of the configuration.

L3DIMP bzw. -L3DIMP

These two commands import LISEGA supports available in the shape of L3D files.

The command „L3DIMP“ opens an „open file“ dialog. The „-L3DIMP“ command is the command line variant of the command „L3DIMP“ and queries the file name in the command line.

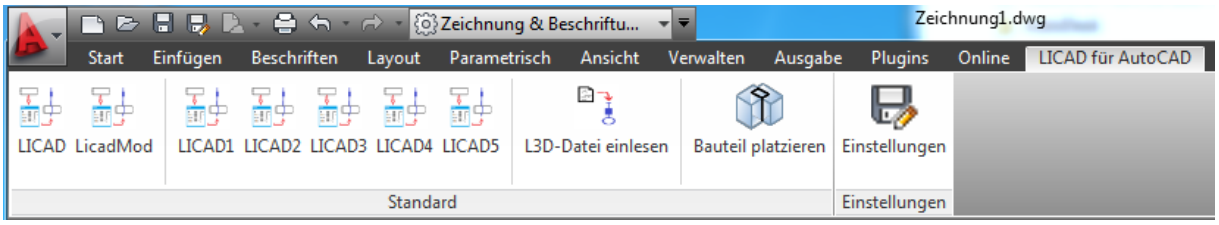
It is necessary that a support is created, stored and exported beforehand as an L3D file with the LICAD program. (See attachment - LICAD creation of a support, export of a stored support as L3D file)

Attachment

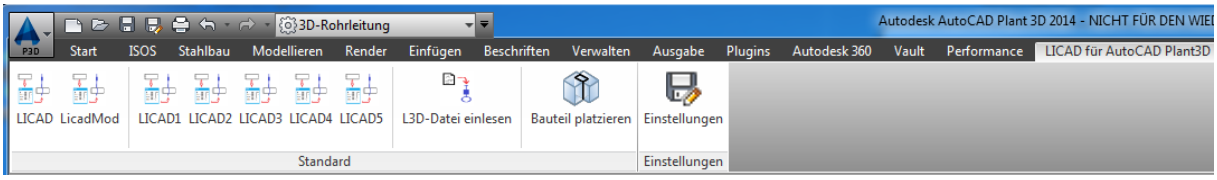
AutoCAD menu extension, tool box and ribbon for plug-in

The following ribbon controls are available:

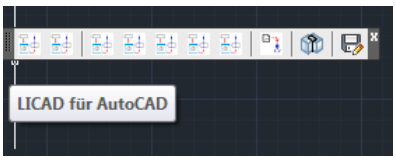
LICAD for AutoCAD

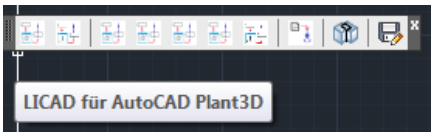


LICAD for AutoCAD Plant3D

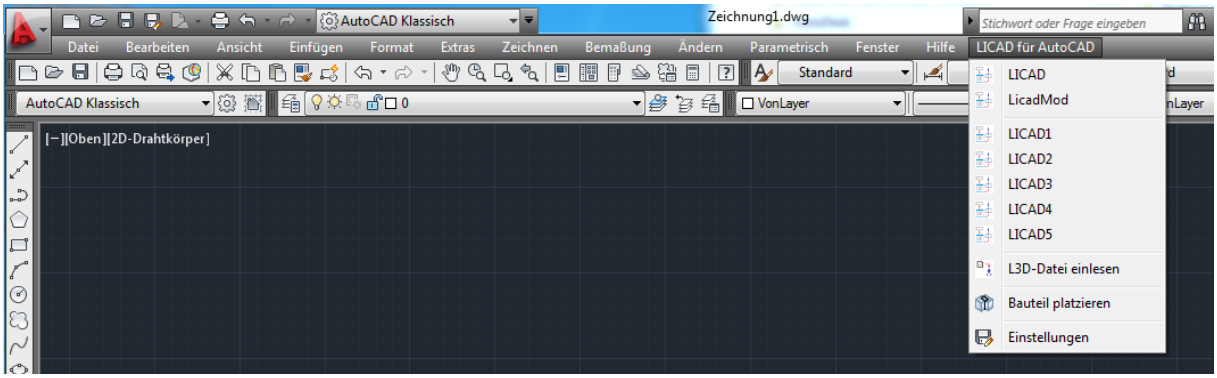


and the tool palettes





as well the menus for classic view



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