Plateia

by CGS Labs

Define a new point type

Tutorial

CGS LABS

CGS Labs d.o.o.

Brnčičeva ulica 13

1000 Ljubljana

Define a new point type

Title: **Define a new point type**

Document date: 07. 12. 2021

Version: 1.0.

Printing: CGS Labs d.o.o.

T: +386 1 235 06 00

E: info@cgs-labs.com

Internet: www.cgs-labs.com

Table of Contents

INTRODUCTION 3
1. Define a new point type 4
2. Define new point type from an existing point 7
3. Copy an existing drawing 8
4. Import Attributes from File 9

INTRODUCTION

In this tutorial, you will learn how to define a new point type. In addition to the traversed and detailed points that are built in the Layout module as standard, you can define a new point type having any geometry or attribute.

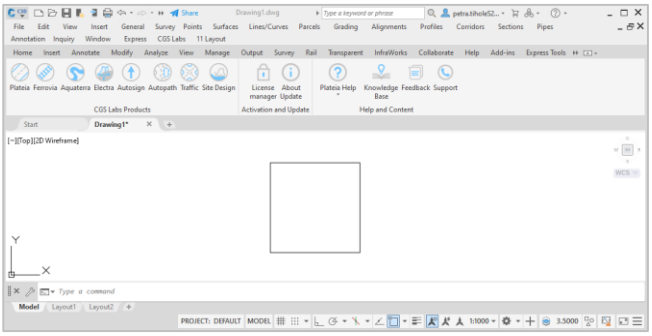
As noted, a point can have any appearance. There are very well known symbols for a geodetic point or sewer shaft. Point geometry can be drawn using usual commands such as line, arc or similar ones. Point attributes such as Label and Elevation are obligatory while others can be added. Attributes can be visible or invisible.

There are three different ways to define a new point type. You can prepare the geometry in the current drawing and then use the Define new point type command. The second way is then that you already have one type of point in the drawing, and based on that you create a new one. Alternatively, you can copy the drawing with the CGS point block and modify it according to your needs.

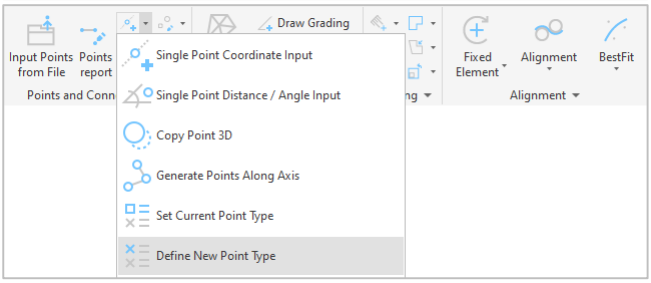
1. Define a new point type

The first option is to create a new point type from scratch using the Define a new point type command from the Layout tab.

1. Draw a point geometry using commands like line, arc or similar ones. The centre of the symbol must be positioned in the 0,0,0.



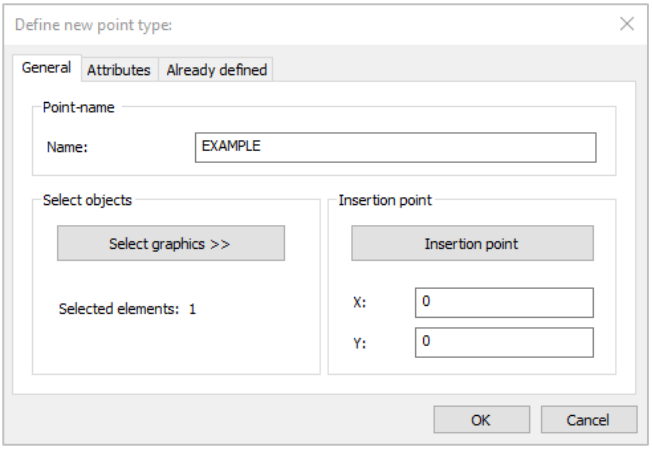
2. Click on the Define New Point Type icon.



3. Type a point name.

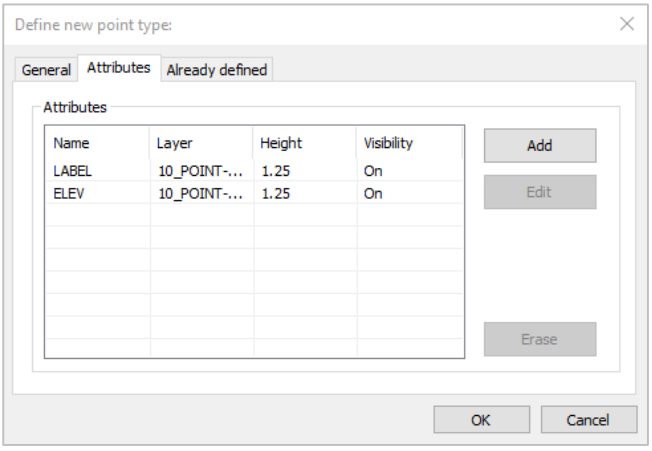
4. Select the geometry that defines point appearance or symbol in the drawing by pressing the Select graphics >> button.

5. Select the Insertion point of the selected graphic. You can leave the value of X and Y 0.



6. Click the Attributes tab.

Point attributes such as LABEL and ELEVATION are obligatory, so we see that they are already entered in the table and we can't erase them. However, we can change some properties of those two attributes such as layer, position, height, rotation and visibility. If you want to do that, click on the Label or Elev line and press Edit.



7. You can add other attributes, by pressing the Add button.

8. Type the attribute name.

9. Select the layer from the drop-down menu.

10. Press on the Select point … button and define the insertion point in the drawing that represents the position of the attribute or type X and Y coordinates.

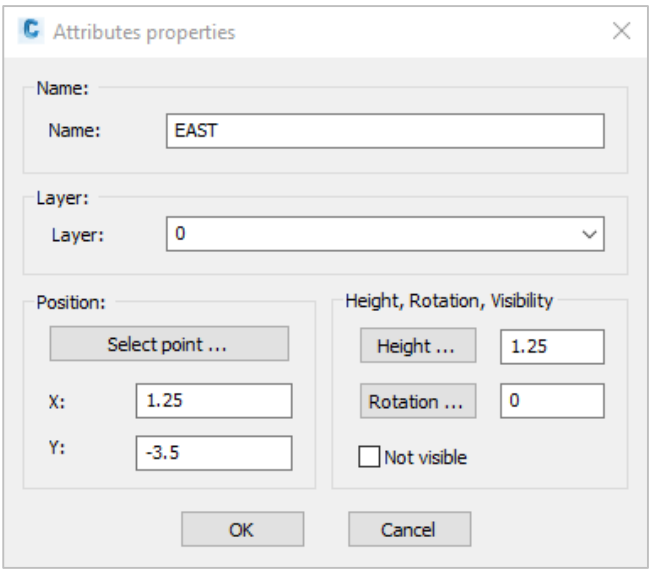
11. Type the height and the rotation of the attribute or select these values directly in the drawing.

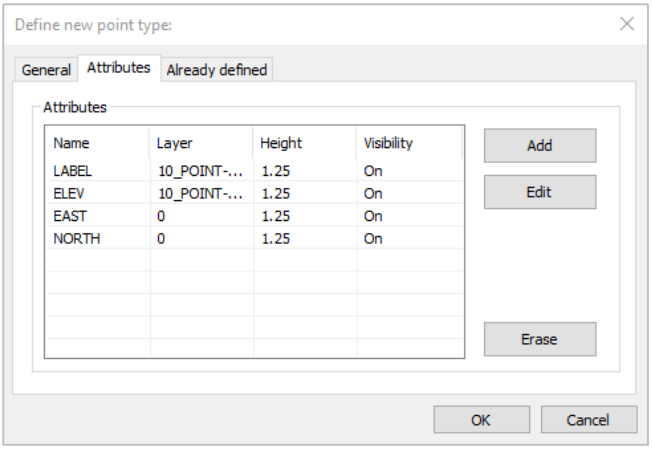
12. Check the box at the Not visible if you want that the attribute is hidden.

By selecting the Already defined tab, you can browse the existing point types.

13. When you have finished, confirm by pressing OK.

14. Another dialog box opens, where you can confirm again by clicking OK.



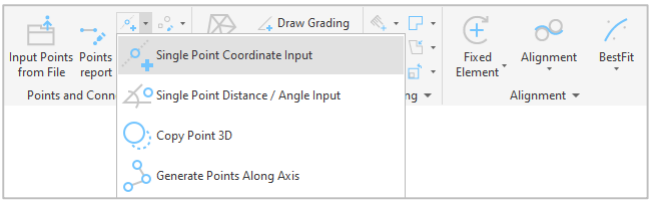


The new point is then written to the DWG file which you can find in the following folder:

C:\Users\%username%**\AppData\Roaming\CGSA**CGSApps202X%lang%**\POINTS**

Now, this new point type is ready for use. You can perform a test by inserting a point into a drawing using the Single point coordinate input command.

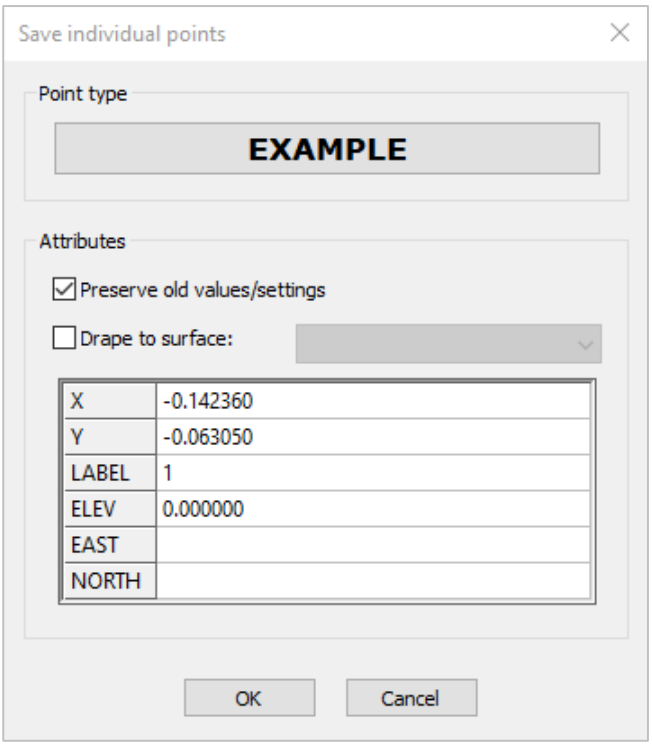
1. Run the Single Point Coordinate Input command.

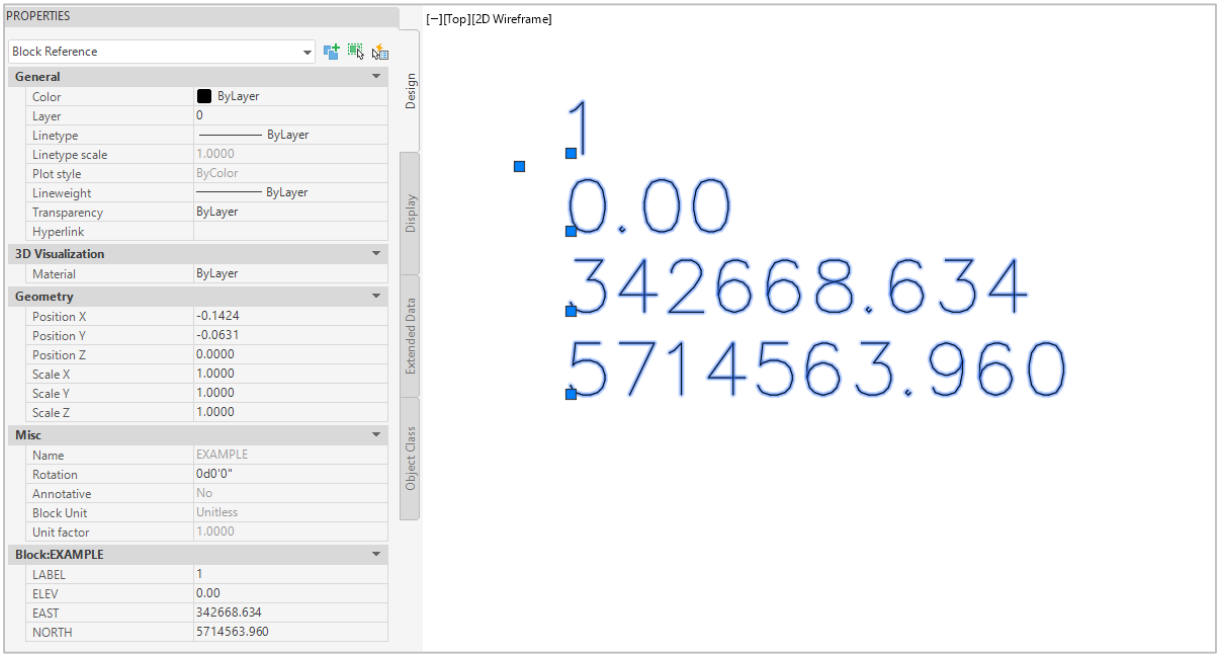


2. Insert a single point in the drawing. This opens a new dialog box, where you select the point type. In this dialog box, you can also see all the attributes and their values. You can also enter empty cell values manually in this dialog box, or do it later.

3. Confirm by pressing the OK button and then right-click in the drawing.

Empty cells can be now entered by hand, in the Properties dialog box, or imported with the Import Attributes from File command. This command automatically imports attributes from different file types. The procedure will be described in Chapter 4.





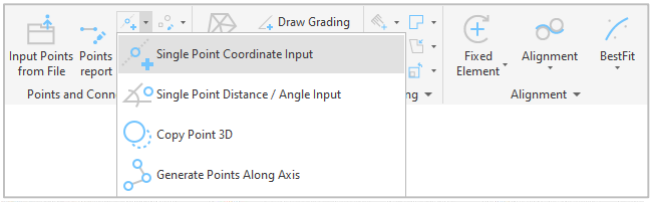
2. Define new point type from an existing point

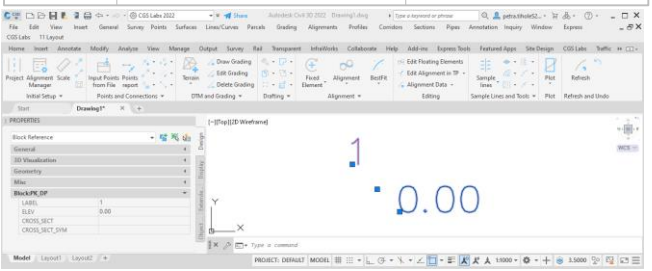
The second option is to define a new type of point based on the existing one.

1. Click on the Single Point Coordinate Input icon.

2. Insert a single point and then click on the Select button. Select the PK_DP point type and confirm by pressing OK.

3. Then right-click in the drawing to complete the command.





4. Run the Define New Point Type from an Existing Point command.

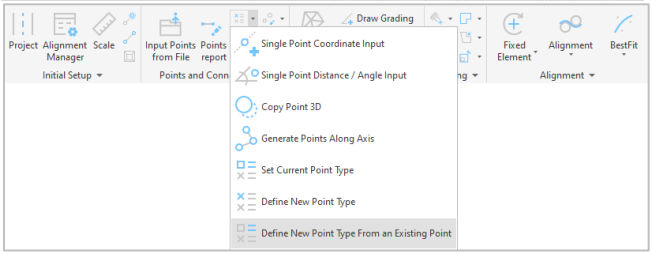
5. Select an existing point in the drawing.

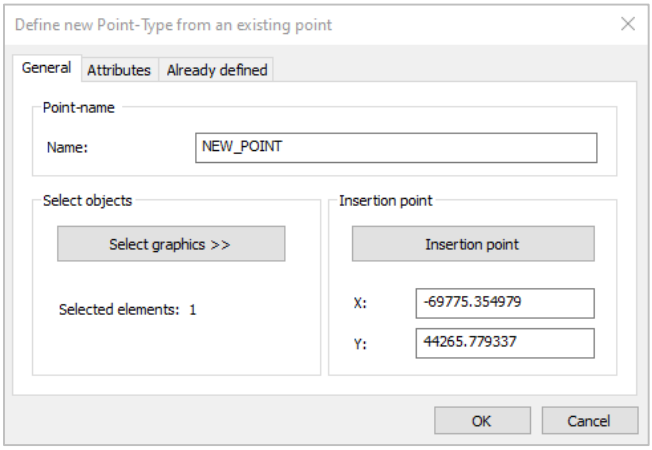
It opens a dialog box named Define new point-type from an existing point.

6. Define a name.

7. Click the Attributes tab. You can add, edit, or delete existing attributes using the same procedure as in the first chapter.

8. When you have finished, confirm by pressing the OK button.





3. Copy an existing drawing

Another option to define a new point type is to copy an existing drawing, paste it in the same folder and then edit it.

Find an existing drawing with a CGS point block. They are saved in the following folder:

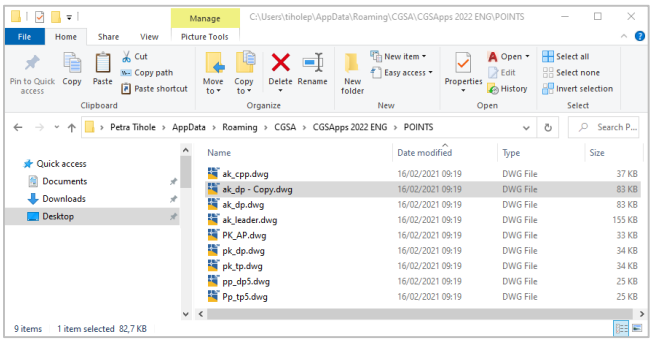
C:\Users\%username%**\AppData\Roaming\CGSA**CGSApps202X%lang%\POINTS

1. Copy one drawing and paste it into the same folder.

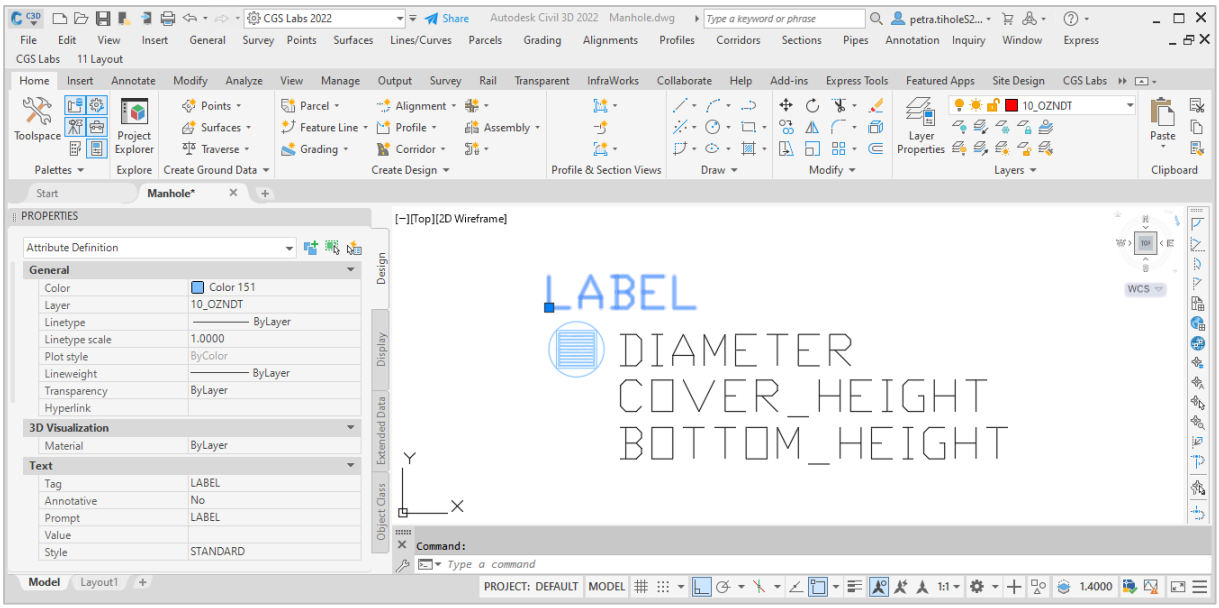
2. Rename the drawing and then open it.

3. Change the geometry. Make sure the centre of the new geometry is still located at 0,0.

4. You can then change the location of the attributes and layers. You can also change the height and the rotation of the attributes and add new or delete existing ones.



5. When you have finished, save the drawing and close it.

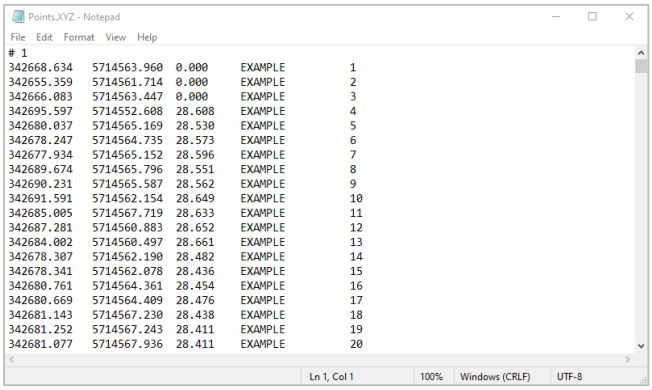


Users can also freely interchange the point definitions simply by transferring the files from the "...\ **CGSA**CGSApps202X%lang%\POINTS " area to another one.

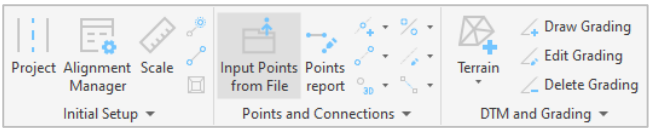
4. Import Attributes from File

When you input points from a file, user-defined attributes will not be added automatically. These must be imported with the Import Attributes from File command.

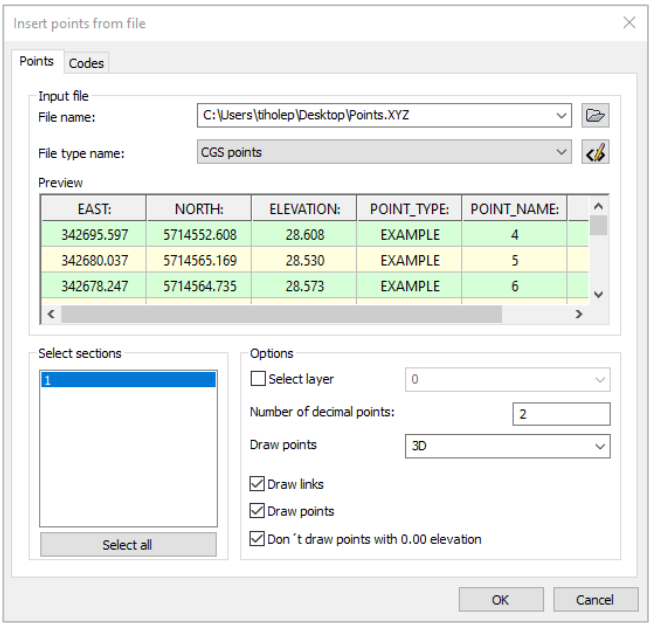
Example of the XYZ file in which the points are written:



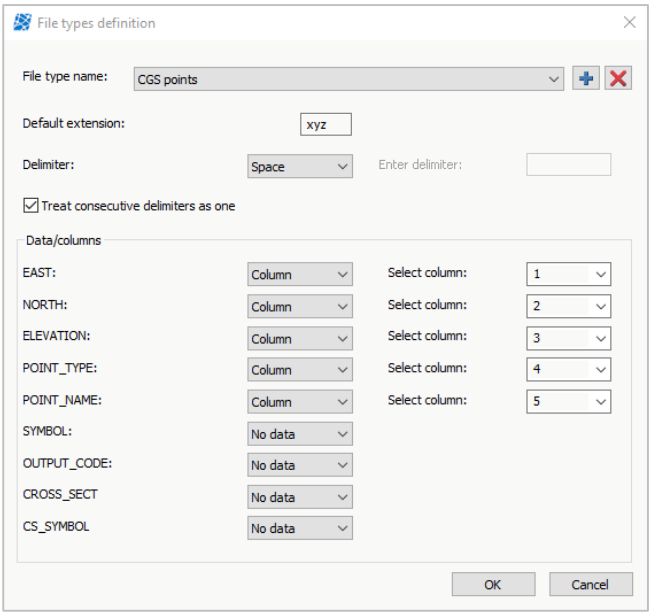
1. Run the Input Points from File command.



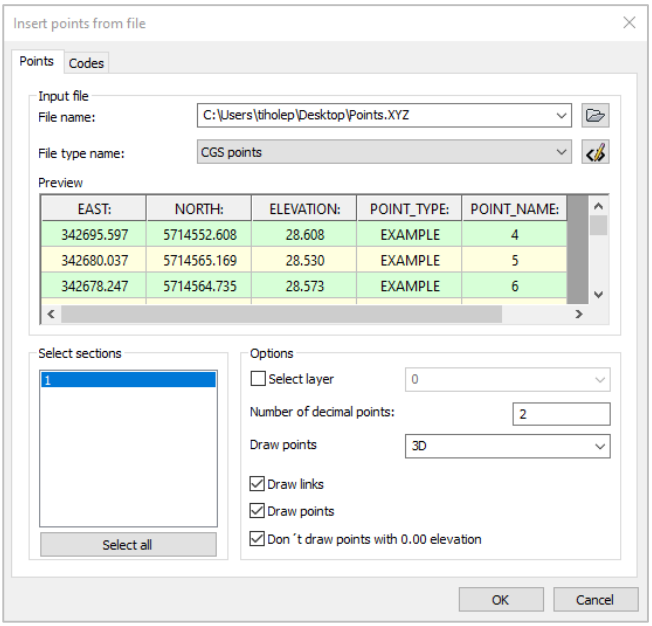
2. Press on the Folder button and select the file.



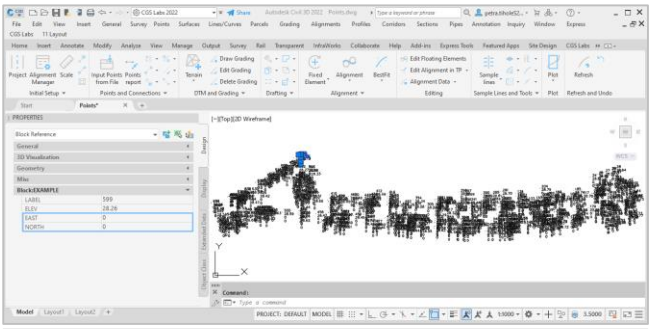
3. Press on the Edit button and define all parameters. Assign a corresponding column to each data.

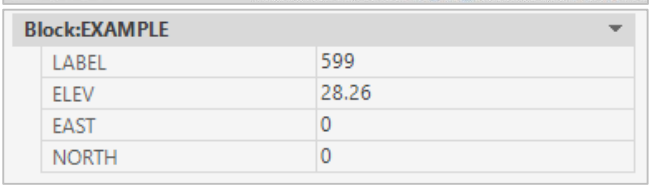


4. When you have finished, press OK and then confirm parameters in the Insert point from file dialog box by pressing the OK button.

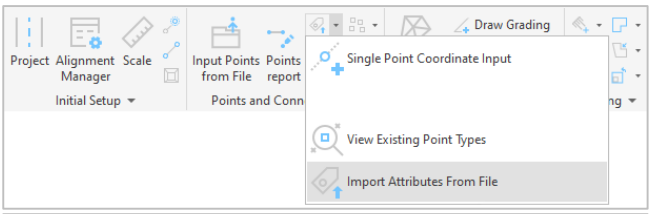


The points are now entered into the drawing. As you can see, only the LABEL and the EAST attributes are automatically entered.



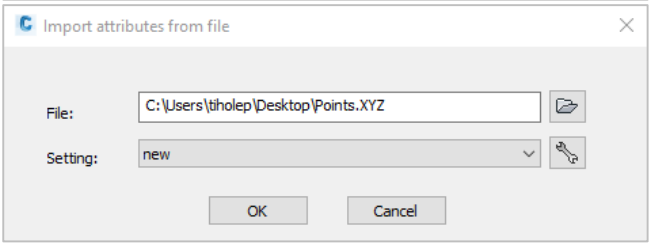


5. Run the Import Attributes from File command.



6. Set the file location.

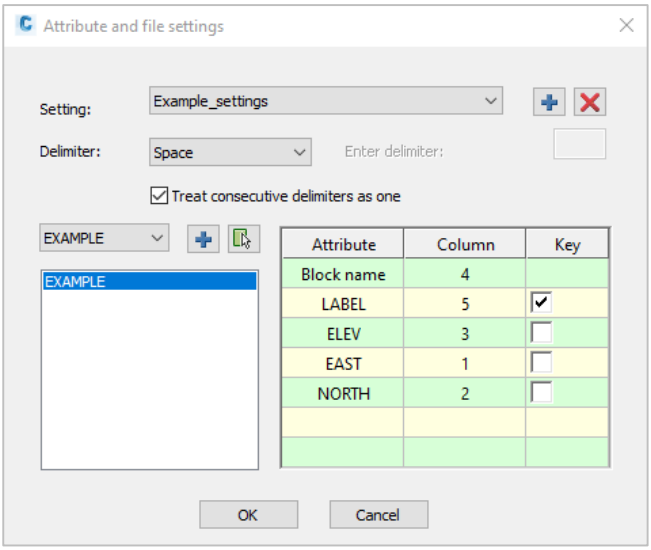
7. Click on the Settings button. This opens a new dialog box.



8. Press on the Plus button and define a settings name.

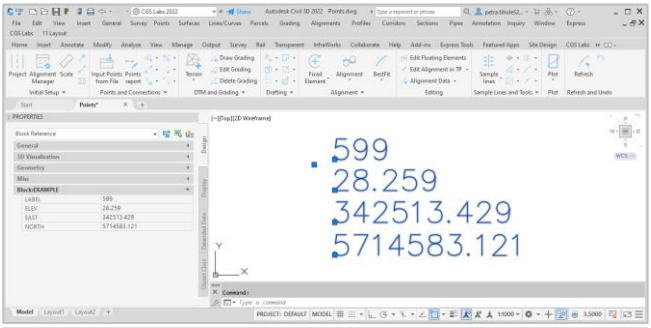
9. Then select the delimiter from the drop-down menu.

10. Check the box at the Treat consecutive delimiters as one. If this option is selected, multiple consecutive punctuation marks without data between them are treated as a single punctuation mark (e.g., five spaces define the boundary between two columns instead of five new columns).



11. Select the point type from the bottom left drop-down menu. The attribute table on the right is then filled in automatically.

This table shows all the attributes that each point type has. Now, you need manually correct which column from the XYZ file belongs to each attribute. In the first line, the attribute is always the name of the block that represents the point type.



12. Then it is necessary to determine the key field, which can be only one. This is the data on the basis of which the command can link the data from the drawing with the data from the file.

13. Confirm by clicking the OK button.

14. Select the last defined setting from the drop-down menu and press OK.