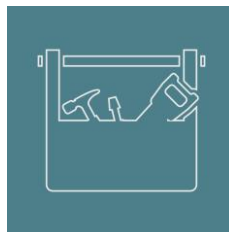




# ZWToolbox 2020



Krzysztof Ruszyński  
Izabela Cholewa

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# ZWToolbox 2020

Version 2020.0.01 (01-08-2019)

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## 1 Description

ZWToolbox is a set of tools which help you to work within ZWCAD environment by means of automating commands.

## 2 Requirements

The program is an overlay, otherwise known as an add-on, for ZWCAD 2020. The requirements are the same as for ZWCAD 2020 Professional.

## 3 Support

Technical support is available from 8am to 4pm from Monday to Friday, we are more than happy to answer any questions by phone or e-mail.

E-mail: [pomoc@zwcad.pl](mailto:pomoc@zwcad.pl)

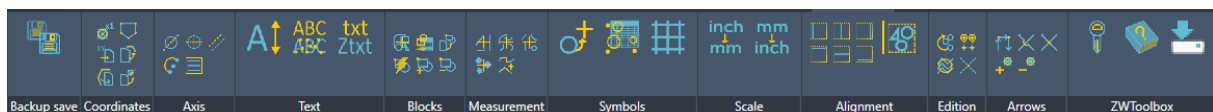
Phone: 33 474 04 03

## 4 Installation of application

The installation begins automatically after running the file ZWTOOLBOX\_2020.exe.

The Default installation path is C:\Szansa\ZWToolbox\2020\EN. It is possible to choose a different installation path, however it is not recommended. Installing the program in the folder Program Files on the operating systems such as Windows Vista, Windows 7, Windows 8 and Windows 10 can cause major implications because of the built in User Account Control in the given operating systems. The User Account Control can block numerous functions of the program.

Once the installation completes and the user opens ZWCAD, the software ZWToolbox should load automatically. A toolbar presented below will appear on the screen.



If for some reason the toolbar is not displayed, it is possible to run the application manually: Manual load application

## 5 Activation

A trial period that lasts for 30 days with full functionality is available after installation of the application.

Activation must be completed on an account with administrative privileges.

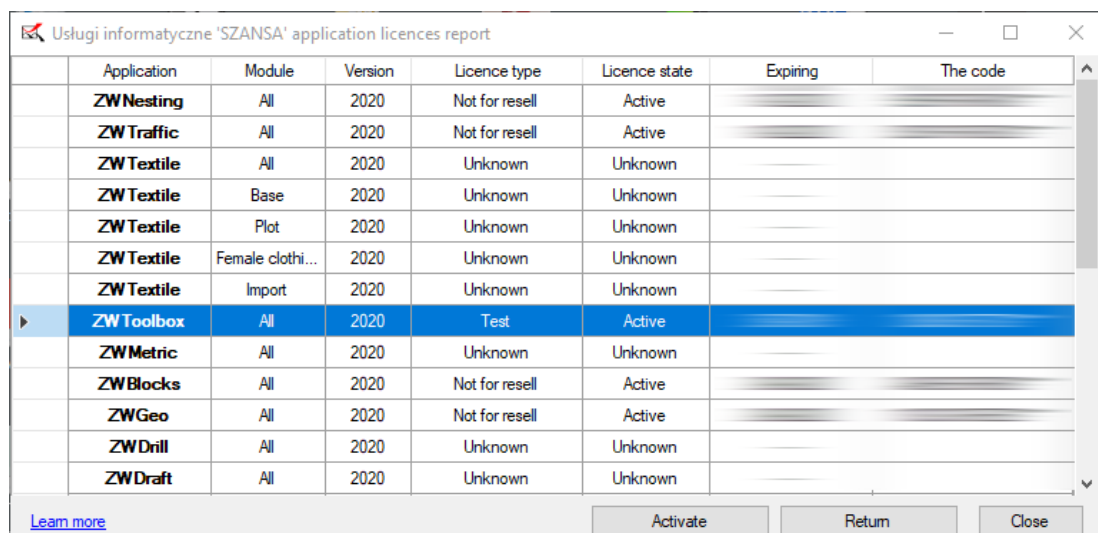
Once the trial period of 30 days runs out, a license will be needed in order to use the program. After receiving the payment, an e-mail with an activation code will be sent.

Activation is available directly in ZWCAD or by using the function “Activation” from menu of the application. It is also possible to activate the program from its installation folder. By default located in: **C:\Szansa\\_Nazwa\_Aplikacji\_\2020\PL** and run **Aktywator\_2020 .exe**.

**In operating systems such as Windows Vista, Windows 7, Windows 8 and Windows 10 it is necessary to right click on ZWCAD icon and select *Run as Administrator*.**

Full license code is only visible on the license certificate that is sent out during completion of the order due to security reasons.

Once Activator has been launched, the following window will be displayed:

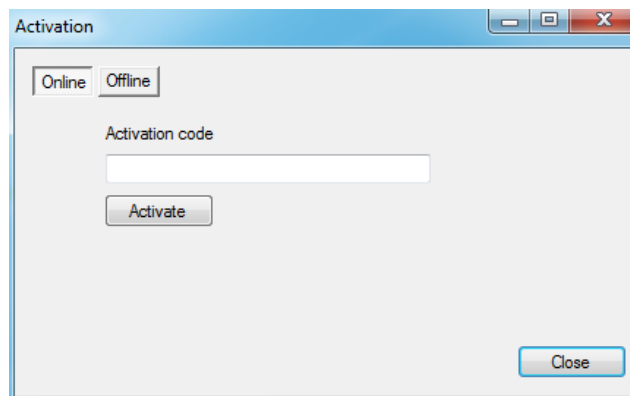


	Application	Module	Version	Licence type	Licence state	Expiring	The code
	ZWNesting	All	2020	Not for resell	Active		
	ZWTraffic	All	2020	Not for resell	Active		
	ZWTextile	All	2020	Unknown	Unknown		
	ZWTextile	Base	2020	Unknown	Unknown		
	ZWTextile	Plot	2020	Unknown	Unknown		
	ZWTextile	Female clothi...	2020	Unknown	Unknown		
	ZWTextile	Import	2020	Unknown	Unknown		
▶	ZW Toolbox	All	2020	Test	Active		
	ZWMetric	All	2020	Unknown	Unknown		
	ZWBlocks	All	2020	Not for resell	Active		
	ZWGeo	All	2020	Not for resell	Active		
	ZWDrill	All	2020	Unknown	Unknown		
	ZWDraft	All	2020	Unknown	Unknown		

[Learn more](#) Activate Return Close

Please click on “**Activate**”.

A choice between activating the application online or offline will be present.

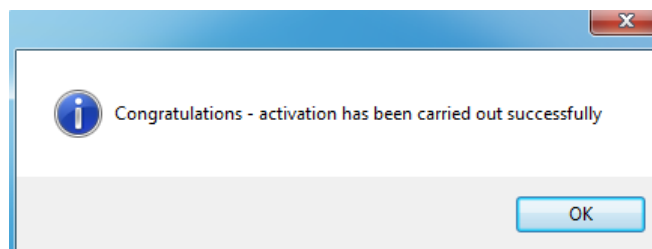


## Online Activation

**Please note:** Online activation requires an Internet connection. If there is no internet connection available please use the Offline Activation (**Błąd! Nie można odnaleźć źródła odwołania.** Offline Activation).

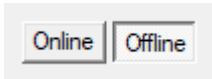
In the field “**Activation code**” please type in the information sent during realization of the order, afterwards click on “**Activate**”.

An information window will pop up confirming the activation.

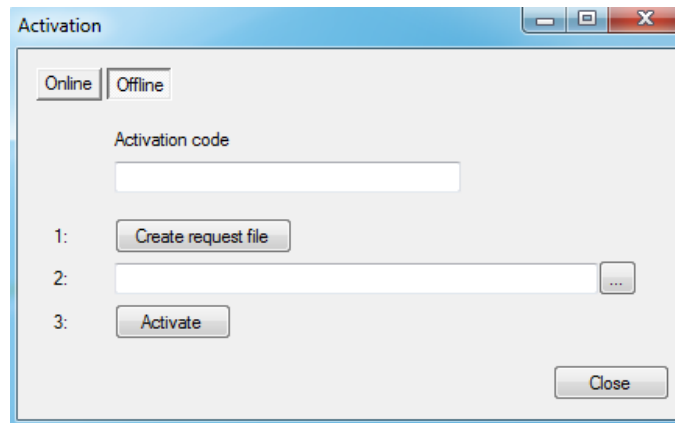


Once ZWCAD is launched, all functions of the program should be loaded and available.

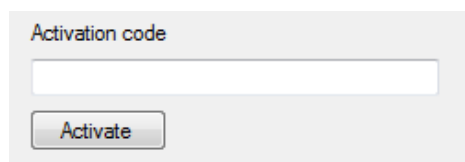
## Offline Activation

In the “**Offline**” tab  additional steps are required to complete the activation.

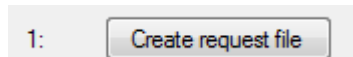




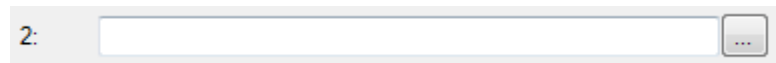
In the field “**Activation code**” please type in the information sent during realization of the order.




Afterwards it is necessary to click on “Create a request file”, it will create an additional file which needs to be saved on the desktop or in any other directory of the computer.

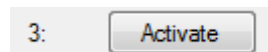


The file needs to be sent in a form of an attachment to, [pomoc@zwcad.pl](mailto:pomoc@zwcad.pl) and a reply will consist of response file which then needs to be loaded in the activator:

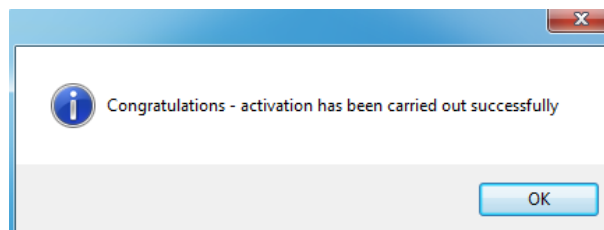


Response file needs to be saved on the computer and its localization needs to be determined by clicking on the following icon .

Once the response file is loaded, click on “**Activate**”.



An information window will pop up confirming the activation.



Once ZWCAD is launched, all functions of the program should be loaded and available.

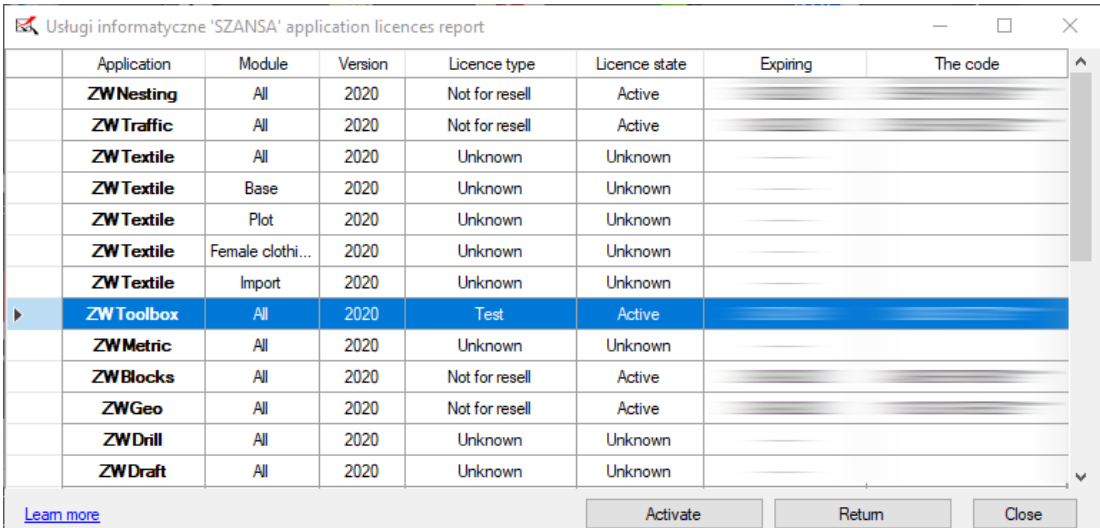
## Transfer of a license

The license of UISZANSA applications in the form of a program code can be transferred to a different workstation.

In order to transfer the license to a different computer, it is necessary to return the active license and once that is done, it will be possible to activate the license on a different Workstation.

## Returning the license

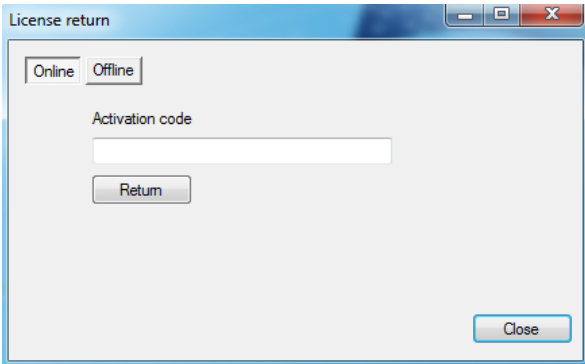
License return is available in the UISZANSA Activator window.



	Application	Module	Version	Licence type	Licence state	Expiring	The code
	<b>ZWNesting</b>	All	2020	Not for resell	Active		
	<b>ZWTraffic</b>	All	2020	Not for resell	Active		
	<b>ZWTextile</b>	All	2020	Unknown	Unknown		
	<b>ZWTextile</b>	Base	2020	Unknown	Unknown		
	<b>ZWTextile</b>	Plot	2020	Unknown	Unknown		
	<b>ZWTextile</b>	Female clothi...	2020	Unknown	Unknown		
	<b>ZWTextile</b>	Import	2020	Unknown	Unknown		
▶	<b>ZWT Toolbox</b>	All	2020	Test	Active		
	<b>ZWMetric</b>	All	2020	Unknown	Unknown		
	<b>ZWBlocks</b>	All	2020	Not for resell	Active		
	<b>ZWGeo</b>	All	2020	Not for resell	Active		
	<b>ZWDraft</b>	All	2020	Unknown	Unknown		

[Learn more](#) Activate Return Close

Once “**Return**” has been clicked on, an additional window will appear in which it will be possible to return the license, either online or offline.



License return

Activation code

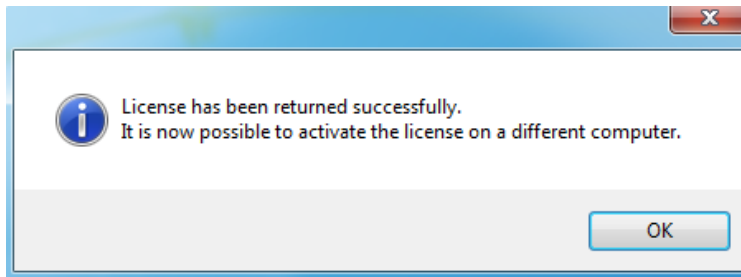
## Online return

**Please note:** Online return requires an Internet connection. If there is no internet connection available please use the Offline return (3.1.2 Offline return).

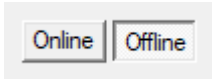
To carry out the online return, please type in your license details followed by clicking

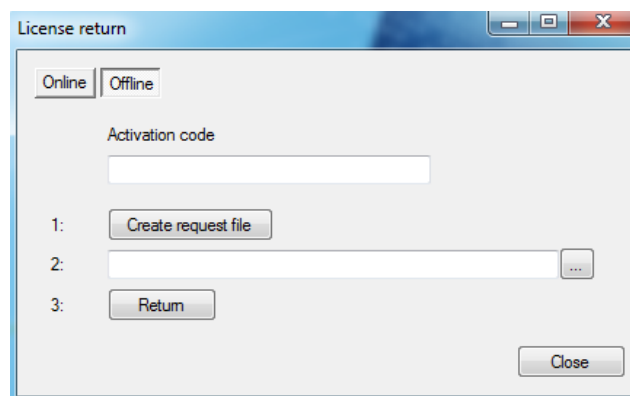
on **“Return”** .

Once confirmed, the license will be usable on a different workstation.

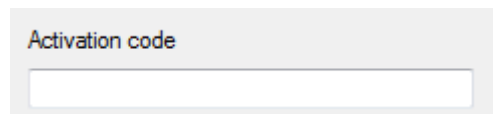


## Offline return

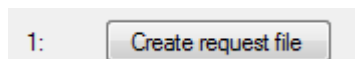
In the **„Offline”** tab  additional steps are required to complete the return of a license.



In the field **„Activation code”** please type in your license details.




Afterwards it is necessary to click on **“Create a request file”**, it will create an additional file which needs to be saved on the desktop or in any other directory of the computer.

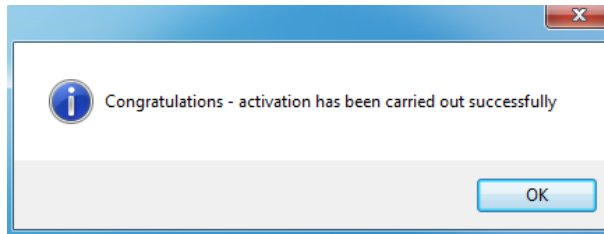


The file needs to be sent in a form of an attachment to, [pomoc@zwcad.pl](mailto:pomoc@zwcad.pl) and a reply will consist of response file which then needs to be loaded in the activator:



Response file needs to be saved on the computer and its localization needs to be determined by clicking on the following icon .

Once the response file is loaded, click on **“Return”**



Once ZWCAD is launched, all functions of the program should be loaded and available.

## 6 Functions

### 6.1 Save a file with backup.

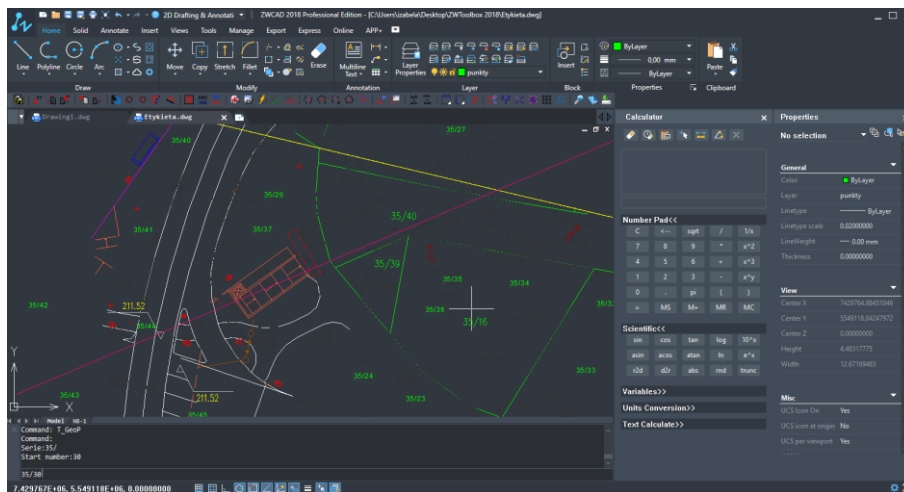
This feature allows you to save a file with an automatic backup (the backup is formatted as follows “name\_year-month-day\_hour.minute.second”).



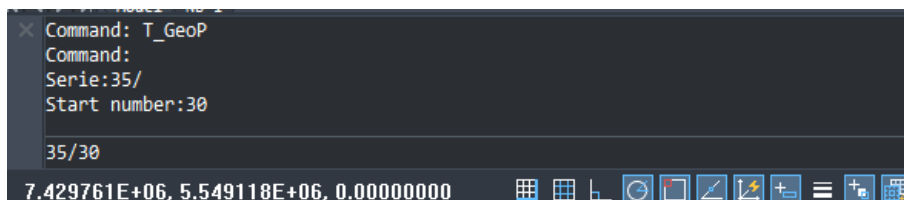
### 6.2 Inserting points with description and auto-numbering

You will have to enter a name of a series and the first number. Next points selected by you will have text included with a description which includes the name of a series and a number of the next point.

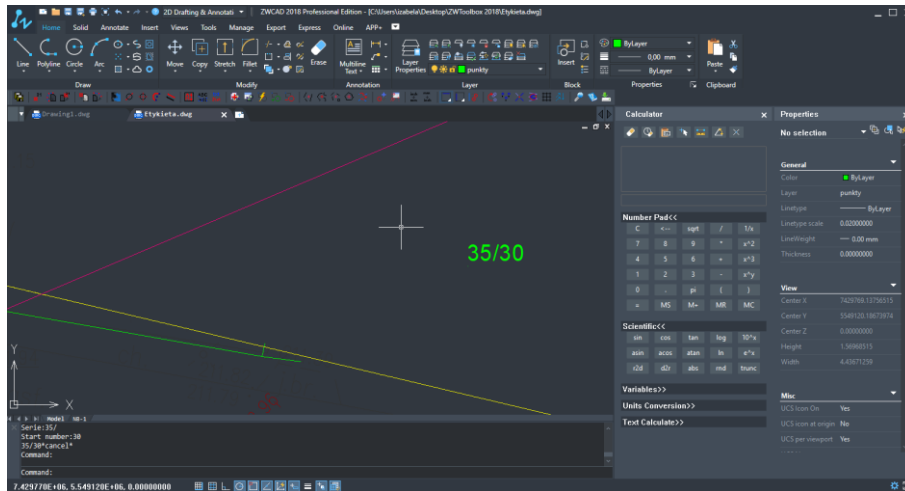
1. After running the command, you have to choose a data point in the command bar.



Enter the series number and enter the start number:



2. Insert a point in the drawing:



3. The program allows you to automatically insert points by indicating the location.

### 6.3 Numbering polyline vertices

This function is used to automatically number polyline vertices from a selected starting number, e.g. a2. It is possible to create a block in which next numbers will be added. An example of usage is presented below:

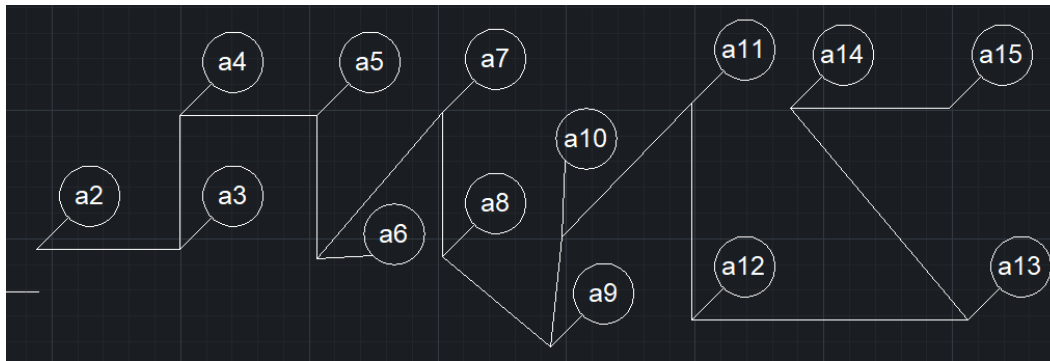
1. Select a block with an attribute which will appear on vertices of the numbered polyline, for example:



2. Now select a polyline to describe vertices, for example:



3. In the command bar name the series, e.g. **a**
4. Enter the starting number (it is set to 1 by default), in this example we will use **2**. Confirm with enter and the result will be presented below:




#### 6.4 Saving coordinates of elements to a \*.csv file.

After running the command, ZWToolbox will ask you to select objects with descriptions that need to be exported. Then, you have to select the destination path in which the file will be saved. It is possible to save the coordinates of objects such as: line, polyline and point. The correct filename extension in which the file should be saved is .csv

The format in which the coordinates are stored is as follows: Description;X;Y;Z

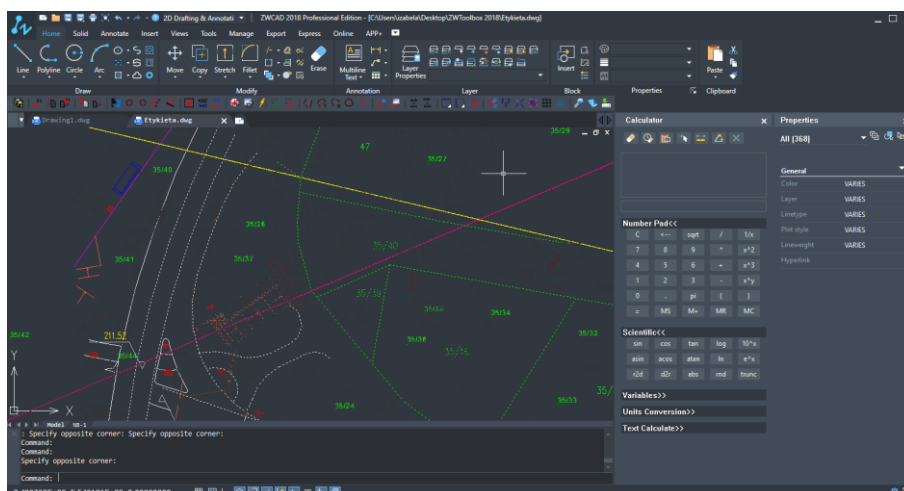
-coordinates will be separated by semicolon „ ; ”

-decimal places will be separated by commas „ , ”

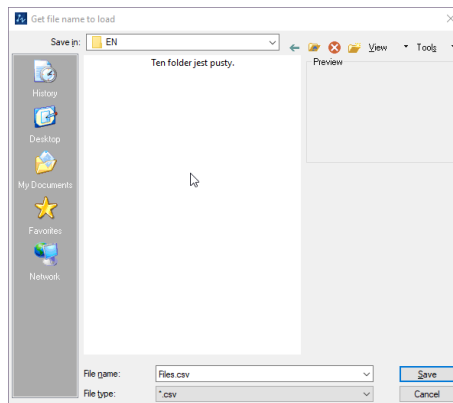
- Description will be added to elements which were inserted by using the  function.

Example of a line of data: d5;83,1082;1271,6697;0

1. After running the command, ZWToolbox will ask you to select the wanted objects.



2. Confirm with Enter and then find a location on your disk, enter the name of the file and click save.



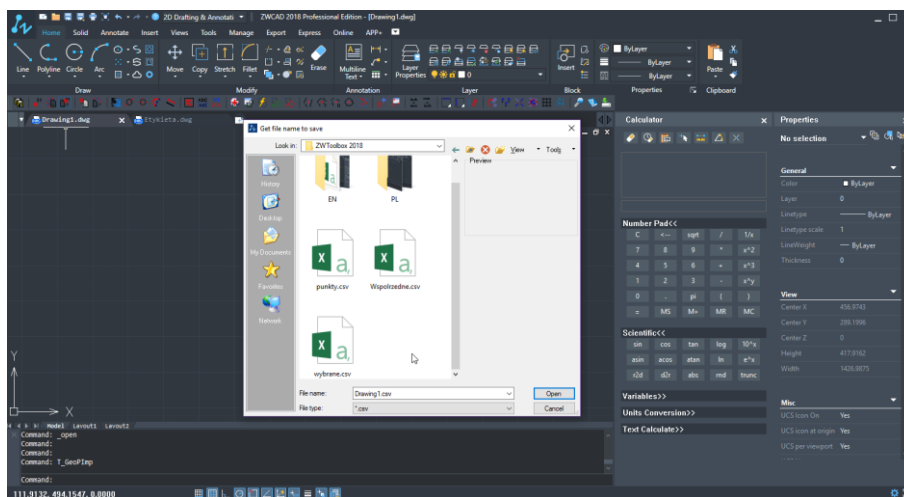
3. The coordinates of chosen objects will be visible in the new file.

	A	B	C	D
1	35/36	7429766.6	5549118.1	0.0000
2	35/35	7429766.8	5549118.6	0.0000
3	35/34	7429767.9	5549118.5	0.0000
4	35/33	7429768.9	5549117.2	0.0000
5	35/32	7429769.2	5549118.2	0.0000
6	35/31	7429770.2	5549118.2	0.0000
7	35/30	7429769.9	5549120.1	0.0000
8	35/29	7429768.8	5549121.3	0.0000
9	35/28	7429767.9	5549121.6	0.0000
10	35/27	7429766.9	5549120.8	0.0000
11	35/23	7429766.3	5549116.8	0.0000

## 6.5 Loading points from a \*.csv file.

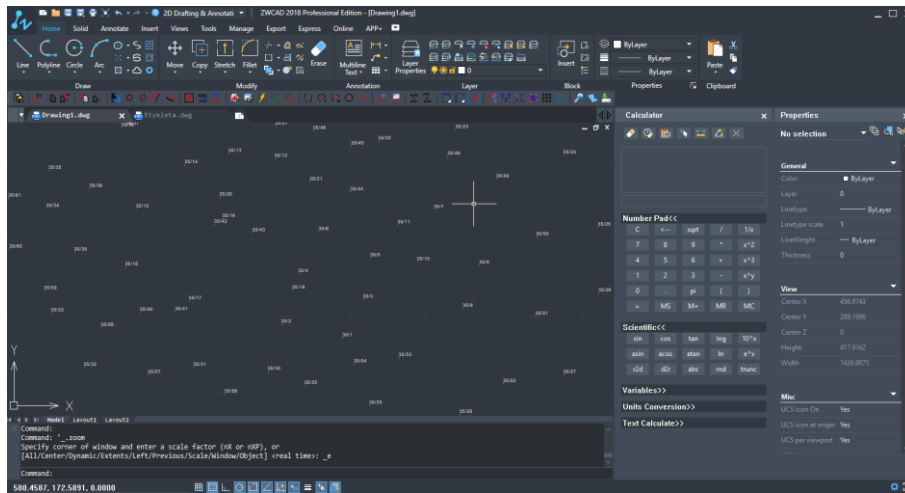
After running the command, you need to select a file which contains the coordinates of points. The file needs to be in the .csv format.

1. Run the command and select the file which contains the coordinates.





- The points will be loaded into a drawing.



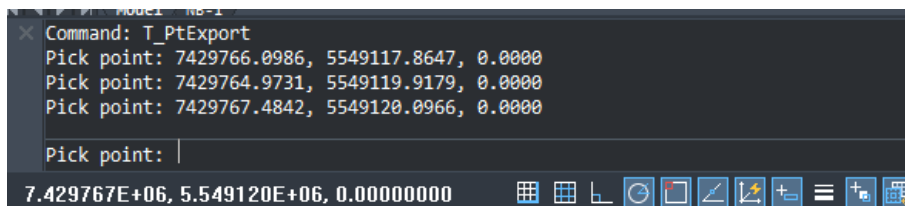
## 6.6 Saving selected coordinates in a \*.csv file.

Firstly, you will be asked to select points. Once all the wanted points are chosen, you will have to select a file path where you want the points to be saved.

The format of coordinates stored in the file will be following: ;X;Y;Z

- coordinates will be separated by semicolon „ ; ”
- decimal places will be separated by commas „ , ”

- After running the command, you need to choose the points on the drawing and confirm by pressing “Enter”.

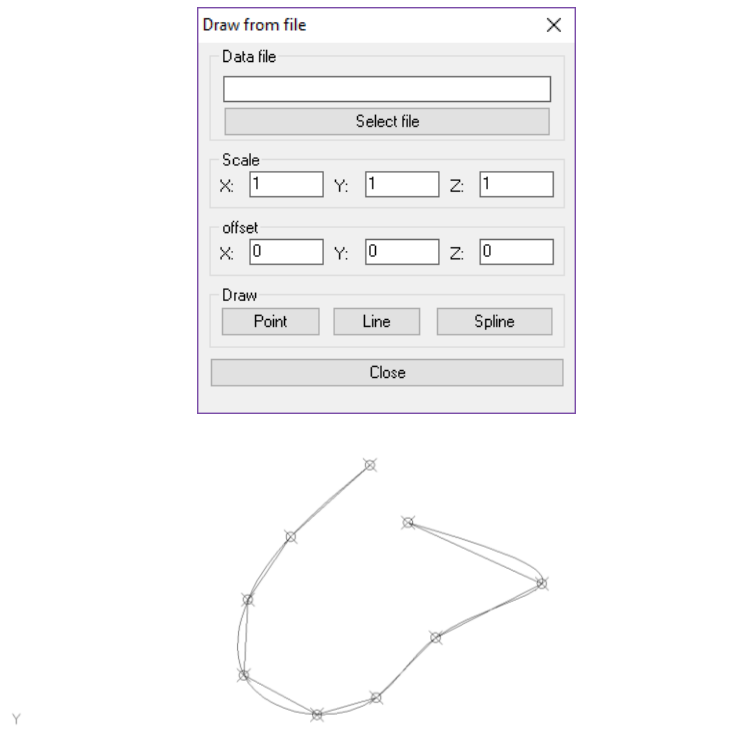


- A window will appear which lets you name and save the file.
- Previously saved data will be displayed in a new file.

	A	B	C
1	7429765.6	5549120.5	0.0000
2	7429767.3	5549118.8	0.0000
3	7429767.1	5549117.4	0.0000
4	7429764.8	5549117.0	0.0000
5	7429766.8	5549117.9	0.0000
6	7429767.5	5549117.2	0.0000
7	7429769.3	5549119.0	0.0000
8	7429762.0	5549120.1	0.0000

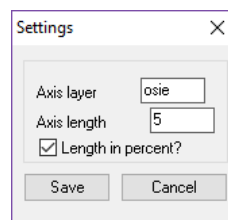
## 6.7 Drawing points, lines or spline

This function allows you to insert points into the drawing with coordinates from a text file, connect the lines (with a straight line) or by using a spline.



## 6.8 Changing the settings of drawing an axis

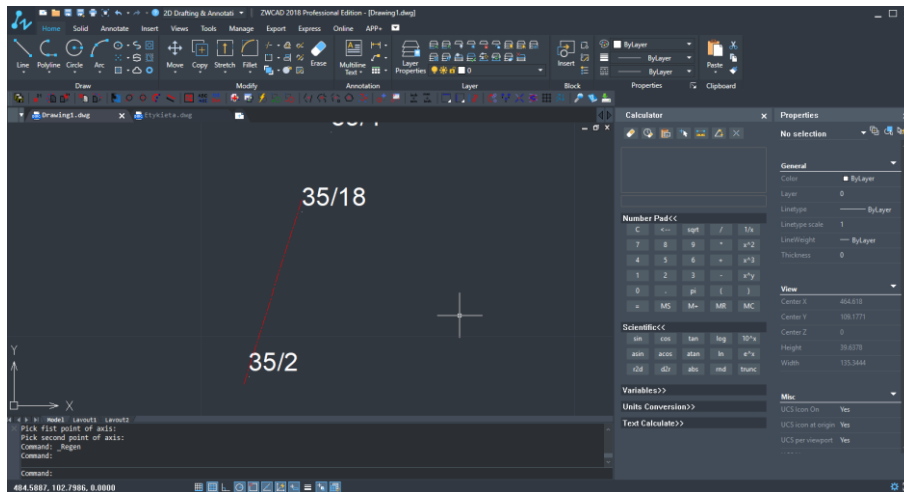
This function lets you determine the layer on which the created axis will be placed and by how much they should extend outside of the object. The length of the extension can be determined numerically or in percentages by selecting the option as shown on the picture below:



## 6.9 Drawing an axis

This function draws an axis between two points on a layer that was previously determined in the settings.

1. After clicking on the command, select two points on the drawing where you want the axis to be inserted.

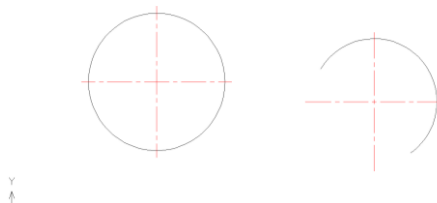


2. Once the two points have been selected, an axis will appear on the predetermined layer.

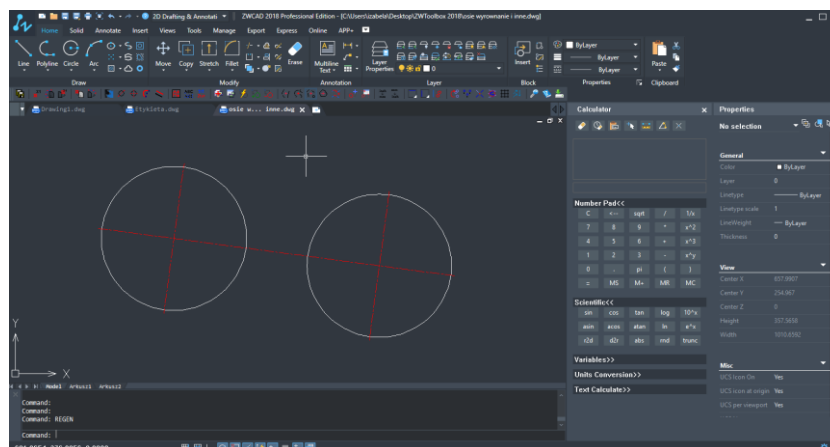
## 6.10 Inserting an axis into an object.

Once you click on the command, you will be asked to choose any number of arcs and circles.

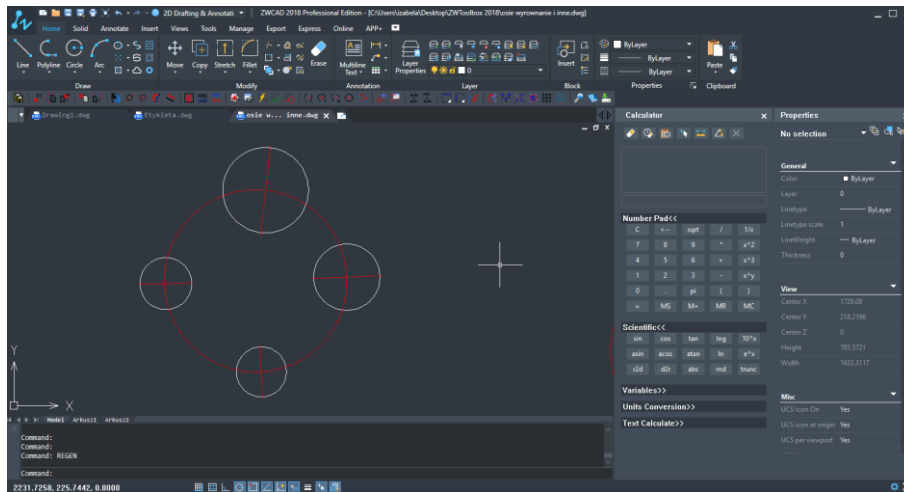
- a) When clicking on an arc, a circle or an ellipse, an axis will be automatically added on a layer determined in the settings window.



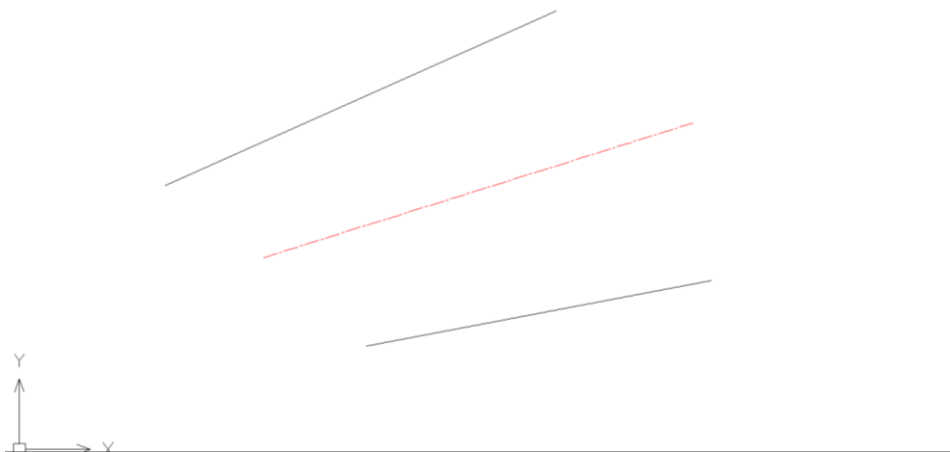
- b) By selecting two arcs or circles you will add an axis similar to the one on the picture below:



c) If you choose more than one arc or circle, an axis will appear similar to the one pictured below:



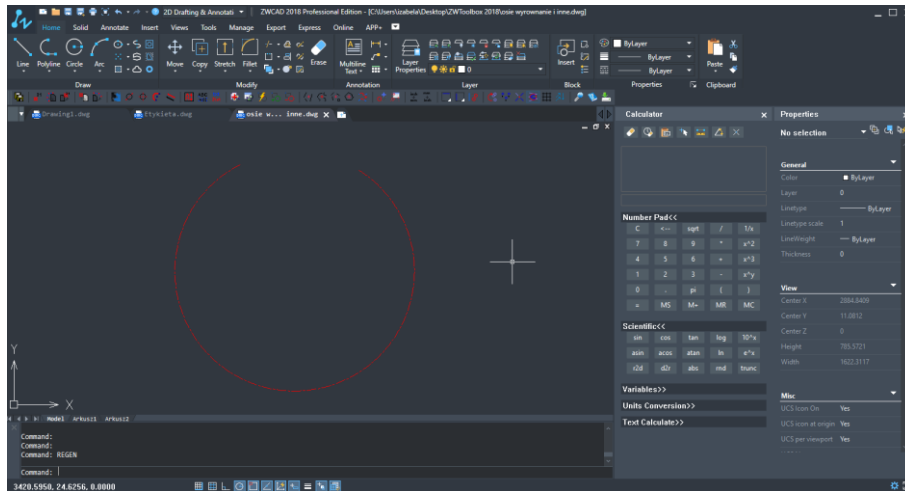
d) By selecting two lines you will insert a symmetry axis between those lines. The length of the axis can be determined if the user selects two points (they will be shown on the axis).



## 6.11 Drawing an axis as an arc

This function will let you draw an axis in a shape of an arc.

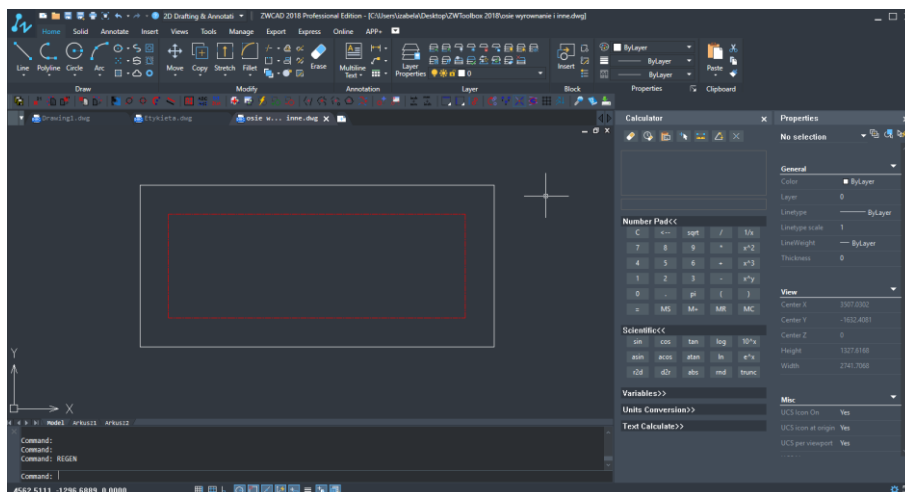
The function will ask you to enter the following in the given order: center point of an arc, the starting point of an arc which will simultaneously define the radius and the end of an arc.



Drawing an axis as an arc is useful in situations such as designing an outline of a screw-thread.

## 6.12 Drawing an axis by offset

You will be asked to select an object to offset, then the direction of an offset by clicking a selected point. Lastly, you need to set a certain distance to offset.



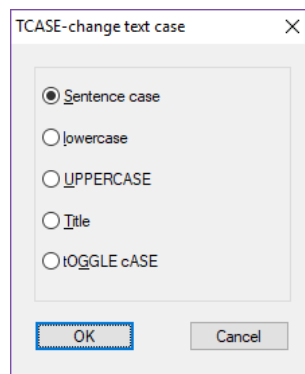
## 6.13 Changing the letter case

This function lets you change the size of the letters. This does not mean that the font will change but instead the letters can be made big and small, various possibilities of the letter size are included in this function.

1. First of all, you have to select a text object on the drawing field.



2. A window will appear which will let you to change the size of the letters.

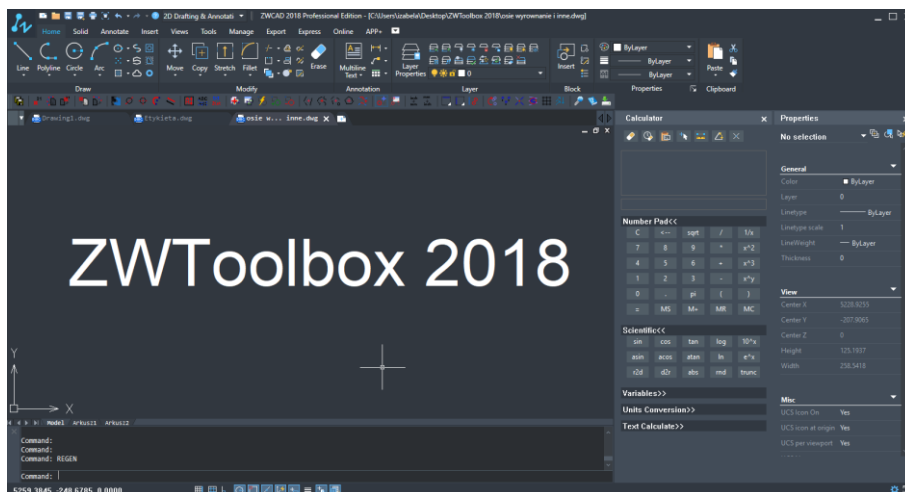


3. Once the option has been picked, you have to confirm it by clicking "OK". The program will adjust the letter size of the chosen text.

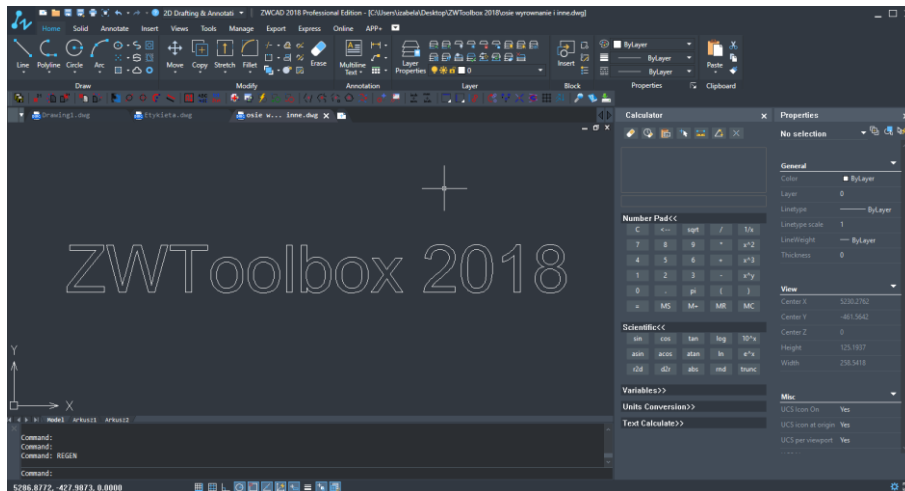
## 6.14 <sup>ABC</sup><sub>ABC</sub> Converting text to polyline

Allows for the selected text to be converted into a group of polylines.

1. Select the text which is to be converted and confirm by pressing "Enter"

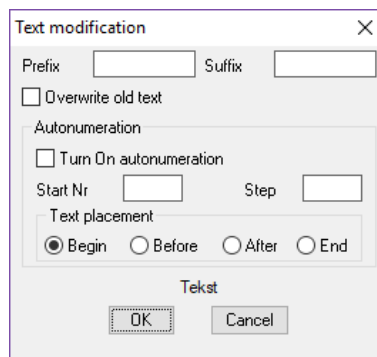


2. Afterwards, contours of selected letters will appear and those are called polylines.



## 6.15 Changing the content of the text

This function enables you to change the existing text by using the options shown below:

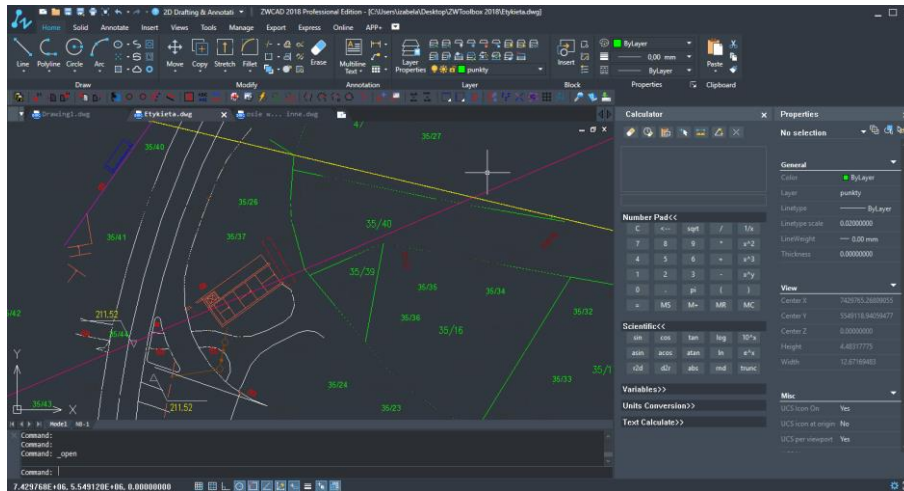


Depending on how you want to modify the text, you can use a prefix or a suffix. You can also add auto-numbering to the text (but you have to remember that only numerical values can be entered) You can also add a starting number, and an initial step which determines the number by which the values need to increase. To confirm the settings we have to press the button “OK” and choose the text which needs changing.

## 6.16 Counting number of blocks

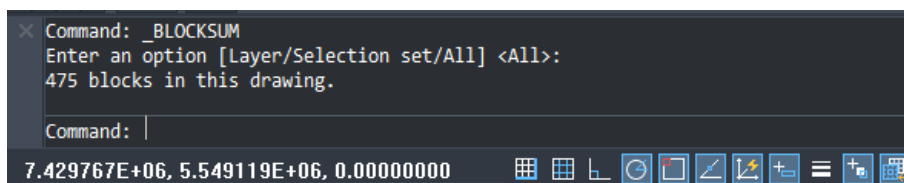
This function counts the number of selected blocks.

1. After activating the command in the toolbar, 3 options become available.



2. Information about counting the amount of blocks needs to be entered:

- Layer – counts the number of blocks on a selected layer
- Selection Set – counts the number of a selected block
- All – counts the number of all the blocks inside the drawing



After you enter all the information, number of blocks included in the drawing will be displayed in the command line.

## 6.17 Saving information about blocks and their attributes in a \*.csv file

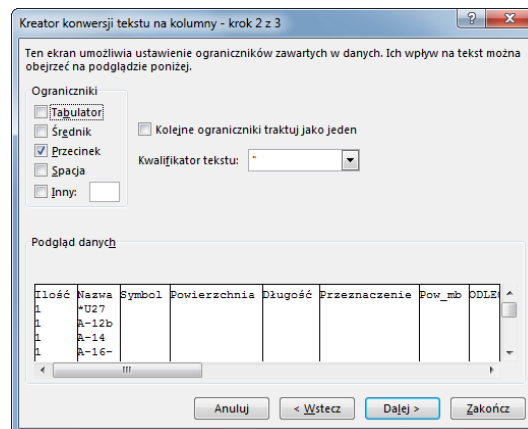
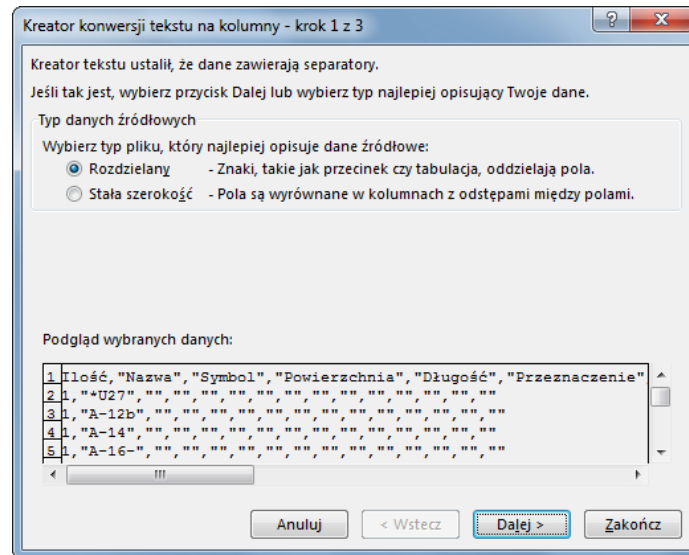
This function is used to save information and parameters of the blocks. By using the command *eattext*, all of the parameters of one block will be saved (in Excel) in one cell, divided by commas:

```
"Ilość","Nazwa","A/B","Skala X","Skala Y","Współrzędna X","Współrzędna Y","Obrót"
"1","SAP","1/1","0.7349","0.7349","2110","1455","0"
"1","SAP","1/2","0.7349","0.7349","2322.4221","1651.4741","0"
"1","SAP","1/3","0.7349","0.7349","2583.7374","1864.2293","0"
"1","SAP","1/4","0.7349","0.7349","2606.2347","1400.665","0"
"1","SAP","1/5","0.7349","0.7349","2971.3839","1308.99","0"
"1","SAP","1/6","0.7349","0.7349","3083.8706","1680.8793","0"
```

In order to divide certain parameters into different columns, for instance the reasoning might be a process which requires only a selected amount of information, please choose the



first column and move onto the tab called *Data*, secondly click on the option *text as columns*. A window will appear, please press *Next*



Please click *Next*, and Finish.

On the right side of the window, as a form of restriction, *Tabulators* are turned on. Please turn them off by clicking on them and please turn off *Comma* as well. A window will appear showing a preview of the document.

## 6.18 Add blocks based on data from .csv file

It is possible to add blocks with attributes which are defined in the current drawing. The block will be added according to the parameters define in the \*.csv file. An example of a file with parameters is shown below. The sequence of columns can be changed however the titles: Name, Scale and coordinates cannot be changed. Remaining titles are treated as name of attributes, of which values are displayed in the lines below.

	A	B	C	D	E	F	G	H	I
1	Ilość,"Nazwa","NPR","WSR","Skala X","Skala Y","Współrzędna X","Współrzędna Y","Współrzędna Z"								
2	1,"DIN",,,,,"0.7000","0.7000","12.2151","61.9837","0"								
3	1,"DIN",,,,,"0.7000","0.7000","15.9897","59.0883","0"								
4	1,"DIN",,,,,"0.7000","0.7000","19.6487","64.7804","0"								
5	1,"DIN",,,,,"0.7000","0.7000","20.6438","61.3189","0"								
6	1,"DIN",,,,,"0.7000","0.7000","27.6999","62.67","0"								
7	1,"DIN",,,,,"0.7000","0.7000","29.999","71.2043","0"								
8	1,"DIN",,,,,"0.7000","0.7000","38.7537","46.6019","0"								
9	1,"DIN",,,,,"0.7000","0.7000","62.3155","34.2319","0"								
10	1,"DIN",,,,,"0.7000","0.7000","64.7954","35.4517","0"								
11	1,"DIN",,,,,"0.7000","0.7000","67.7689","40.6049","0"								
12	1,"DIN",,,,,"0.7000","0.7000","71.734","43.4757","0"								
13	1,"DIN",,,,,"0.7000","0.7000","82.13","28.522","0"								

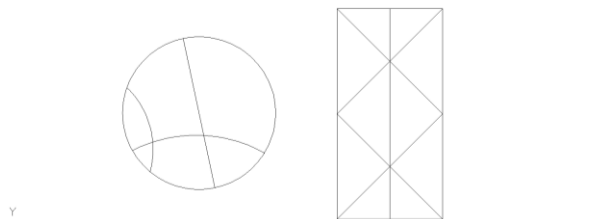
An example after the blocks have been imported



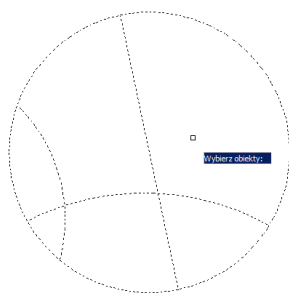
## 6.19 Quick Block

Quick Block gives you the option to create a block by target certain objects and pressing “Enter”. A step for choosing additional options such as choosing a name or a base point is skipped as they are determined automatically.

From the example below, we can see that elements are divided from each other – they do not create a whole. Thanks to this function, you can create a block from them which will stand as a one, connected element.



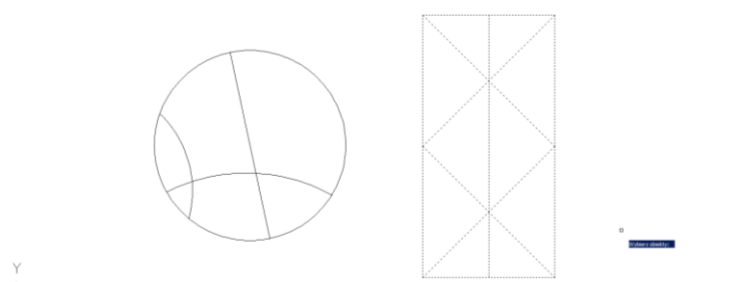
Once you select the elements which are to create a block, to confirm press “Enter”.



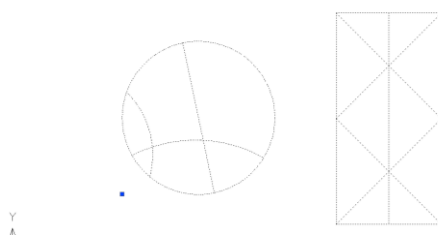
## 6.20 Add to block

This command allows you to add more elements to the existing block.

1. Press Add To Block.
2. Select the items you want to add.



4. Select block.



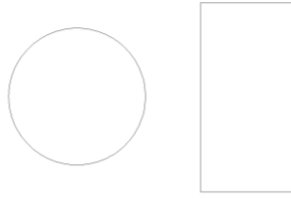
After completing the instructions above, the selected elements will merge into one object with the previously created block.

## 6.21 Remove from block

This function allows you to delete chosen elements from a created block

Press Remove From Block

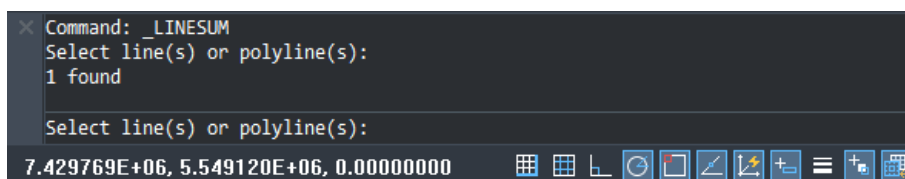
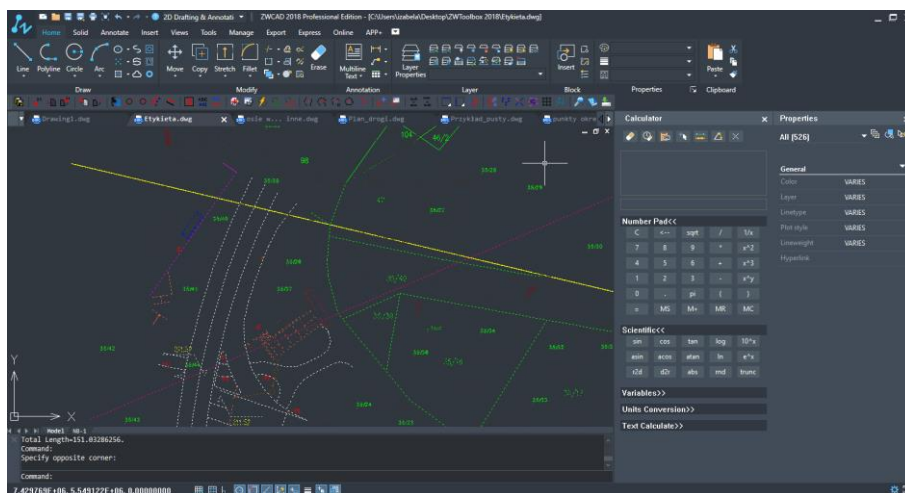
Choose the elements which are to be deleted from the block



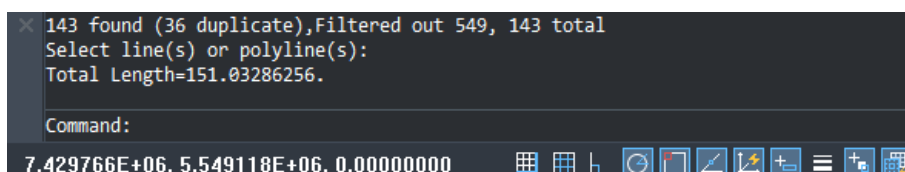
## 6.22 Total length of the line

This function tells the program to sum up the total length of selected lines on the command line.

1. Please select the lines on the area of the drawing and confirm by pressing “Enter”. The function does not work on polylines. If you would like to count the length of polylines please use the function **Counting the length of the line between the indicated points**.



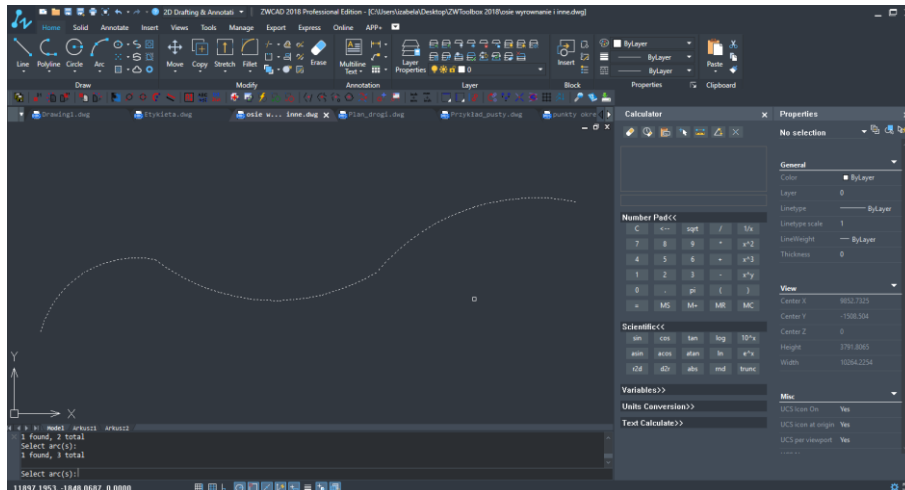
2. Once you confirm the action, the command bar will show the total length of chosen lines.



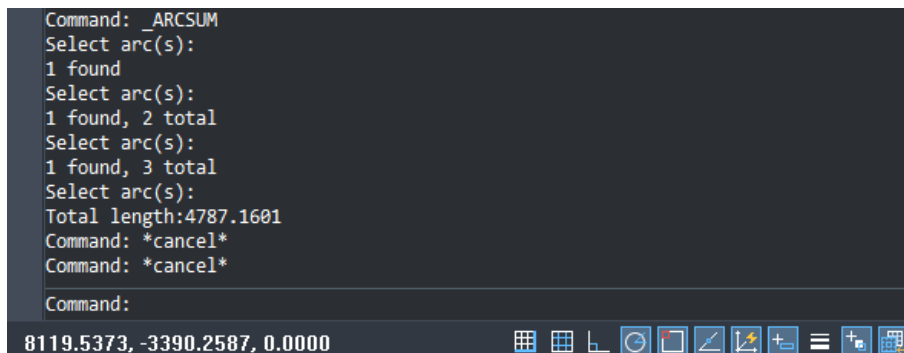
## 6.23 Total length of an arc

The program will sum up the total length of all selected arcs and will display them on the command bar.

1. Please indicate the arcs that you would like to sum up and press “Enter”.



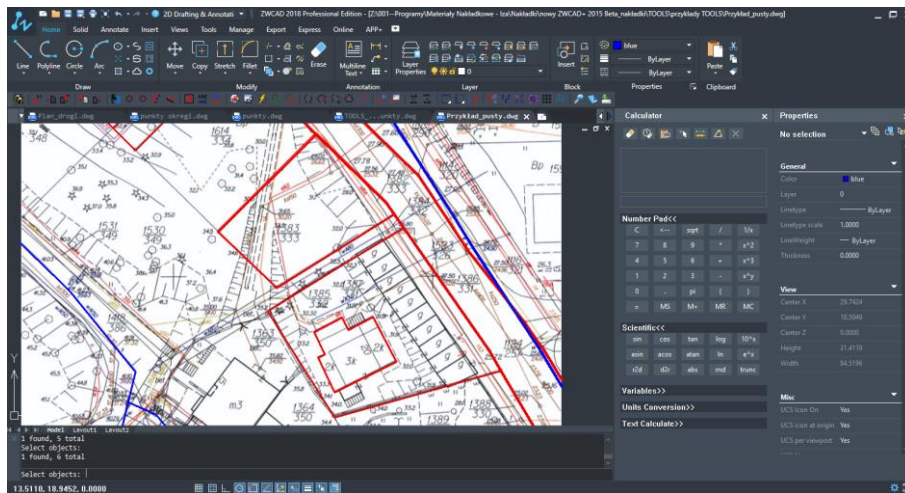
3. Once the action is confirmed, the command bar will show the total length of selected arcs.



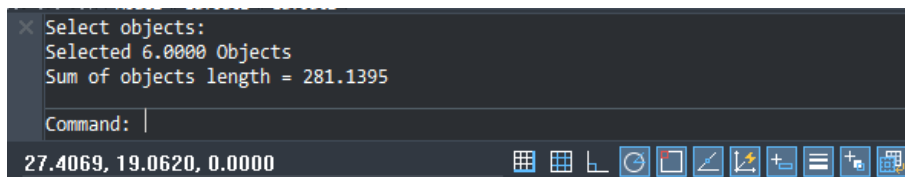
## 6.24 Total length and circumference of objects

This function can be used to sum up the length and circumference of selected objects.

1. Once the command has been clicked on, you have to choose the objects which are to be summed up and confirm with “Enter”.



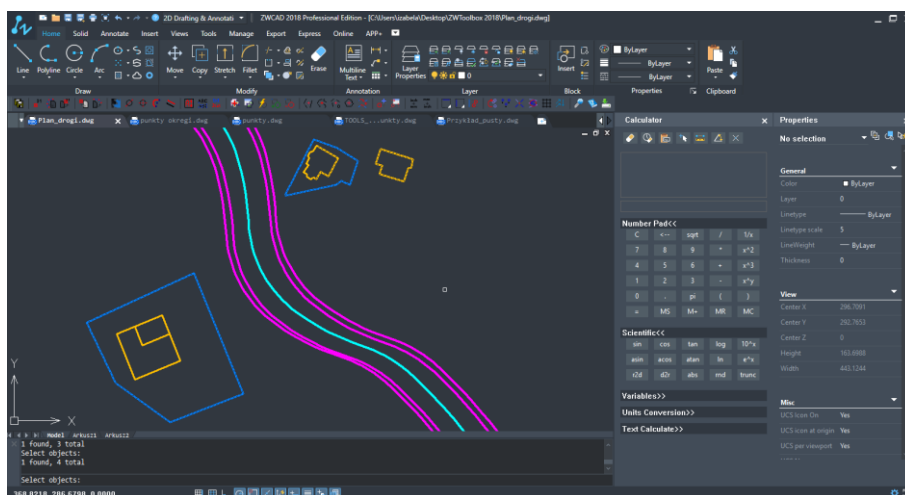
2. As soon as you confirm the action, the command bar will display the total length and circumference of chosen objects.



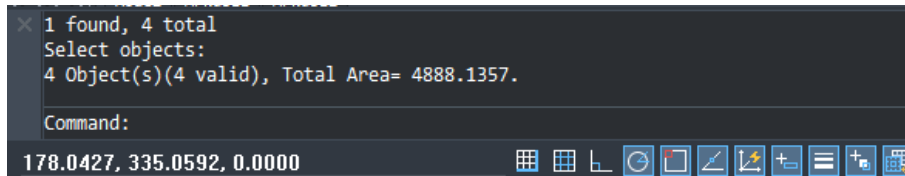
## 6.25 Total surface area of selected objects

This function will sum up the surface area of selected objects.

1. Once the command is clicked on, you need to choose the surface area of objects which is to be summed up. Confirm with “Enter”.



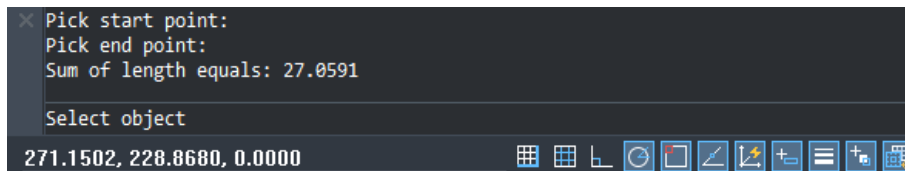
3. As soon as the action is confirmed by pressing “Enter”. The total surface area of chosen objects is displayed.



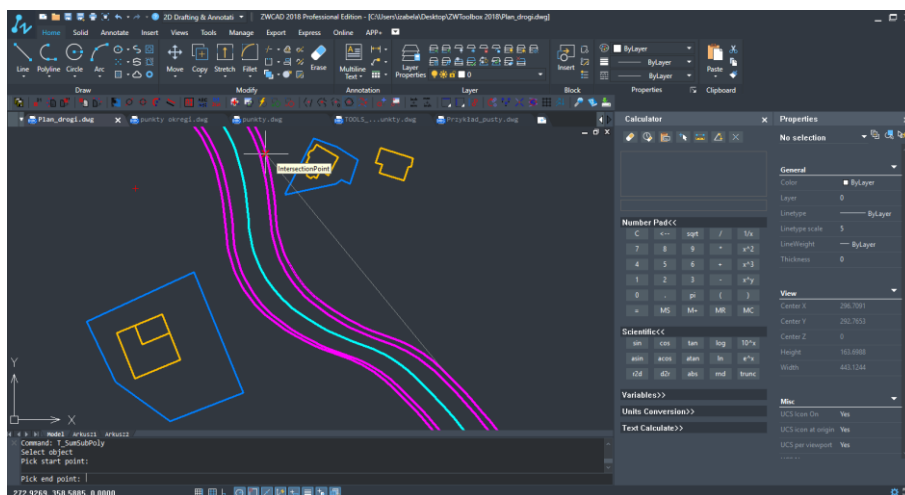
## 6.26 Counting the length of a line between indicated points

This function lets you sum up the length of a line between indicated points. This can be used on lines, polylines and splines.

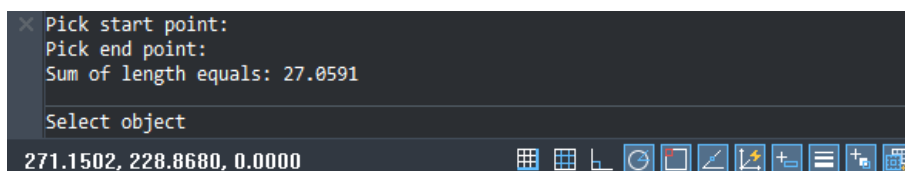
1. Once you run the command, you need to choose a line.



2. Afterwards, select two points on the chosen line to calculate the length of the line.



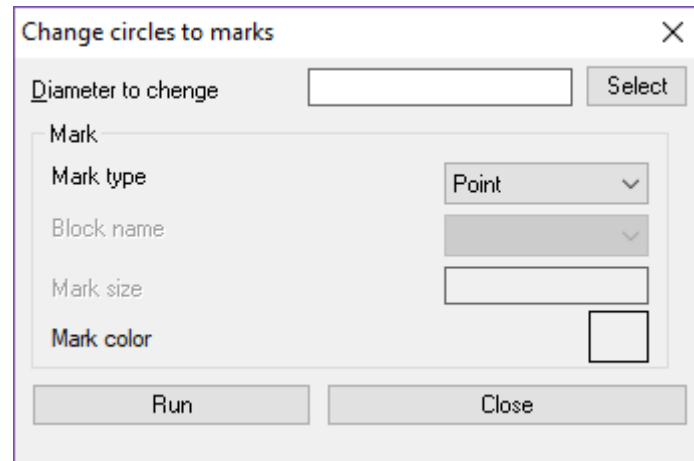
3. As soon as you click on the second point, command bar will display the length of the line between the chosen points.



## 6.27 Transforms circles into different objects

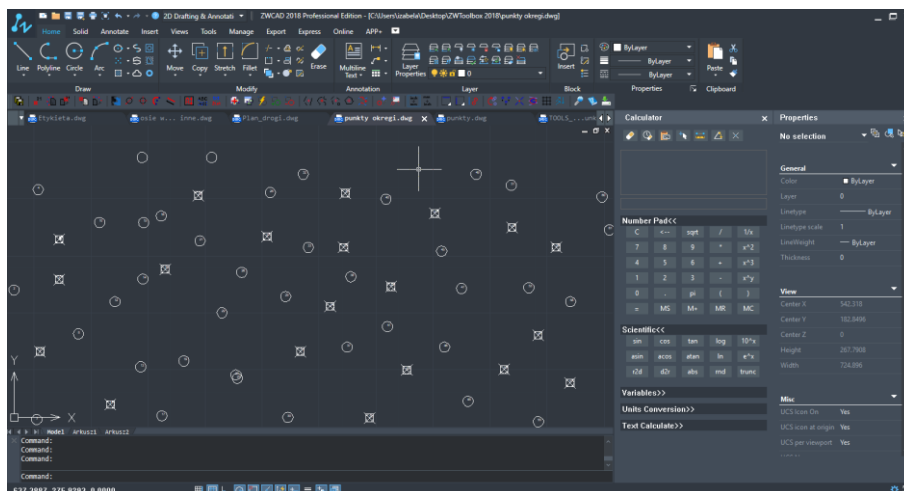
This function transform circles into objects such as: points, crosses, circles of a selected size, stars and blocks. In order to change an object, you need to enter the diameter of circles

which are going to be changed. The type of a mark that it will be changed to and its color. By doing this all of the circles of a given diameter will be changed to a set mark.

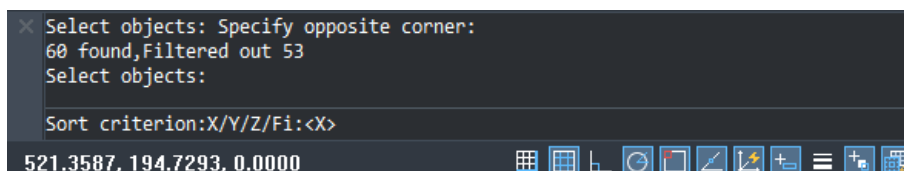


## 6.28 Points, blocks and circles report

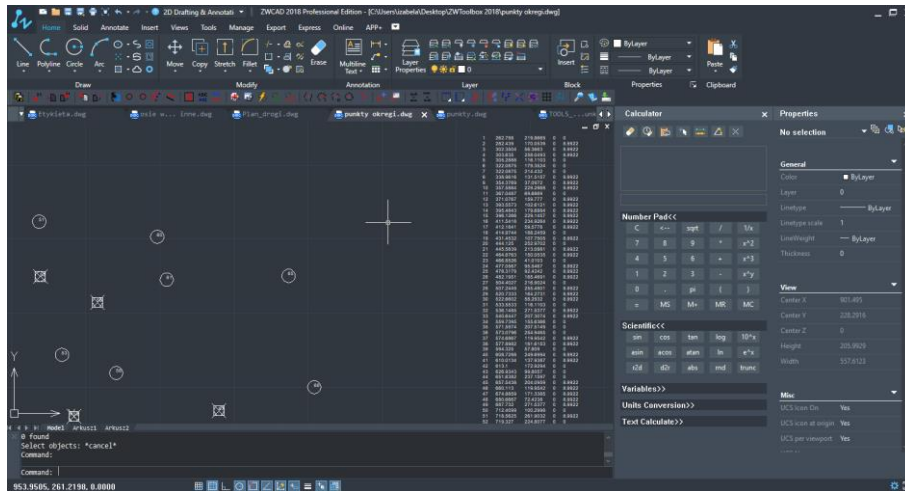
This function will ask you to select points, circles and blocks. Afterwards, you will be asked to choose a sorting criteria: do the selected elements in the collection have to be sorted by using the coordinates of X,Y,Z, by the size of the circles or the scale of the blocks. The collection is inserted into the drawing, alongside numbers next to each element. Those are then added to each point, circle and block. An example of such drawing before using this function is as follows:



1. Once you run the command, please select the points and circles.
2. You then need to set a sorting criteria

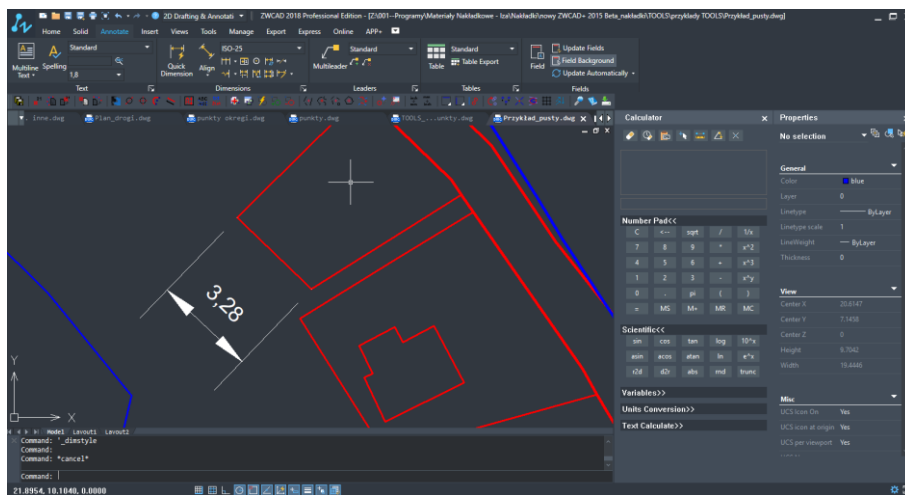




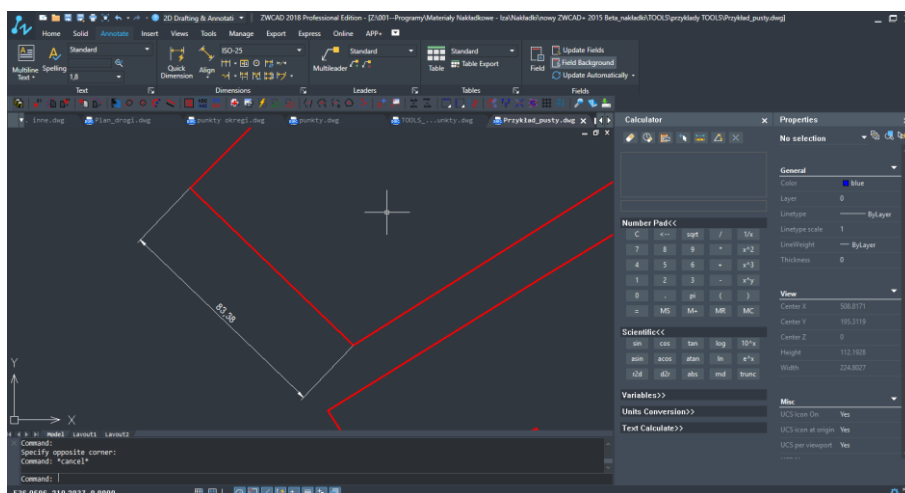


## 6.29 <sup>inch</sup> <sup>mm</sup> Scale drawing from inches to millimeters

If a picture is drawn in the metric scale of inches, and you have to convert it to millimeters, you can use this function in order to do so. This picture will be increased 25.4 times. Size in inches.



Size in mm



## 6.30 Scale drawing of millimeters to inches

If a drawing is in millimeters and you need to convert it to inches, you can do this by pressing the correct icon. The example shows the picture reduced 25.4 times.

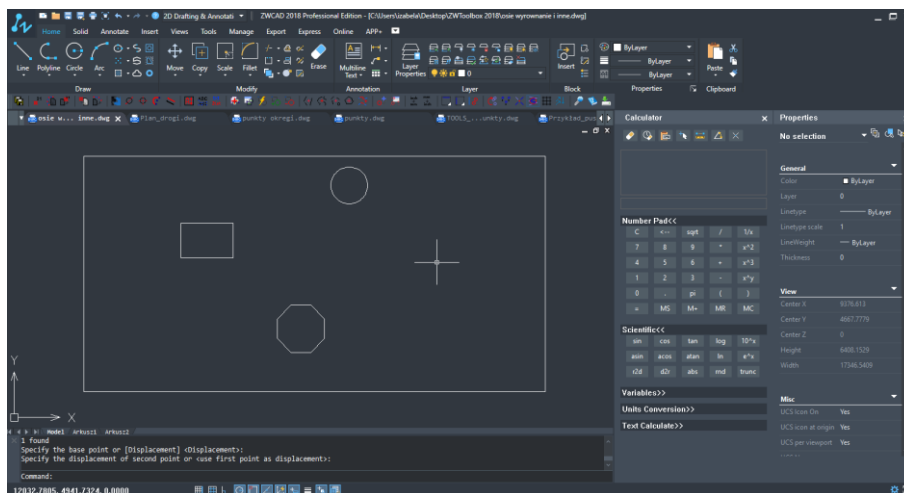
## 6.31 Aligning objects horizontally

### 6.31.1 Aligning objects to top

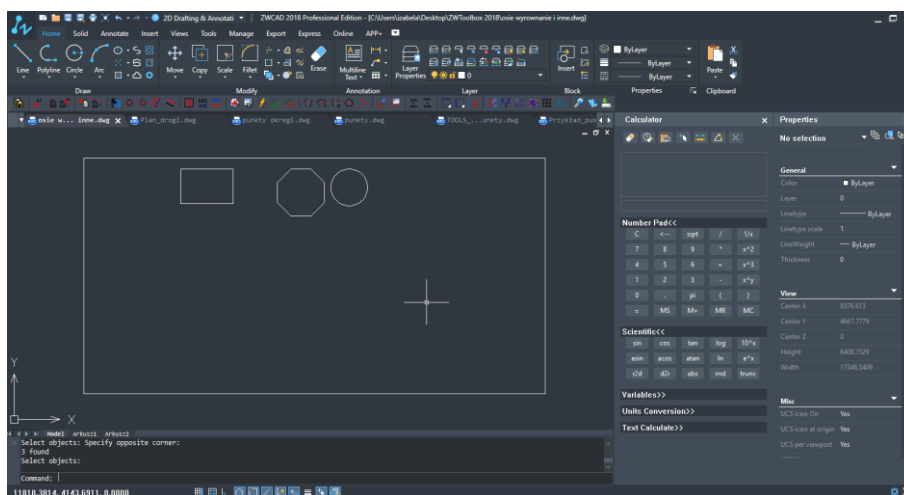
The elements will be aligned to the most furthest upper edge out of the chosen objects, just like on the example.

User could choose the group of objects and after confirmation by ENTER, the objects will be aligned to the the extreme upper edge among indicated objects.

You have to specify the alignment parameters: orientation, alignment direction.



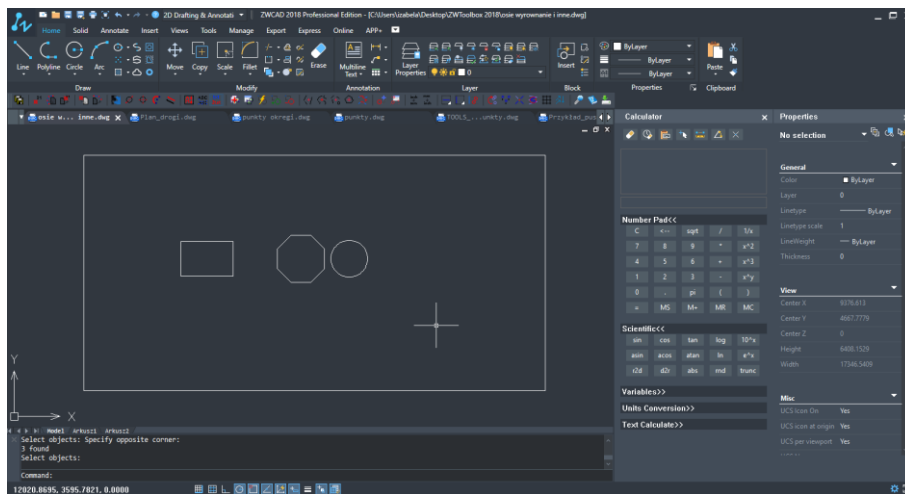
Then please select the objects.



### 6.31.2 Align objects to the center

Chosen elements can be aligned in the middle of the vertical line. The point is designated as a centre of an axis Y with the furthest extended lower and upper edge of the objects.

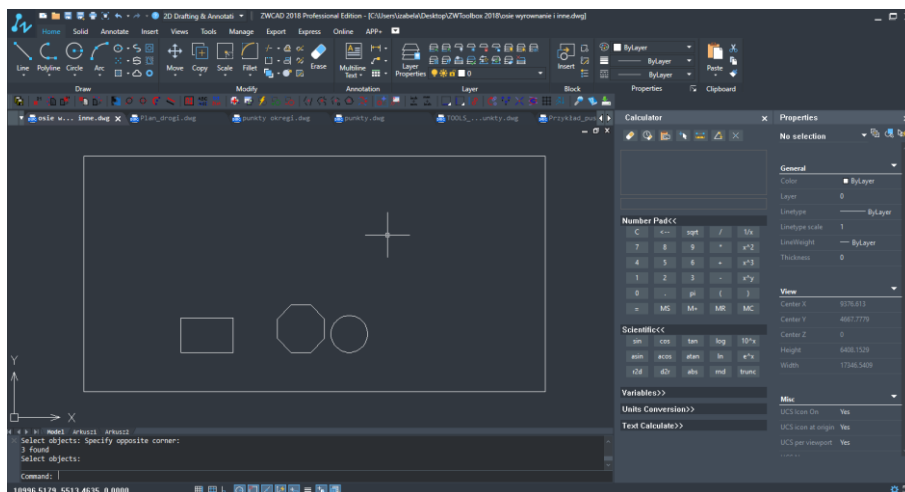
Elements will change their location.



### 6.31.3 Align objects to the bottom

Elements will be aligned to the furthest bottom edge amongst the indicated objects.

Objects will change their location.



## 6.32 Aligning object vertically

### 6.32.1 Align objects to the left

After choosing a group of objects and activating the function, they will be aligned to the furthest left edge of the indicated objects.

### 6.32.2 Align objects to the middle

You have to choose a group of objects and after pressing ENTER they will be aligned to measure the level of the indicated objects. The point is marked as the center of the X axis from the furthest left and right edges of objects.

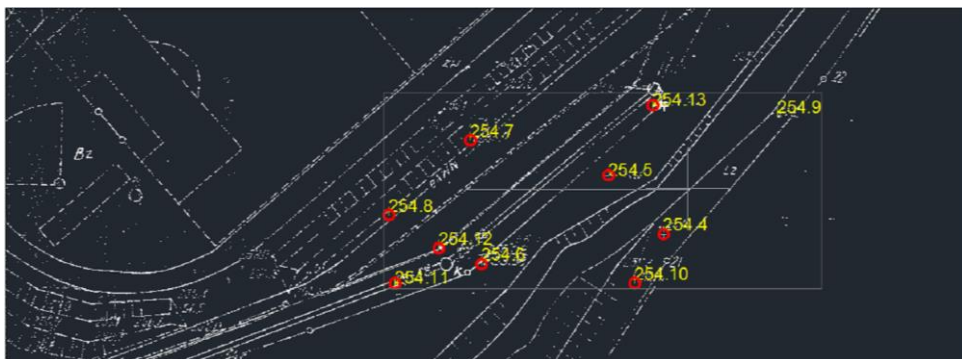
### 6.32.3 Align objects to the right

In order to align objects to the right, choose objects and confirm by pressing ENTER. They will be aligned to the furthest right edge of the indicated objects.

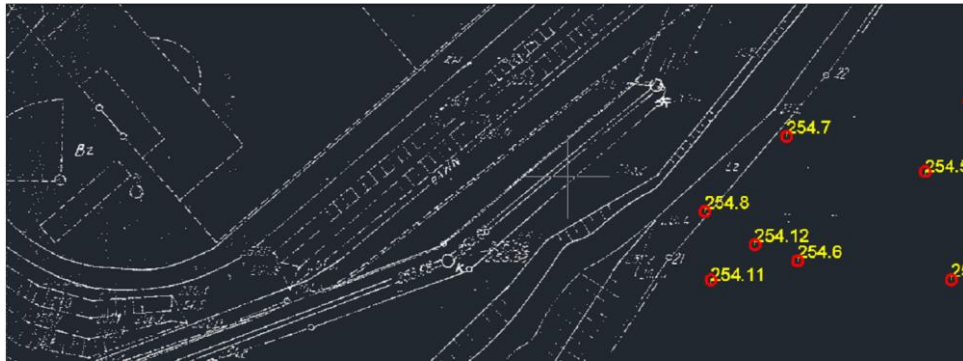
## 6.33 Align a group of objects

This function allows to align the group of objects to a chosen point. Firstly, the user should indicate a certain point, and then point to which the objects are to be moved/adjusted.

If the chosen point of outer contour will be for ex. *the end* or center, all the indicated objects will be moved to that point.



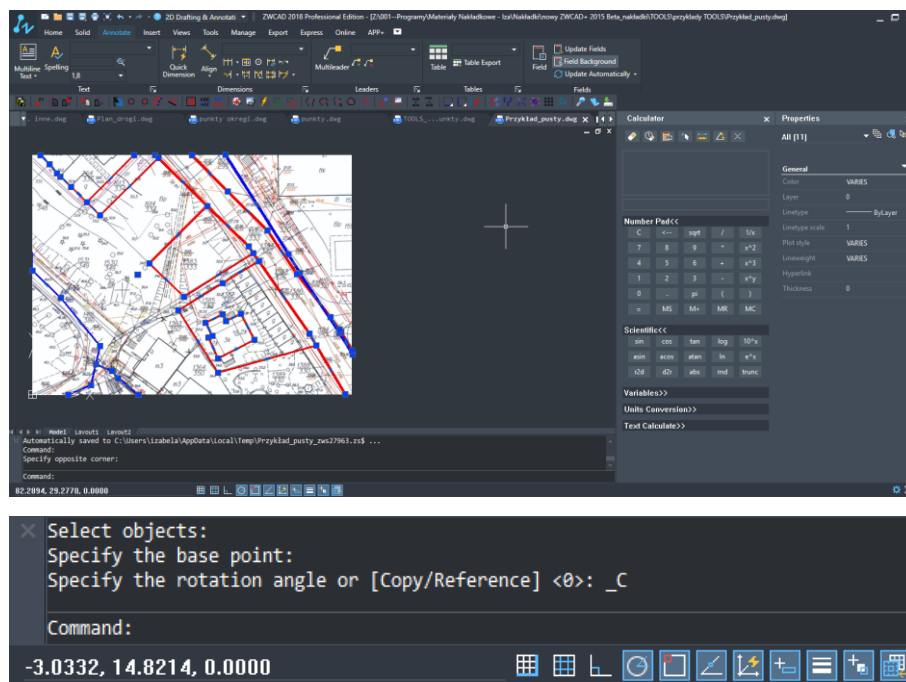
If the chosen point of outer contour will be "Close", all the objects will be aligned in the direction of the X or Y to a certain point.



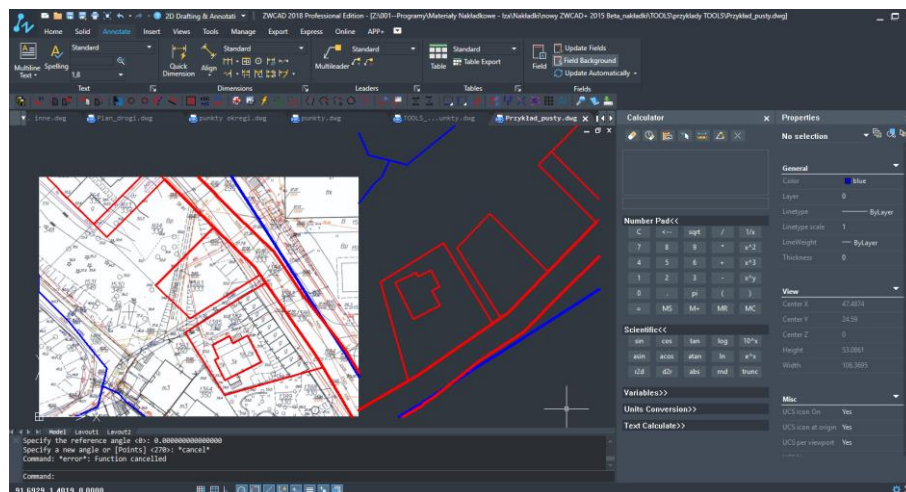
## 6.34 Rotate with Copy

This function is similar to the standard ZWCAD command Rotate.

It will ask the user to select objects, center point, reference and rotation angle.

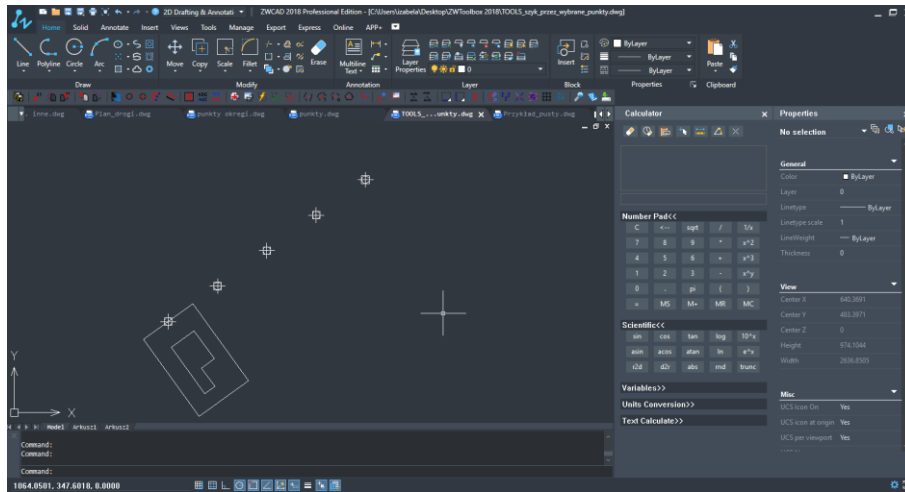


Rotation will be done on a copy of a selected object.



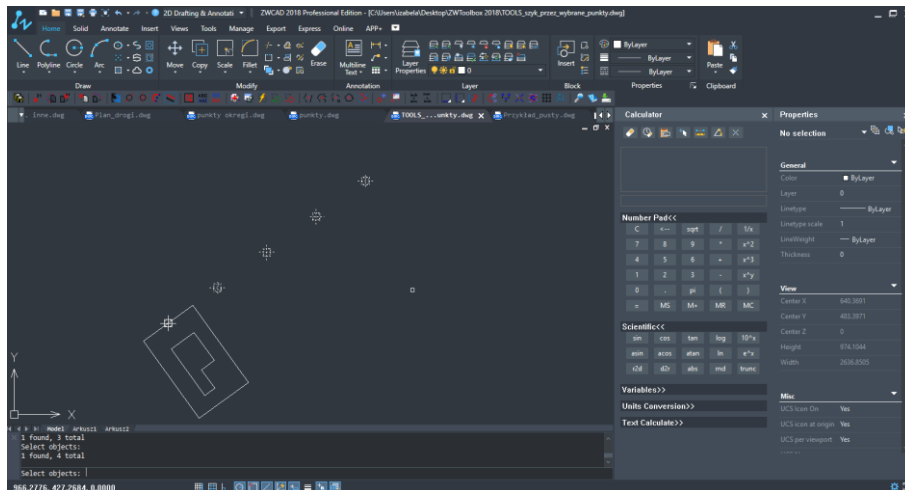
## 6.35 Array of objects by points

This function will ask the user to select elements to copy and select point objects.

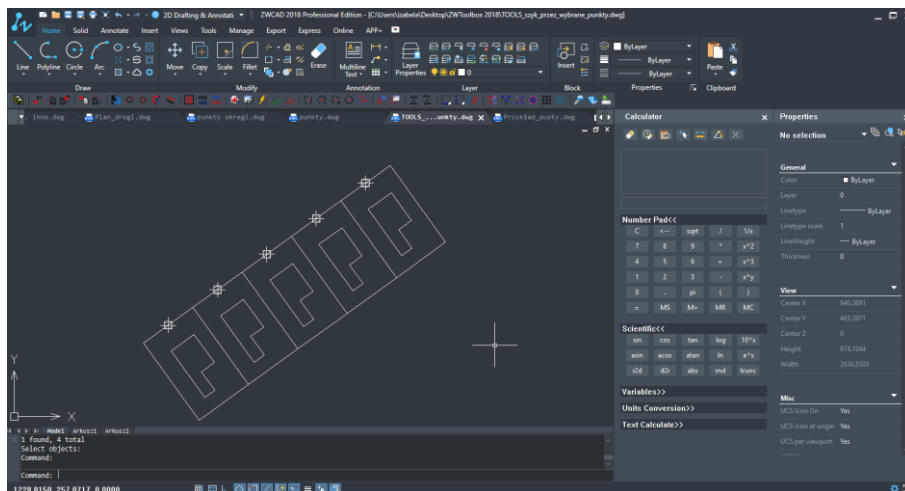


Specify the base point of the copied item.

In each selected point, a copy of items will be inserted.



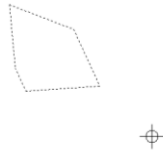
The results of the operation is presented on the picture below:



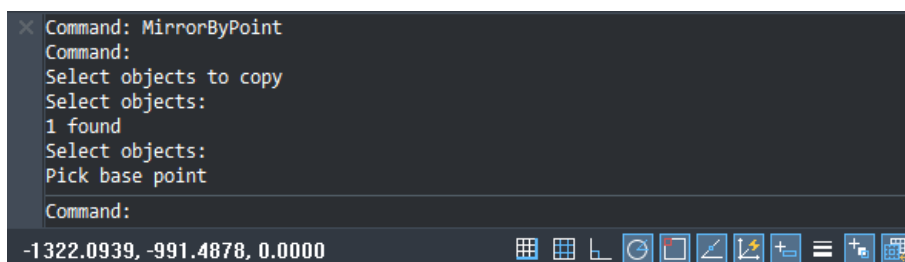
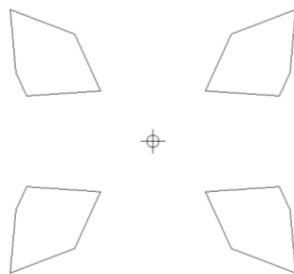
### 6.36 Mirror by point

Function will make a mirror image of each selected object by X and Y axis.

After activating the command, you have to identify the item that you want to copy and then a base point as the center point of the reflection element.



You will get 3 copies.

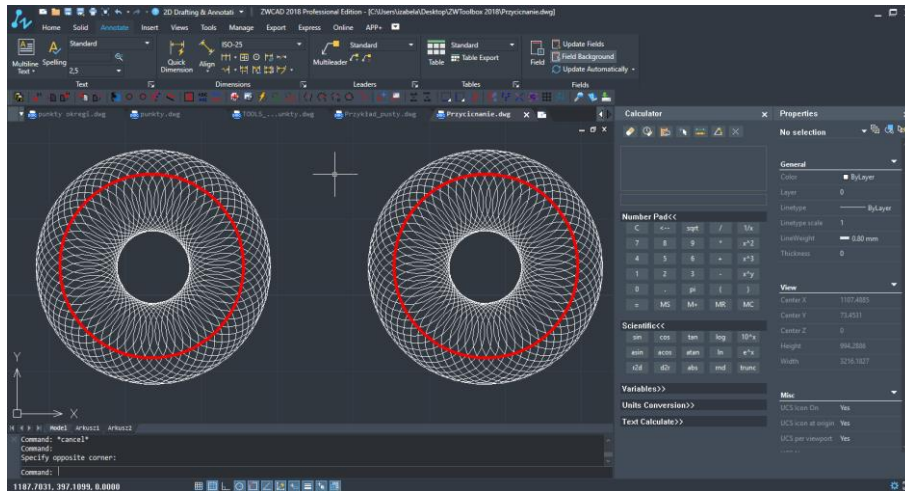


### 6.37 Extended trim

This function trims all the elements which cut through a chosen object

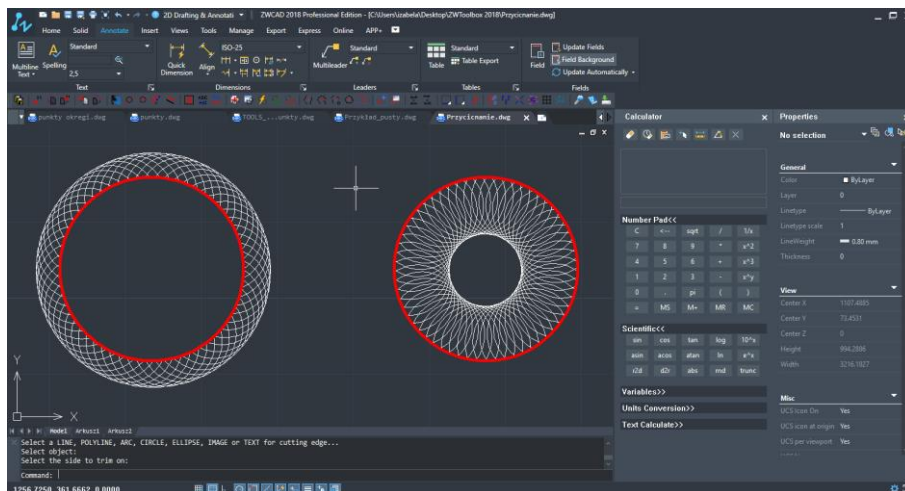
The first step is the indication of the element which is to be cut. Afterwards, you need to choose a side of the element on which the elements have to be cut.





The results are presented below:

- On the object on the left hand side of the drawing area the lines are cut inside of the selected outline.
- On the object on the right hand side of the drawing area lines are cut on the outer side of the selected outline.

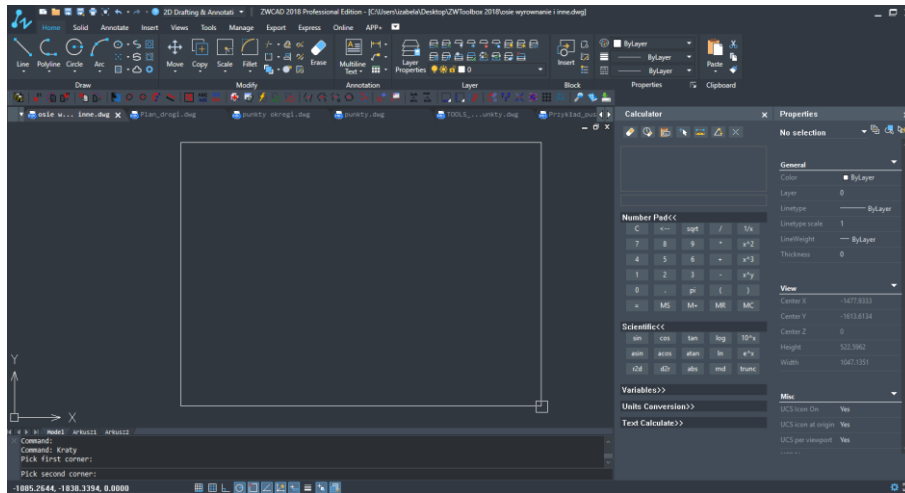


## 6.38 Grating

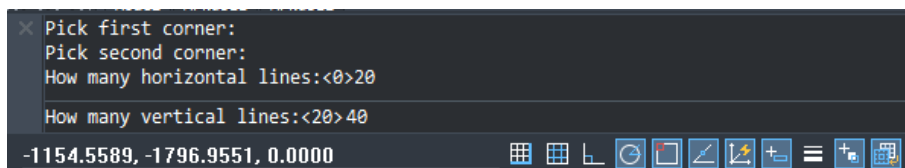
This function allows the user to draw vertical and horizontal lines on a selected area. After running this command, the application will ask you to indicate the scope of the drawing grid and then it will ask you for the amount of horizontal and vertical lines.

Please specify two corners of the area where you want gratings to be done.

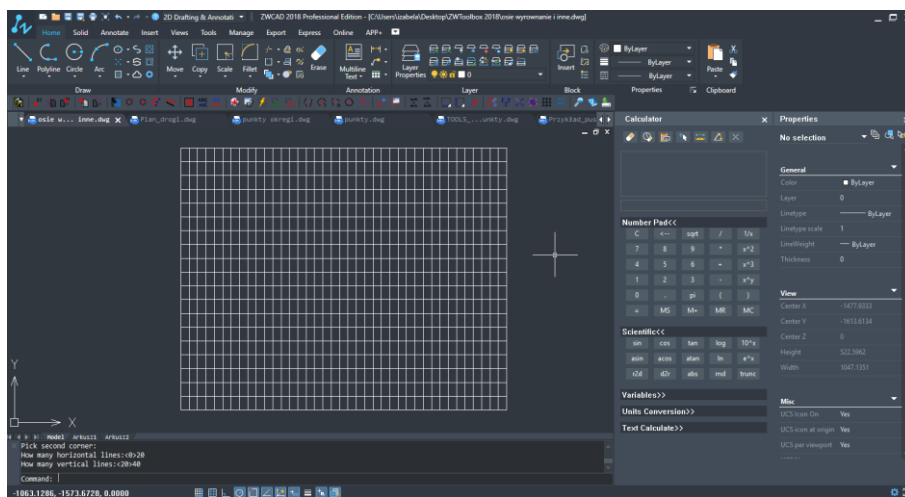




You have to specify the number of rows and number of columns.



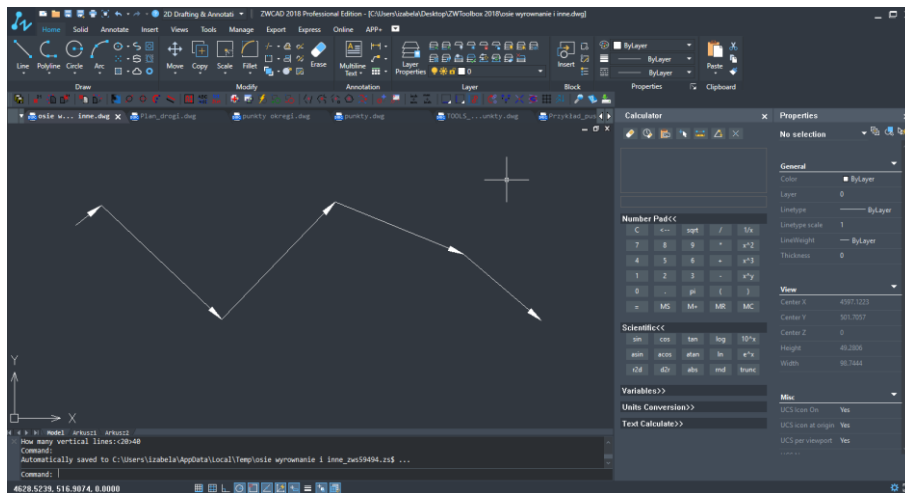
The effect is as follows:



## 6.39 Draws a series of arrows alongside points

The arrows are drawn between the points that the user chooses.

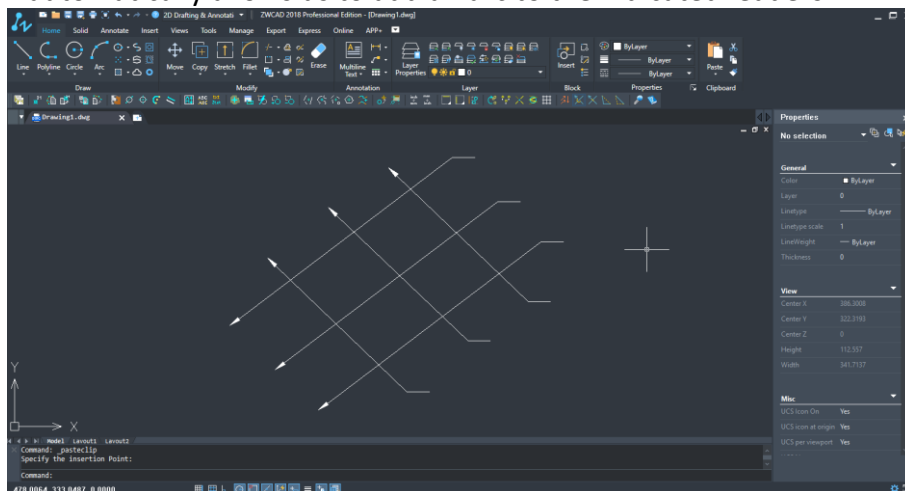
The first step after activating the command is choosing the starting point of an arrow which is to be inserted.



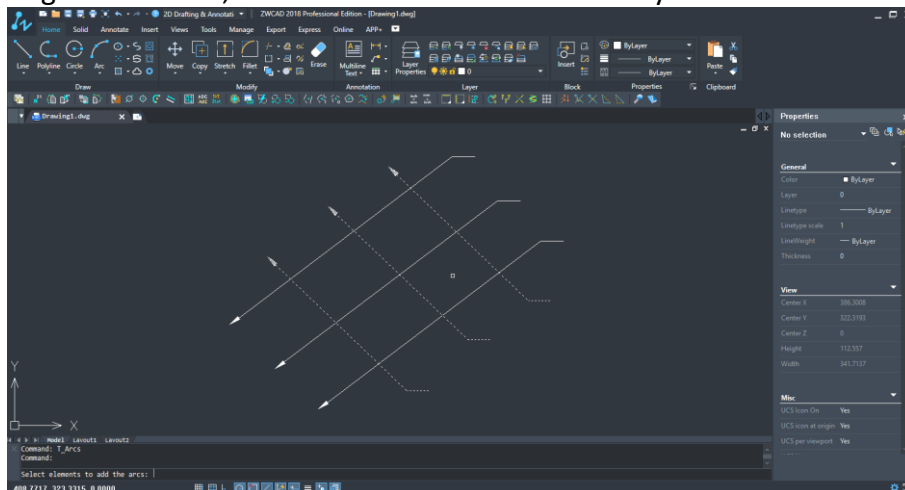
Following that, choosing different points will allow you to connect them with arrows.

## 6.40 Add arc

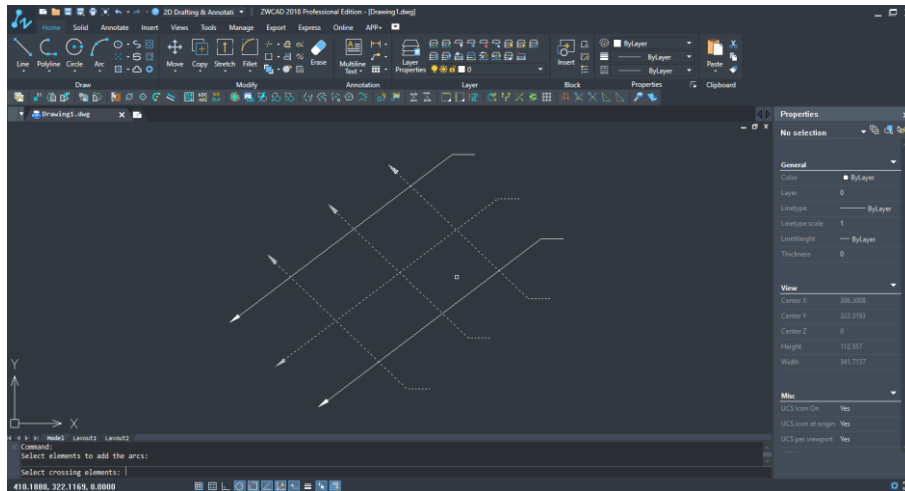
The function automatically allows us to add an arc to the indicated leaders.



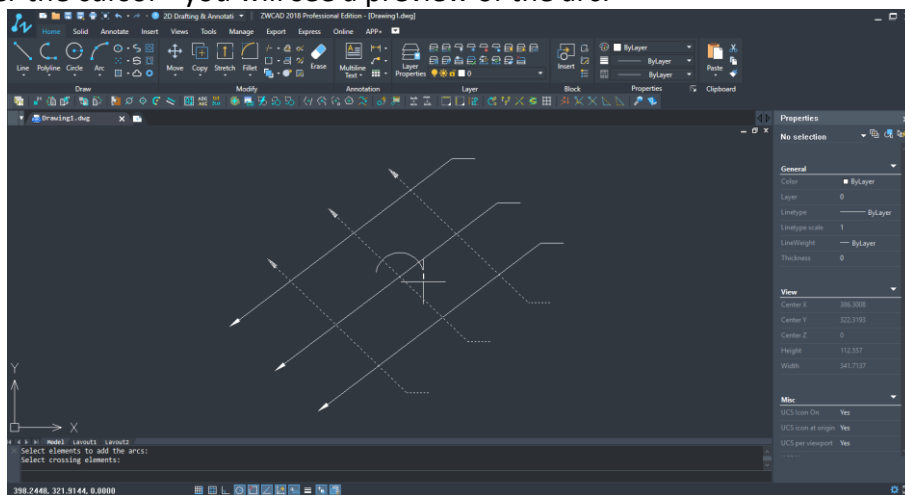
After activating the function, indicate the elements on which you want to insert the arcs:



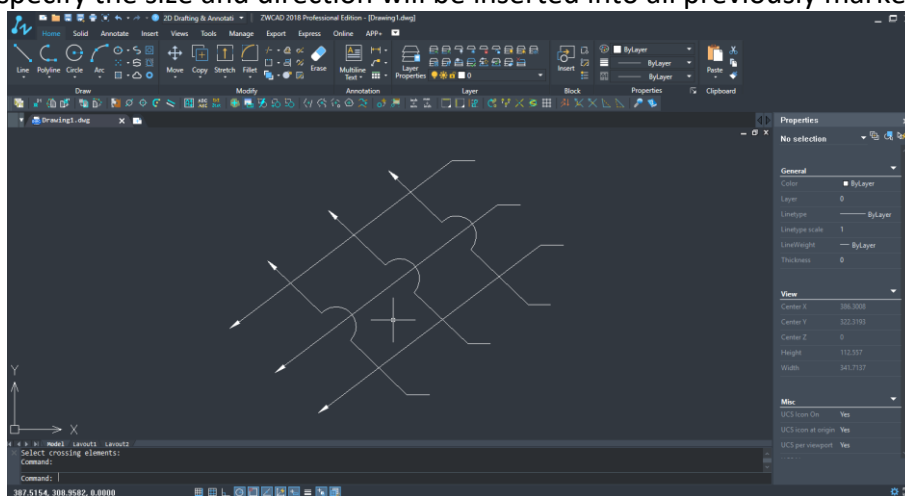
Then select the crossing element:



Next - under the cursor - you will see a preview of the arc:

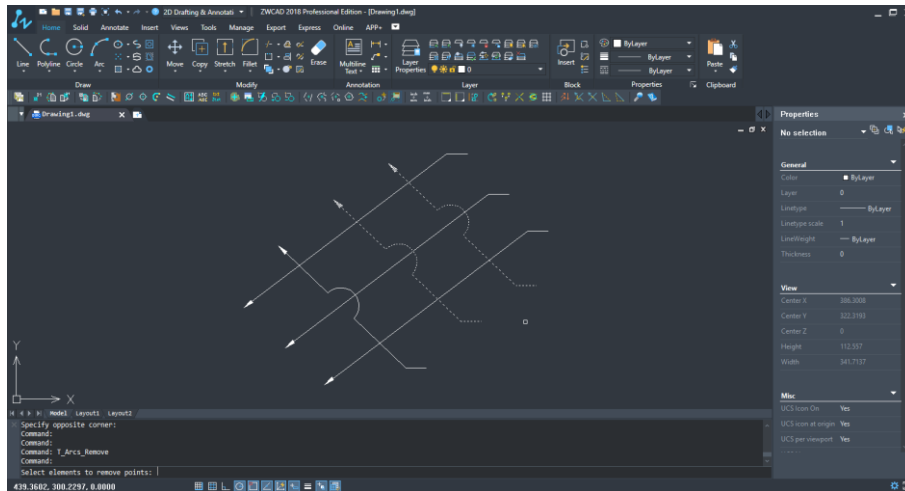


When you specify the size and direction will be inserted into all previously marked leaders:

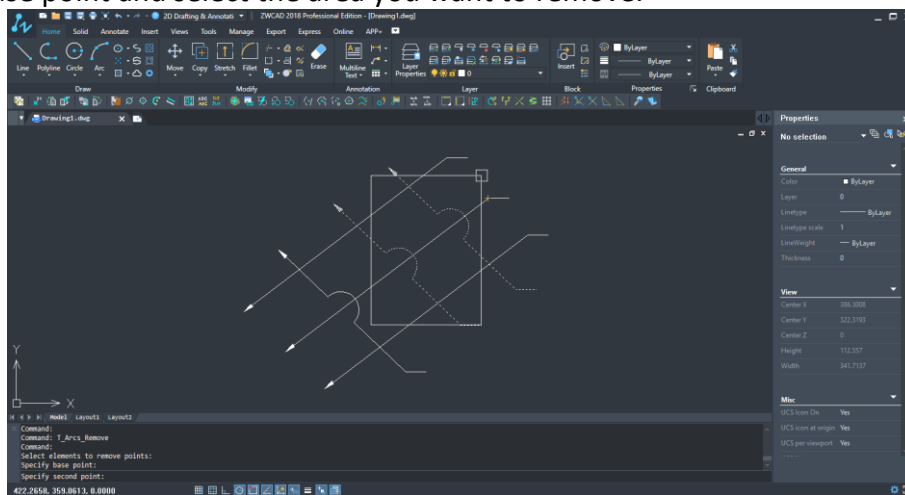


## 6.41 ✕ Remove points

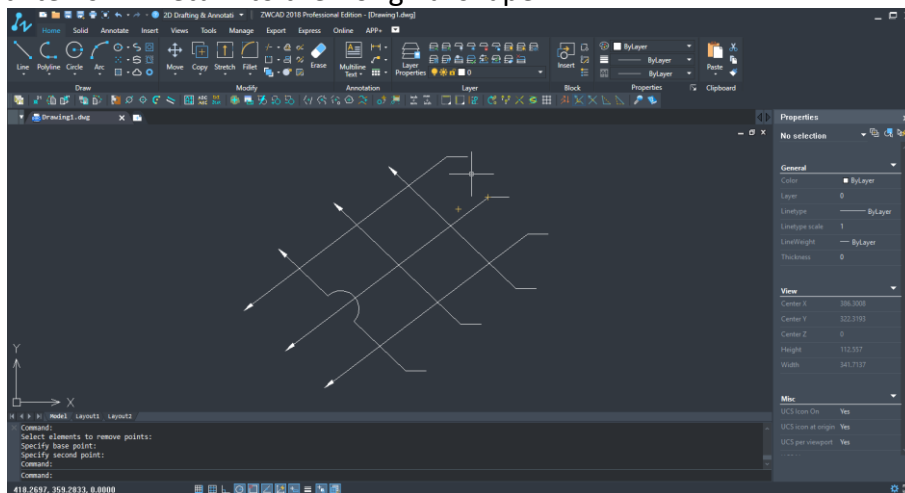
We can easily remove the arc with the points that were created on the selected elements. To do this, after activating the function, specify the elements on which you want to remove the arcs and additional points:



Click the base point and select the area you want to remove.



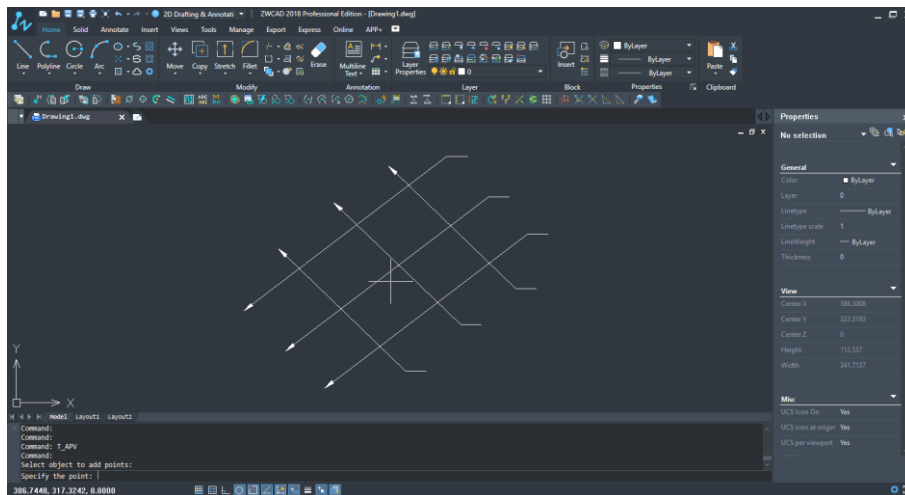
The selected items will return to their original shape:



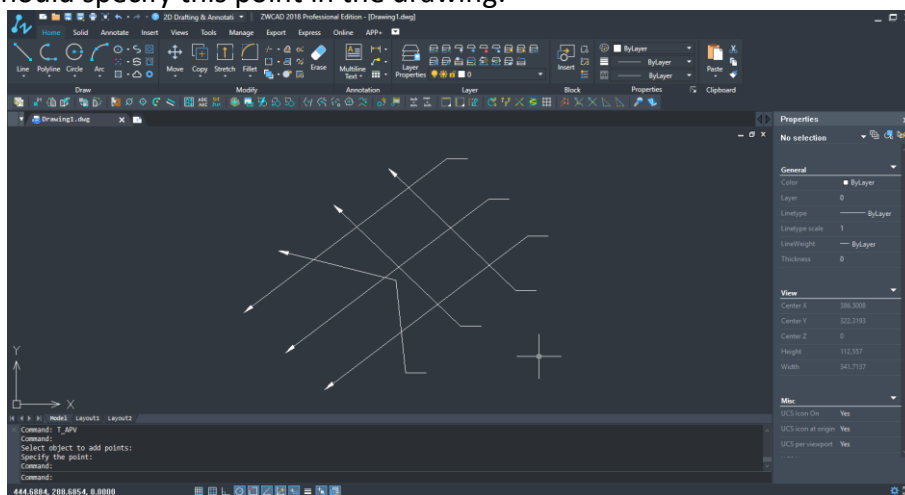
## 6.42 Add point

The command allows you to add a point to an existing leader.

After activating the command you need to specify to which element you want add a point:



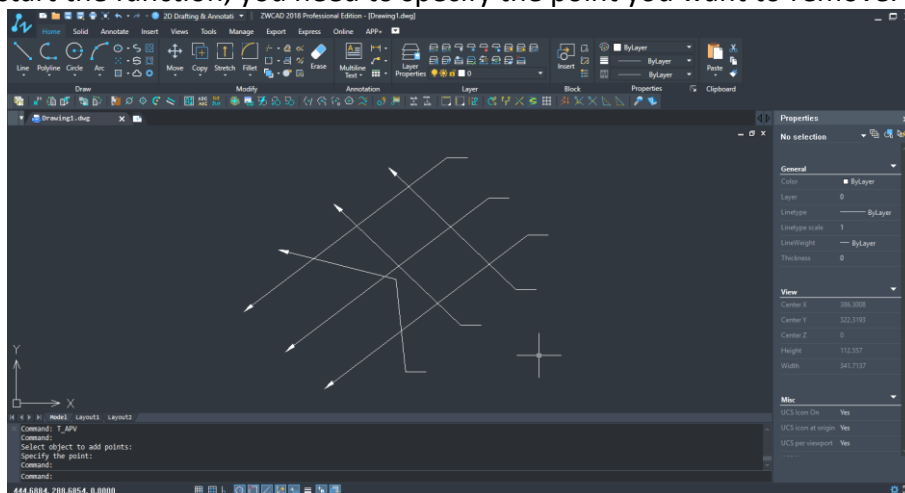
Next, you should specify this point in the drawing:



## 6.43 Remove point

Similarly to the preceding function, we can easily remove the indicated point and return to the original state.

When you start the function, you need to specify the point you want to remove.



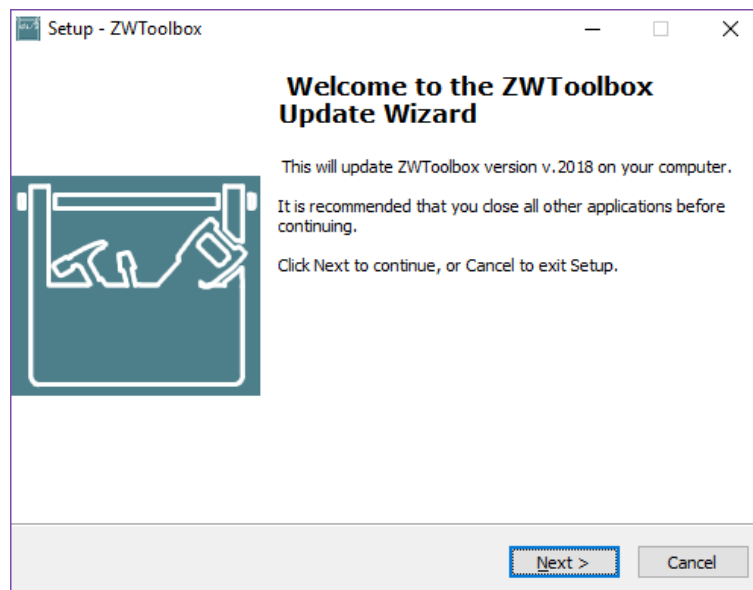
#### 6.44 Activation

#### 6.45 ZWToolbox 2020 User Manual

Gives access to the user manual.

#### 6.46 Updating ZWToolbox 2020

You can check whether you have the most up to date version of the overlay.

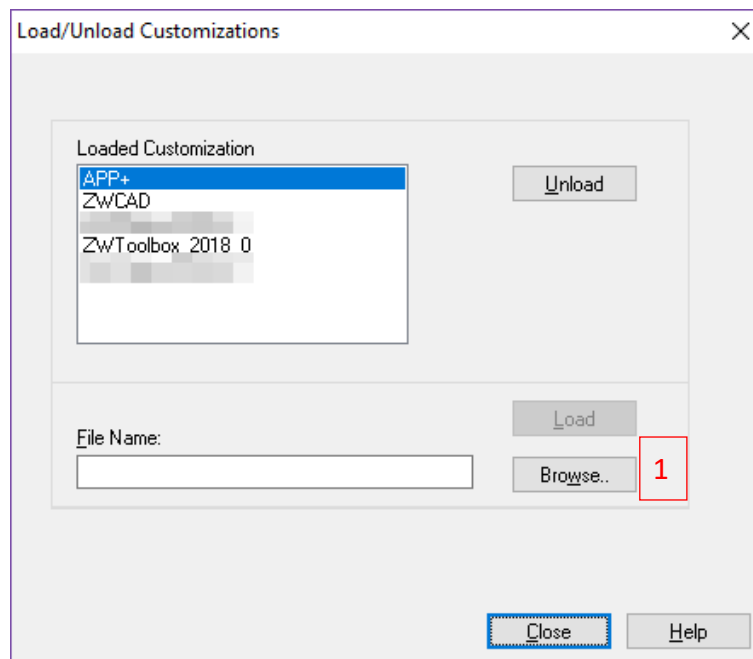


After clicking "Next", the program will download and install a newer version of the overlay, if it is available.

## 7 Additional information

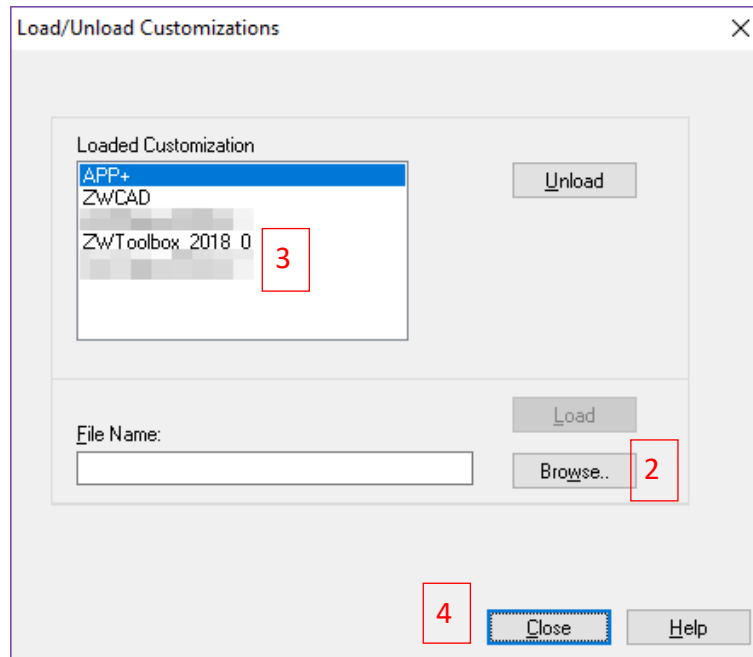
### 7.1 Manual load menu

In order to manually load menu, you have to write the command „\_menuload” or go into menu: Tools->Customize->Menu. There, a window similar to the one below will be displayed.



- a. Press the button „Browse”[1]. In the new window.
2. You need to look for the file called „ZWToolbox.cuix”. Default path:
3. „C:\ Szansa\ZWToolbox\2020\EN\Menu” .
4. It’s location may be different. It all depends on the installation path which was chosen during the installation.
  - a. Select the file by pressing „Open”.
  - b. Load the file by pressing „Load”[2].
  - c. In the list [3] a confirmation text will appear.

- d. The button „Close”[4] will close the window. ZWCAD will have a new toolbar once all the steps are done.

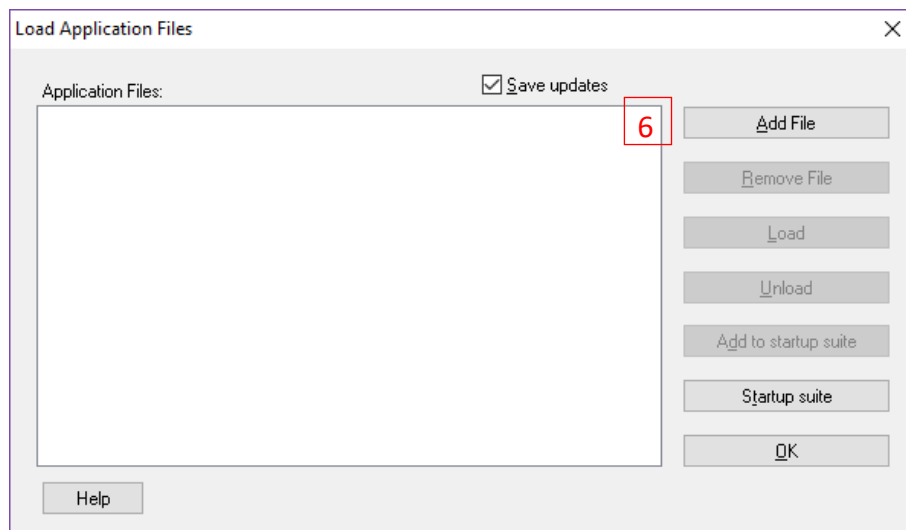


## 7.2 Manual load application

After installing the overlay, it should load automatically after running ZWCAD 2020. The functions should be available and the toolbar with the icons should be displayed. If after running ZWCAD the overlay does not appear, please follow these steps:

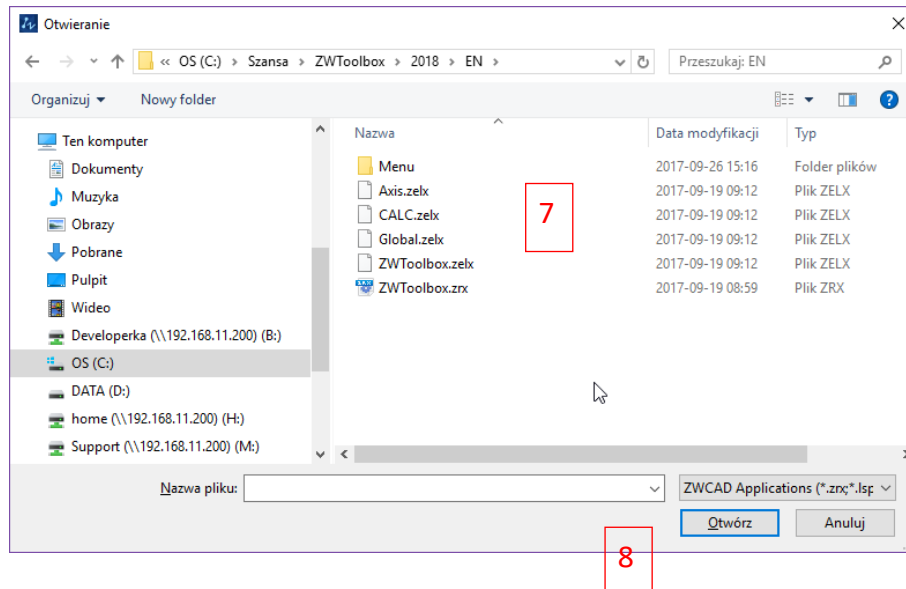
Run the command „\_appload” or by using the menu in ZWCAD: Tools->Load Application:

To begin the process follow these guidelines:

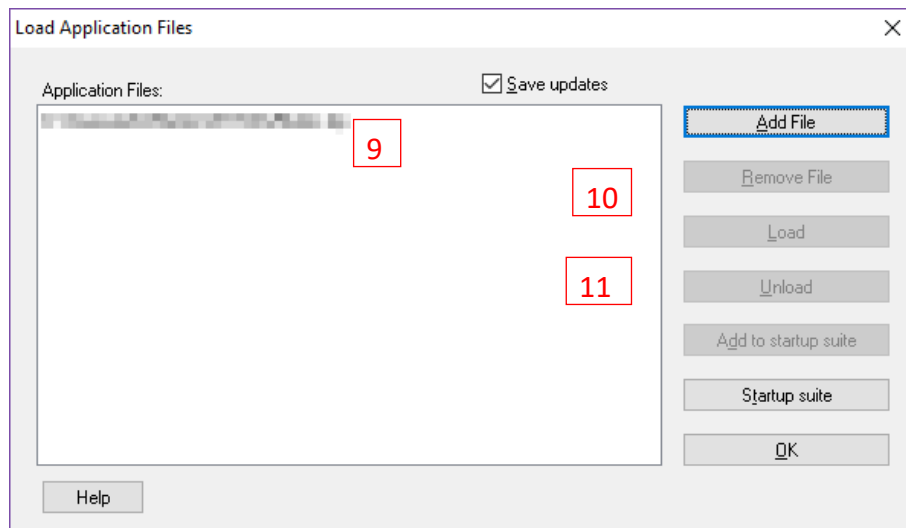




Press the button „Add file”[6], select the file „ZWToolbox.zelx” [7] Confirm by pressing the button „Add”[8]



Following that, in previous window select on the list a newly added file [9] and load by pressing the button „Load”[10]



You can also add an application to the list of applications, which start automatically when ZWCAD loads. To do this, you should follow the previous steps, and after the last step press the button [Add to startup suite] [11] and then press the button “OK”.