

Krzysztof Ruszyński
Izabela Cholewa

ZW **Nesting** 



ZWNesting 2021

Version 2021.0.00 (12-08-2020)

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Usługi Informatyczne "SZANSA" Sp. z o.o.

ul. Świerkowa 25

43-305 Bielsko-Biała

NIP 937-267-27-69

www.zwcad.pl

tel. +48 33 307 01 95

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Description

ZWNesting is used to effectively and efficiently place number of elements automatically within a selected area.

1 Requirements

The new version of ZWNesting acts as an addon application for ZWCAD 2021 Professional. Hardware requirements of ZWNesting do not exceed the requirements of ZWCAD 2021.

2 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

Phone: 33 474 04 03

3 Installation

Installation must be completed on an account with administrative privileges.

Application installs automatically after running the downloaded installation package.

The Default installation path is C:\Szansa\ ZWNesting\2021. 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.

After correct installation of ZWCAD, the application ZWNesting should load automatically. ZWCAD should display a toolbar similar to the one below:




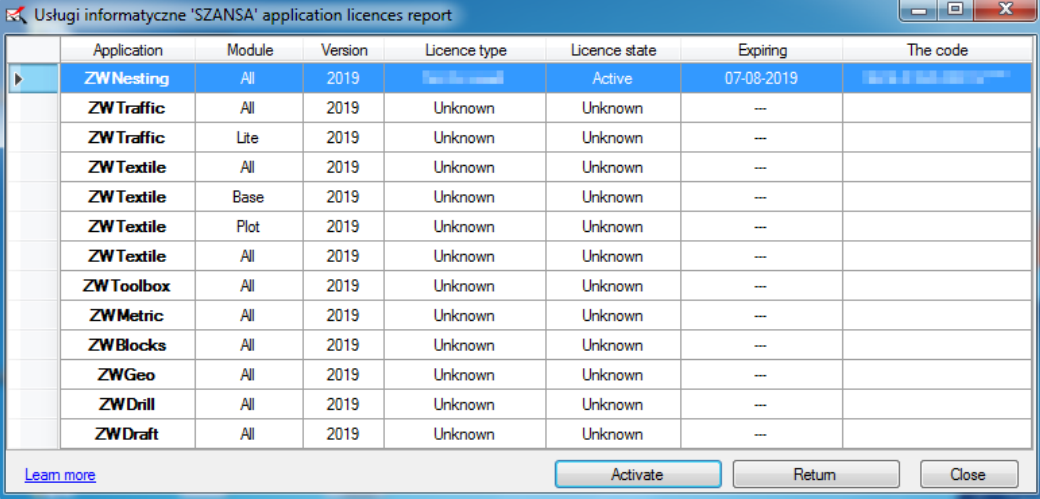
If for some reason the application menu does not appear, it can be loaded manually. You can load it manually by following the instructions listed in the chapter 8.2.

4 Activation

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.

In order to activate the program, use the command ZWNesting:Activate or click on this icon  in ZWNesting toolbar. The following window will appear: Once Activator has been launched, the following window will be displayed:

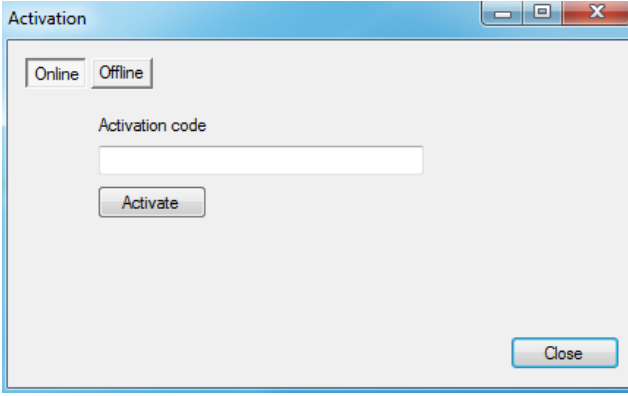


	Application	Module	Version	Licence type	Licence state	Expiring	The code
▶	ZWNesting	All	2019	Free for small	Active	07-09-2019	
	ZW Traffic	All	2019	Unknown	Unknown	--	
	ZW Traffic	Lite	2019	Unknown	Unknown	--	
	ZW Textile	All	2019	Unknown	Unknown	--	
	ZW Textile	Base	2019	Unknown	Unknown	--	
	ZW Textile	Plot	2019	Unknown	Unknown	--	
	ZW Textile	All	2019	Unknown	Unknown	--	
	ZW Toolbox	All	2019	Unknown	Unknown	--	
	ZW Metric	All	2019	Unknown	Unknown	--	
	ZW Blocks	All	2019	Unknown	Unknown	--	
	ZW Geo	All	2019	Unknown	Unknown	--	
	ZW Drill	All	2019	Unknown	Unknown	--	
	ZW Draft	All	2019	Unknown	Unknown	--	

Learn more Activate Return Close

Please click on “**Activate**”.

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



Activation

Online Offline

Activation code

Activate

Close

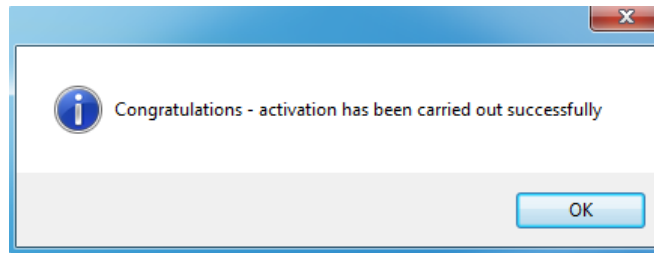
Online Activation

Please note: Online activation requires an Internet connection. If there is no internet connection available please use the Offline Activation.

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

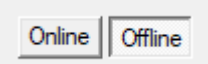
order, afterwards click on “**Activate**”.

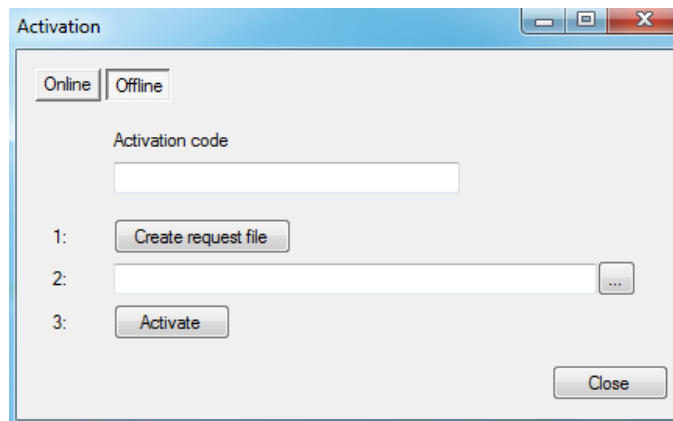
An information window will pop up confirming the activation.



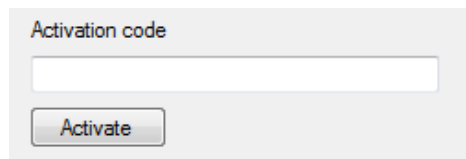
Once ZWCAD is launched, all functions of the program should be loaded and available.

Offline Activation

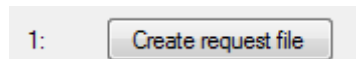
In the “**Offline**” tab  additional steps are required to complete the activation.



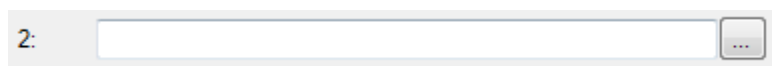
In the field “**Activation code**” please type in the information sent during realization of the order.




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 and a reply will consist of response file which then needs to be loaded in the activator:

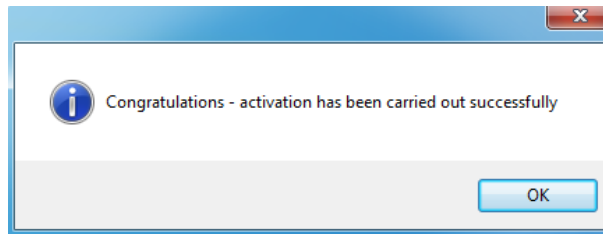


Response file needs to be saved on the computer and its localization needs to be determined by clicking on the following icon .

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.

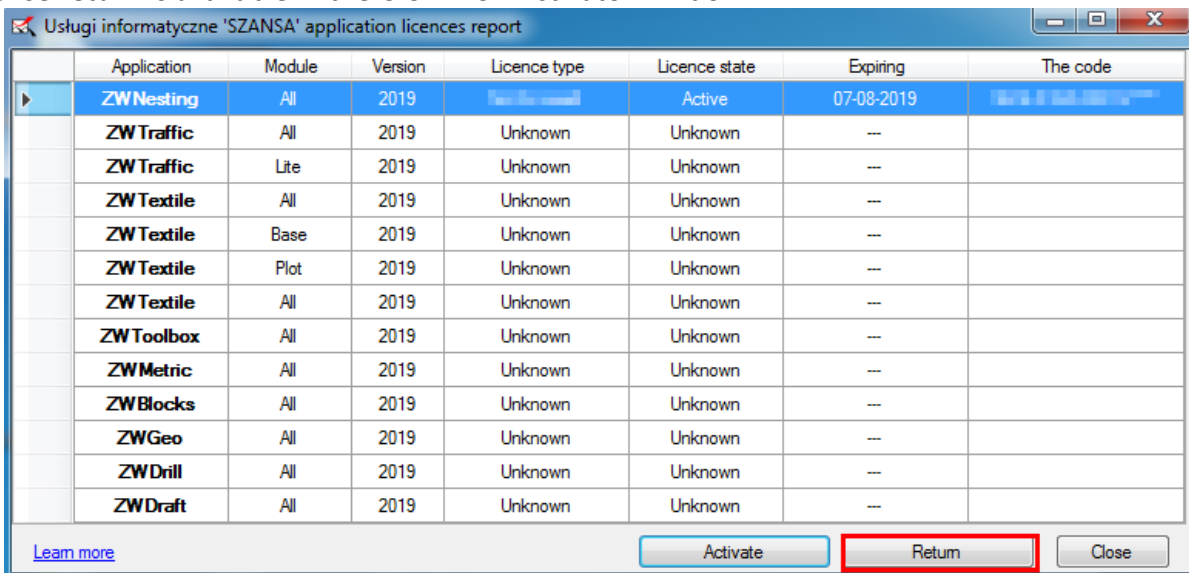
5 Transfer of a license

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

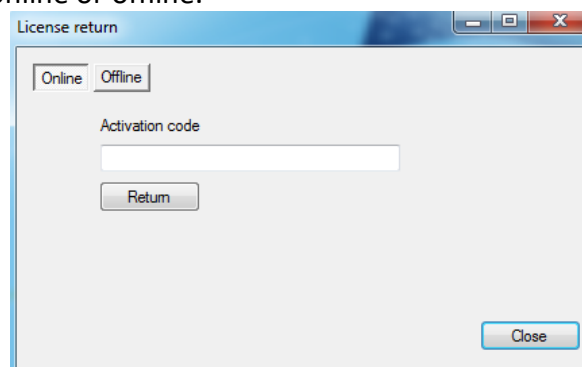
In order to transfer the license to a different computer, it is necessary to return the active license and once that is done, it will be possible to activate the license on a different Workstation.

Returning the license

License return is available in the UISZANSA Activator window.



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.

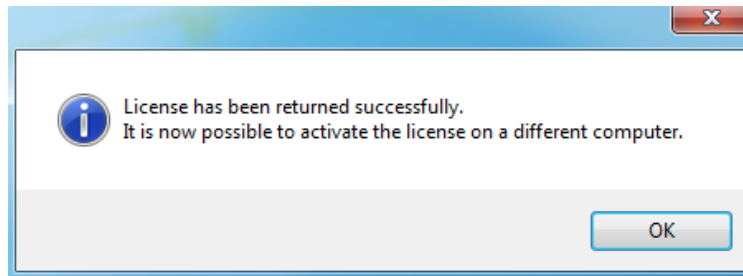


Online return

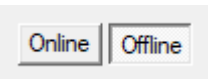
Please note: Online return requires an Internet connection. If there is no internet connection

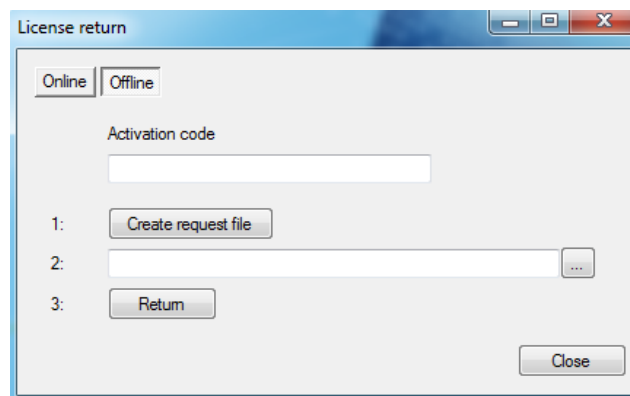
available please use the Offline return (3.1.2 Offline return).

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.

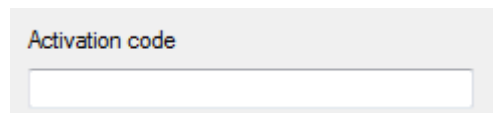


Offline return

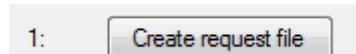
In the **„Offline”** tab  additional steps are required to complete the return of a license.



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.

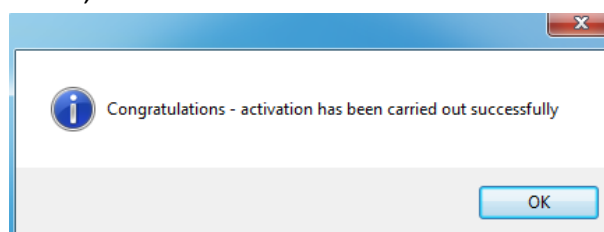


The file needs to be sent in a form of an attachment to, pomoc@zwcad.pl and a reply will consist of response file which then needs to be loaded in the activator:



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

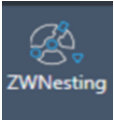
Once the response file is loaded, click on **“Return”**



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

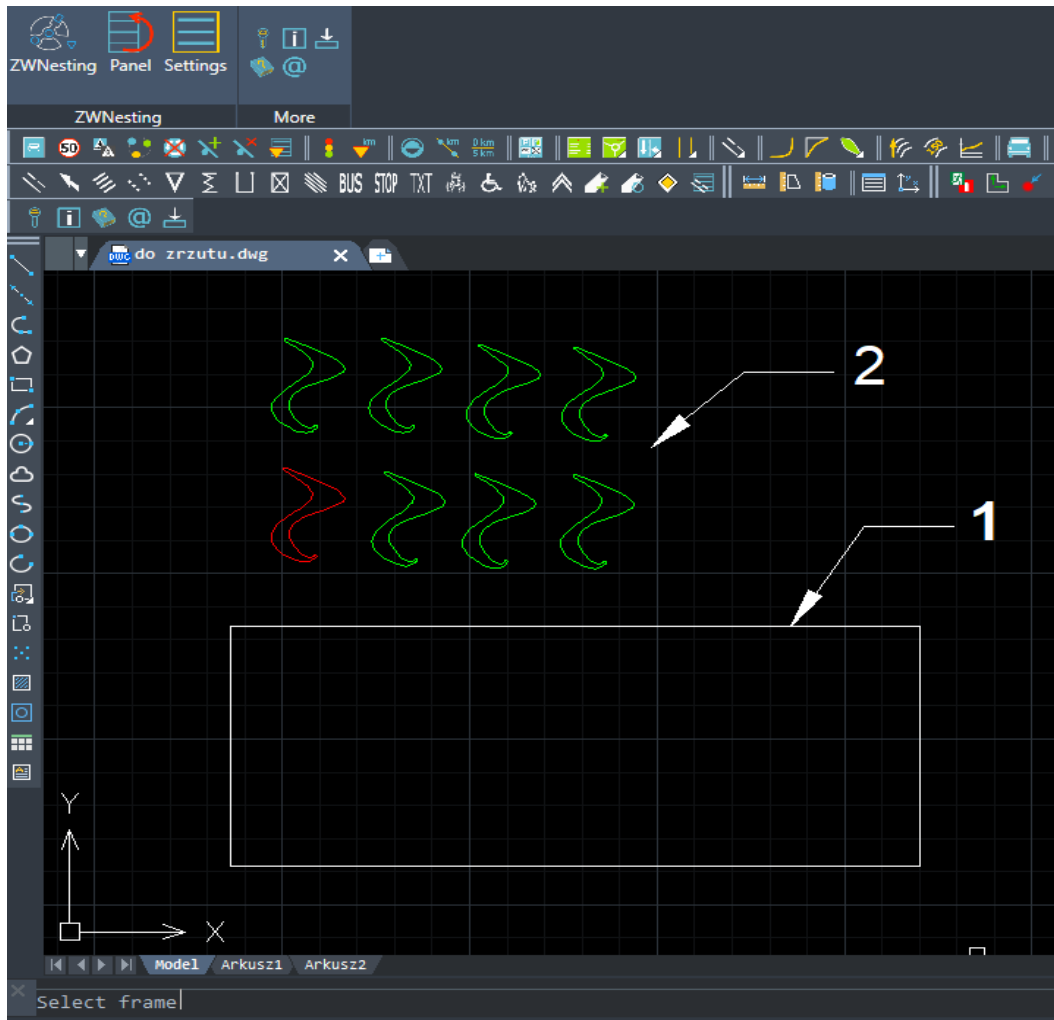
6 Functionality

ZWNesting

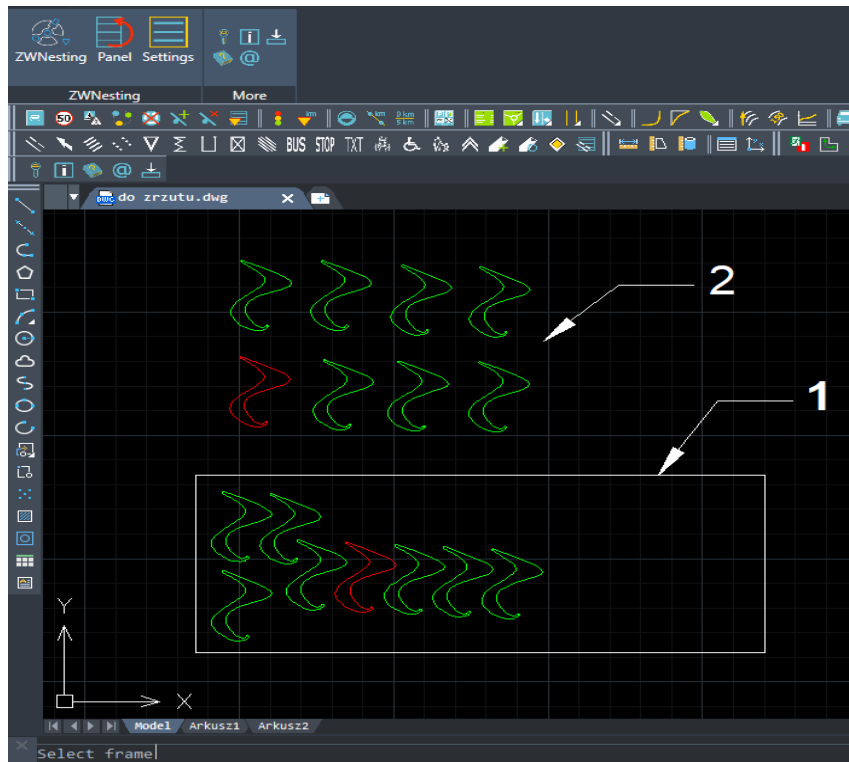


Select the ZWNesting from the menu:

1. The program will ask for an object – a rectangular frame which represents an area on which elements will be placed
2. Afterwards, the program will ask for elements from a drawing, which will be placed in the rectangular area.

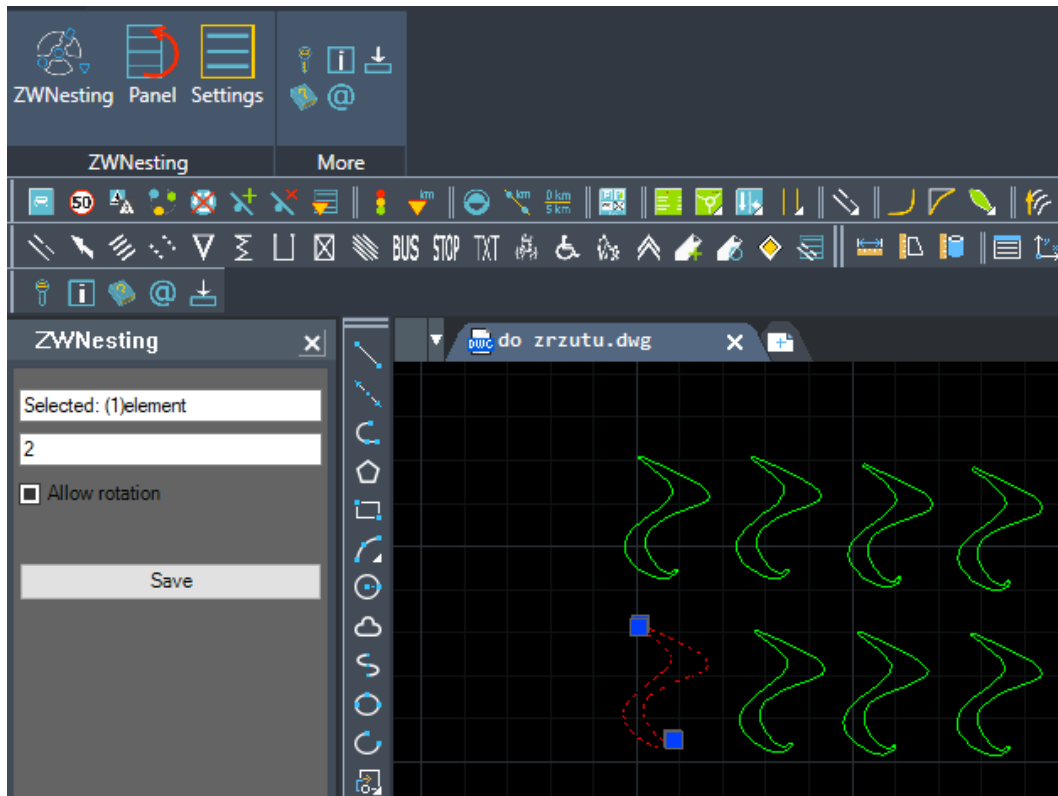


Now the elements will be placed in the selected area:

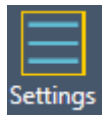


Select the Panel from the menu:

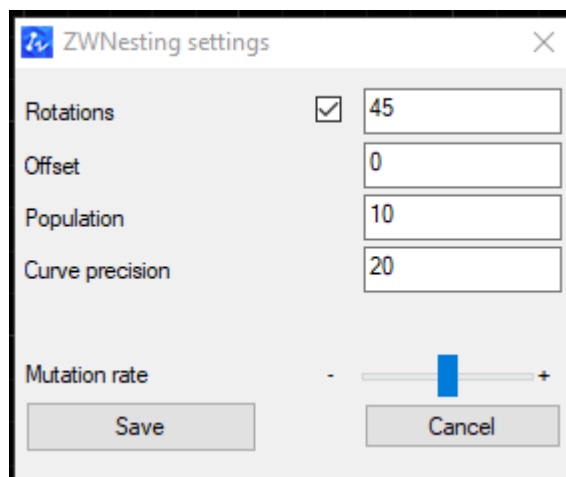
3. The program offers the possibility of choosing the number of copies for drawing elements. Select the NestingPanel, in the first window select the elements of the drawing , after that select the number of copies in the window below. If you don't choose the number of copies for the item, this element will be placed in rectangular area in one copy. The selected elements could be blocked if the widow- 'allow rotation'- is empty, after this save and run the program.



7 Settings



Select the Settings from the menu



- Rotations – Define a rotation angle of elements that are to be placed in a layout. The program will try to fit them by rotating them a number of times.
- Offset – Extra length between elements. Margins should be entered in the same units that the drawing is in. The program tries to place the elements as precisely as possible, in most cases the tolerance margin does not exceed $\pm 10\%$.

- Population – In order to maximize effectiveness of the program, there is an option to choose a number of iterations that will be completed. The program will try different layouts and will choose the one that has the best effect. If more iterations are set, the likelihood of a better result is high. However in order to create more iterations, more time is required. Smaller amount of iterations might be faster, but the result will not be as good as it could be with a higher iterations amount.
- Curve precision – every element, type of arc, circle or a polyline must be simplified in order to calculate it. Increasing this parameter will yield more precise results but the performance might suffer as the program will have to carry out more operations. Decreasing this parameter will improve loading times but results will not be as accurate.
- Mutation rate - ZWNesting by default tries to fit all big elements at the beginning and then fit all the smaller ones. The user can change the default settings by moving the slider to the right, which priorities smaller elements from the bigger ones. Whereas moving the slide to the left will lower the priority of smaller elements. By default its set to the balanced state.

If you run the program for settings from this pictures get this effect:

