

# SmartTOOL Instruction manual



## Version Info

Version	Release Date	Change
1.2.1.7	06.02.2023	First Version

## Table of contents

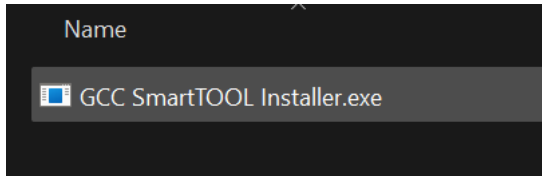
<b>1. Installation</b>	<b>4</b>
1.1. GCC SmartTOOL Installation	4
1.2. GCC SmartTOOL enable in CorelDRAW	6
1.3. GCC SmartTOOL Activate license	8
<b>2. General functions</b>	<b>9</b>
2.1. Laser Model and Information Windows	9
2.2. Set CCD-marker	10
<b>3. Sign Generator</b>	<b>10</b>
<b>4. Smart Copying</b>	<b>11</b>
4.1. Measure and fill the part	11
<b>5. Read Excel</b>	<b>13</b>
5.1. Read Excel from Clipboard	13
5.2. Copy fields multiple times (xCopy)	15
5.3. Create machine-readable codes	15
<b>6. Optimize vectors</b>	<b>17</b>
6.1. Sort Vector / Cleanup	19
<b>7. Create laser image</b>	<b>20</b>
7.1. Cartoon	20
7.2. Mode Structured 1, 2 (Standard), 3, K	22
7.3. Halftone	23
7.4. Convert image to sketch	24
<b>8. 3D Effects</b>	<b>25</b>
8.1. Negative 3D object (Wood Carving)	25
8.2. Create a positive 3D object	26
<b>9. Stamp Tools</b>	<b>27</b>
9.1. Create a cutting outline	27
<b>10. Rhinestone Module / LED</b>	<b>28</b>
10.1. Create Rhinestone Template	28
10.2. LED	29

# 1. Installation

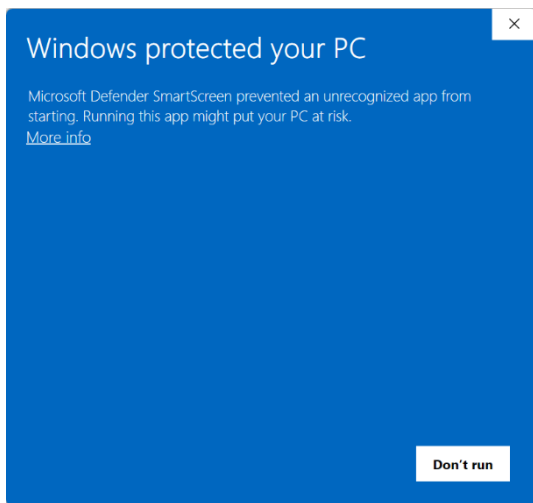
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## 1.1. GCC SmartTOOL Installation

Download the installer from the received link.



You can ignore the smart screen message. *(Turn off any virus warners present)*



Click on «More information»

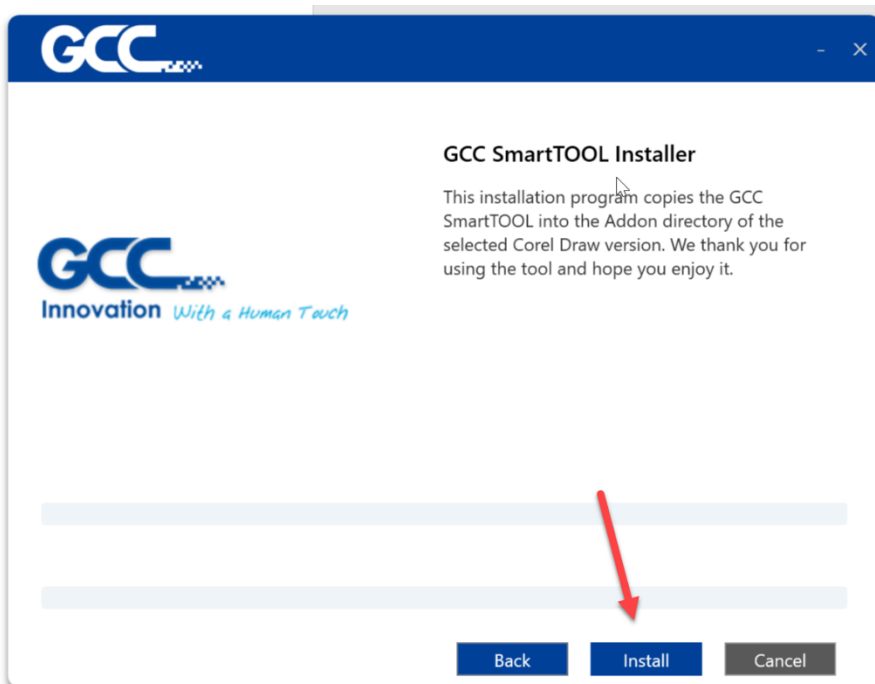


Click on «Run anyway»



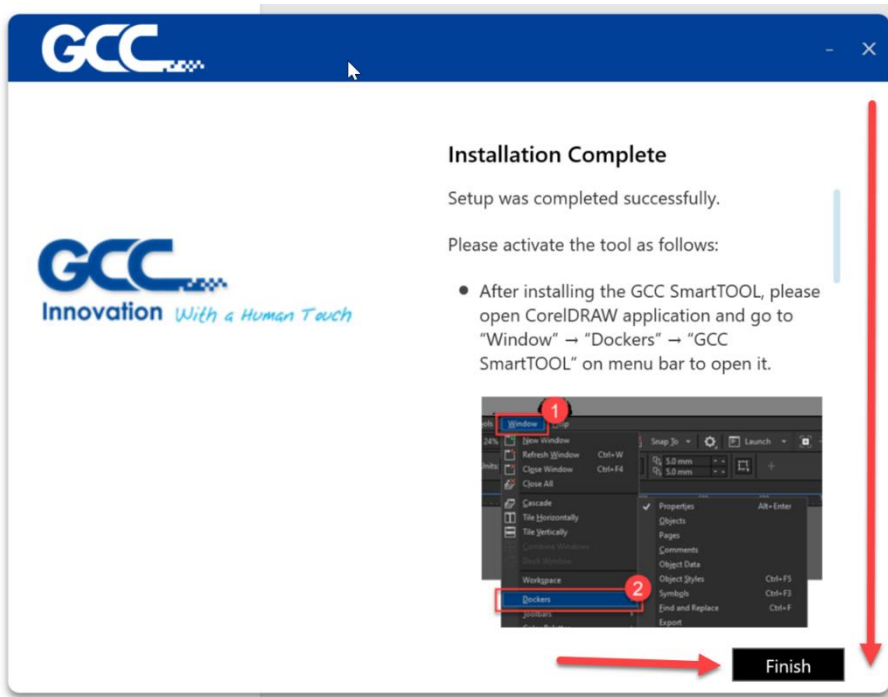
Confirm the End User License Agreement and press «Next»

Select your CorelDRAW version



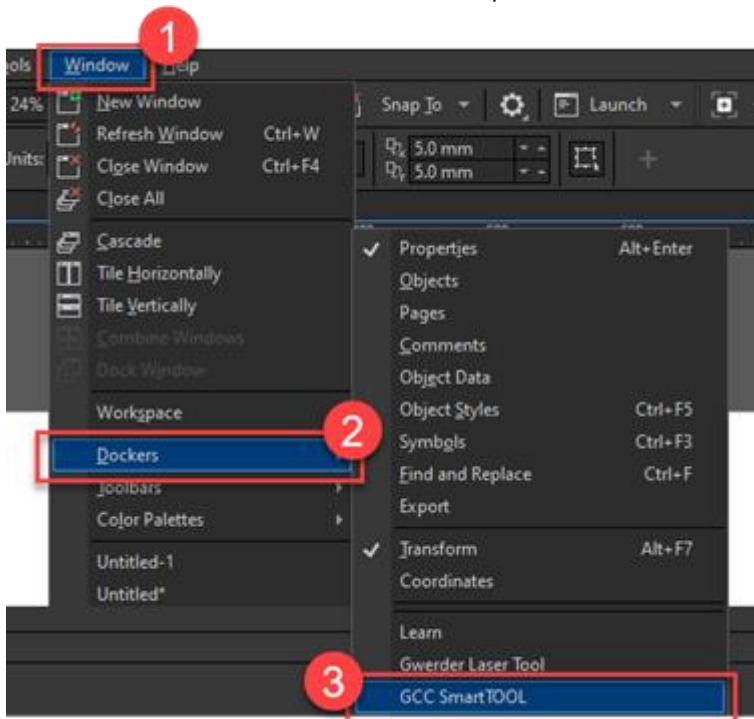
Press "Install"

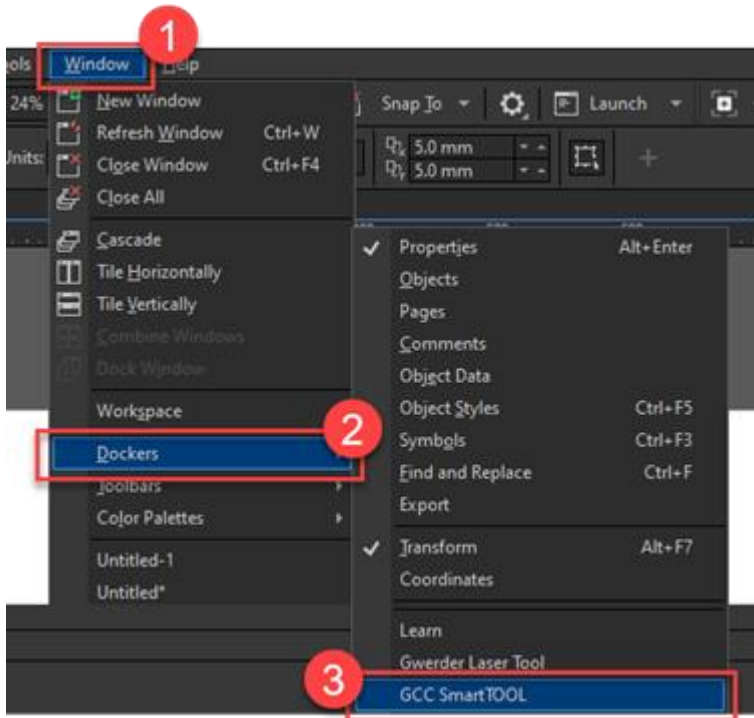
## 1.2. GCC SmartTOOL enable in CoreIDRAW



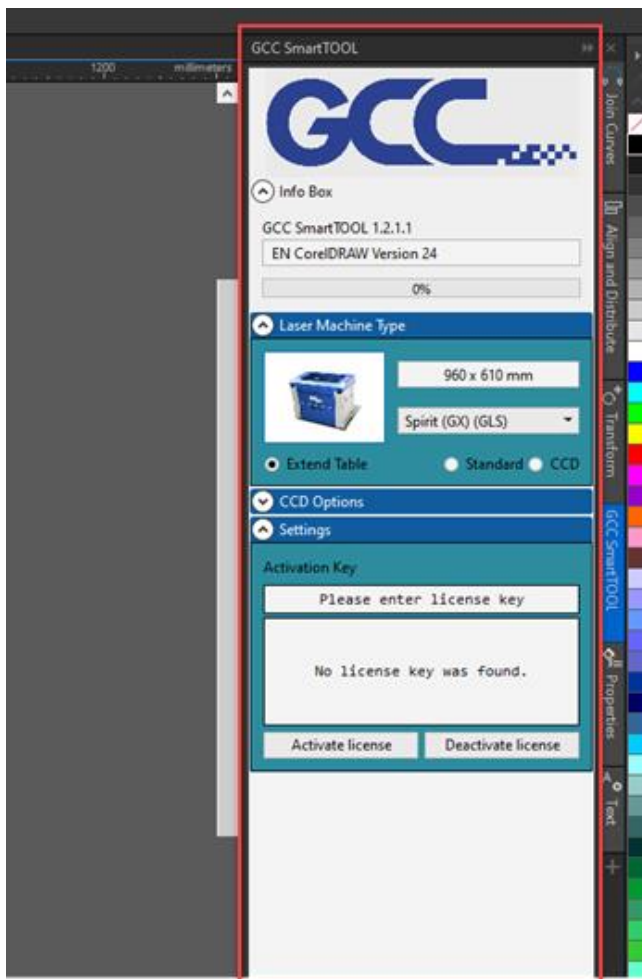
At the end of the installation you will receive instructions for activation in CoreIDRAW of the tool, which is also described here.

After installing GCC SmartTOOL, open the CoreIDRAW application and go to "Window" → "Docker" → "GCC SmartTOOL" in the menu bar to open it.

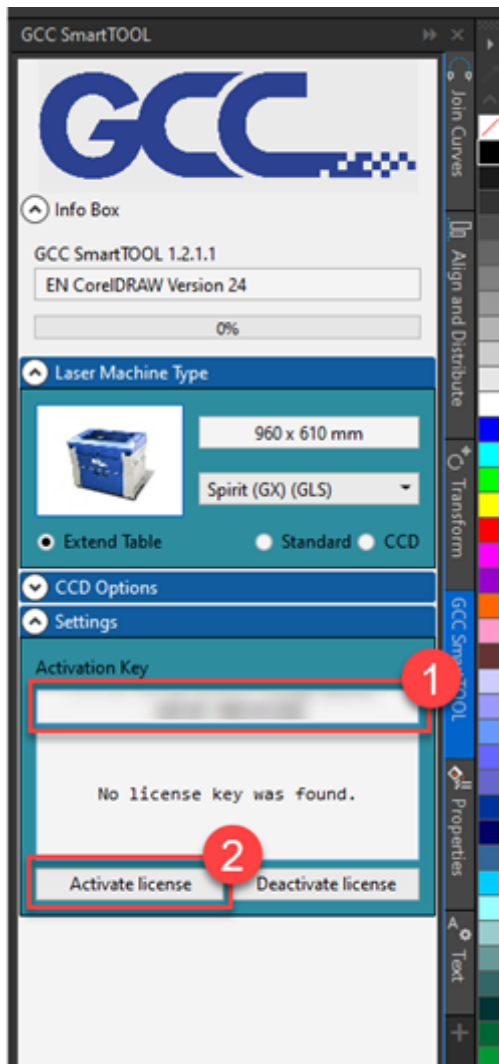




The GCC SmartTOOL plugin appears on the right side of CorelDRAW



### 1.3. GCC SmartTOOL Activate license



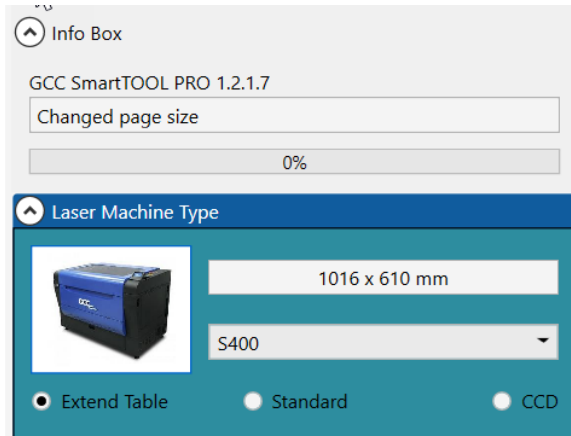
Paste the activation code into the License Key field and click the Activate License button. Activation is now complete.



## 2. General functions

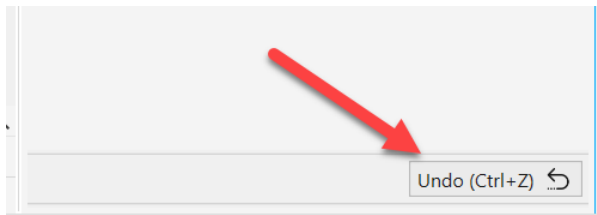
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### 2.1. Laser Model and Information Windows



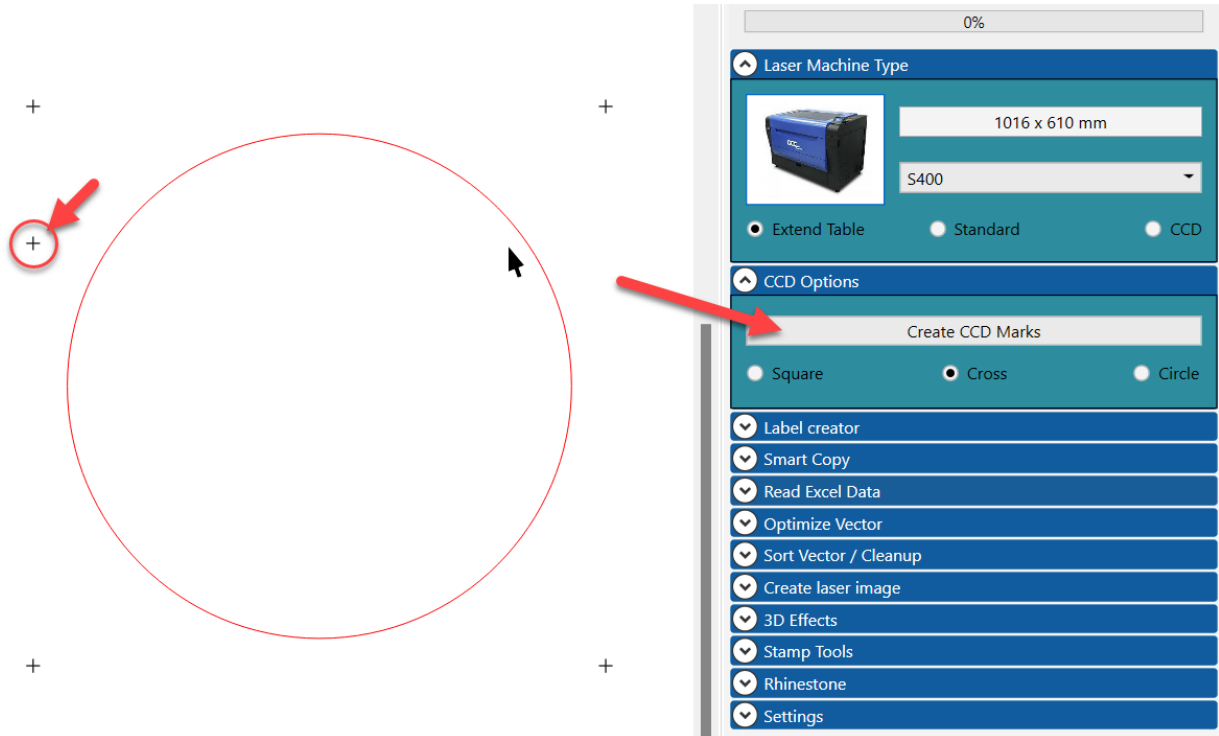
In the upper area you can see important information about the version as well as the progress bar

With the selection «Laser Machine Type» you can select your GCC laser. Depending on the type, you can also select the table size (maximum, standard or with camera CCD option)



At the bottom right you will find the Undo button

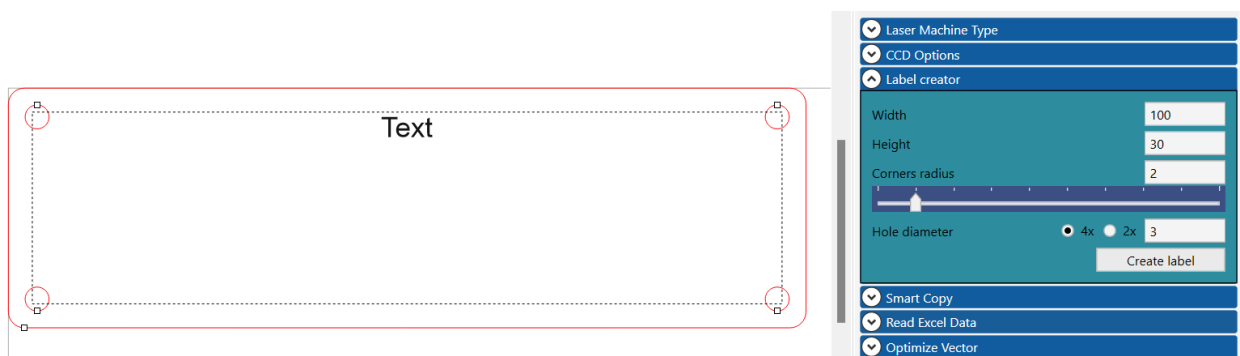
## 2.2. Set CCD-marker



Select the object(s) to be offset with markers. There are 3 different types available (square, cross, circle)

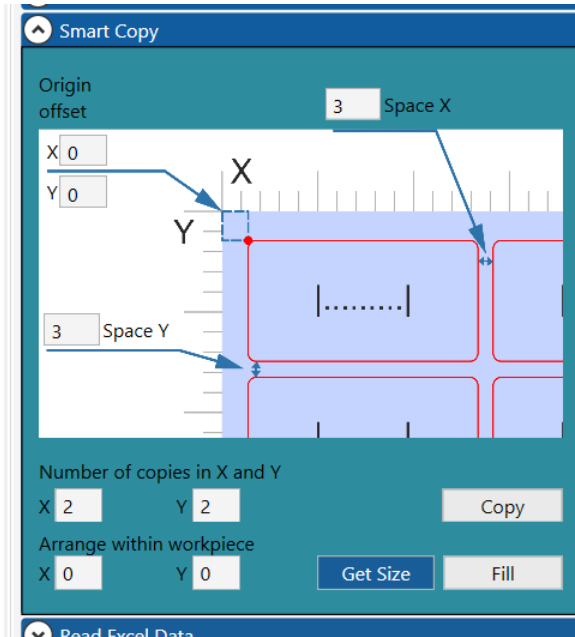
In addition, a marker of 5 is also generated for the older AAS version. You should delete this marker if you are using the new generation CCD.

## 3. Sign Generator



With the Sign Generator you can quickly create a simple sign. To do this, enter the width and height, as well as the corner radius and the hole size. In addition, you can choose whether the shield should have 2 or 4 holes.

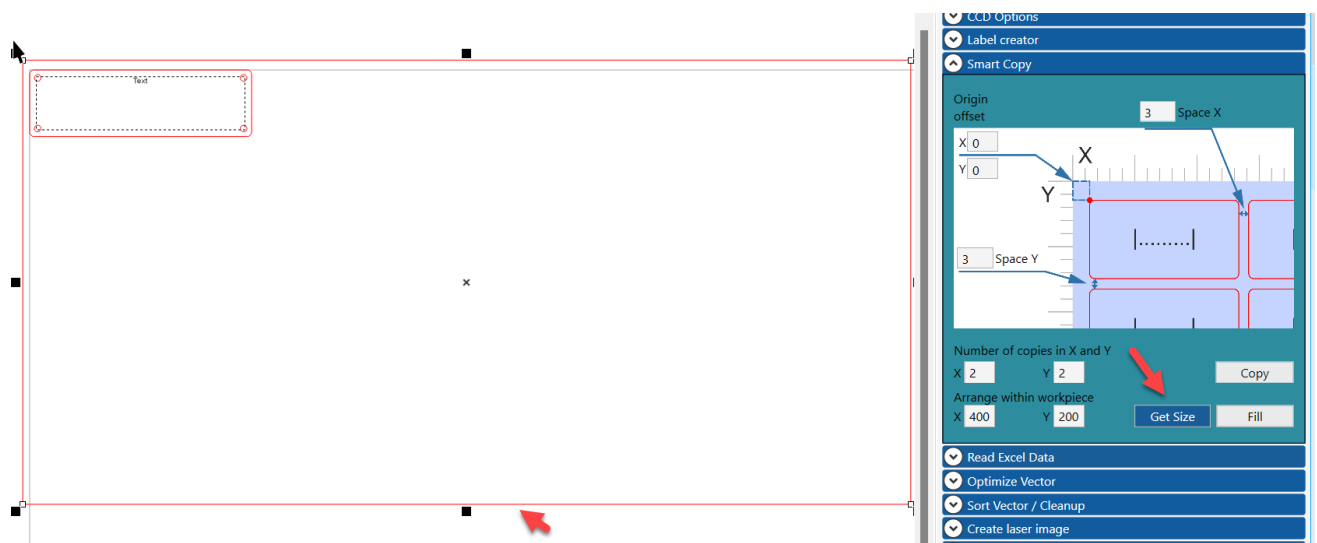
## 4. Smart Copying



You can use this function to copy the selected objects to the following criteria.

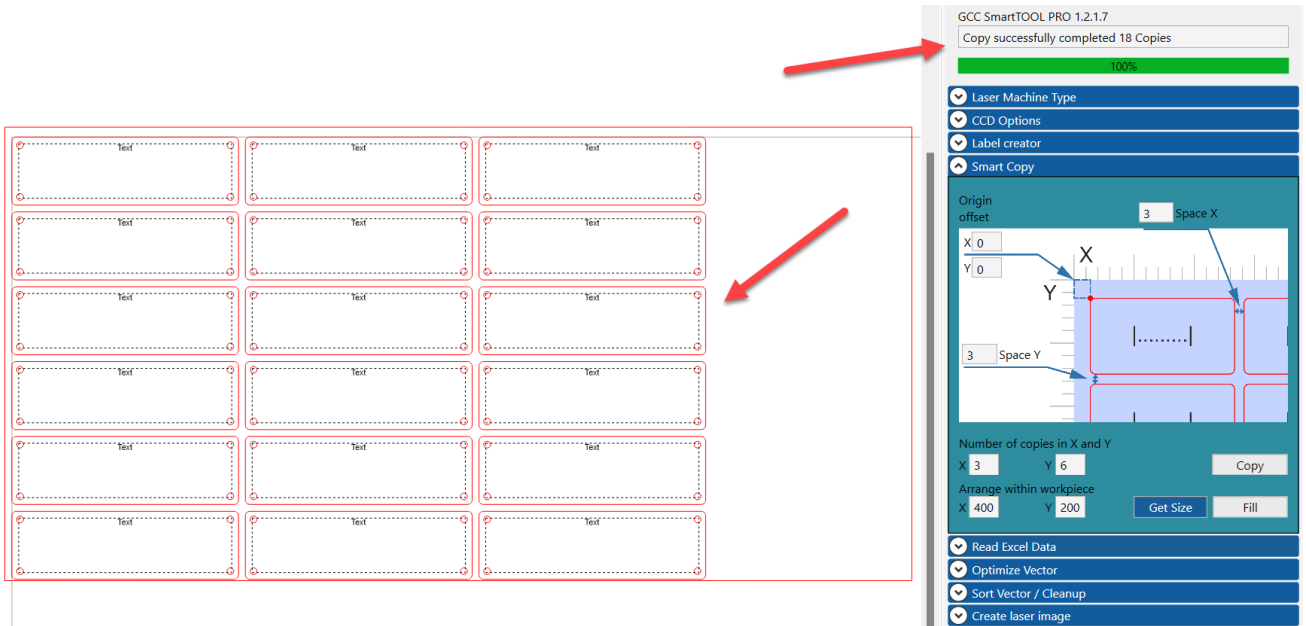
- Space X and Space Y specifies the distance between the objects.
- Zero point shift shifts everything by the entered value.
- Number of copies specifies the number of copies in X and Y.

### 4.1. Measure and fill the part



If you want to fill a blank with objects, select the blank and click on «Get Size». The Part Size is then measured and the values are inserted below. If you now click on «Fill», as many objects as possible will be copied.

Do not forget to select the object(s) to be copied.



Now you can see from the example in the info that there have been 18 copies and that the job is done (100% progress bar)

## 5. Read Excel

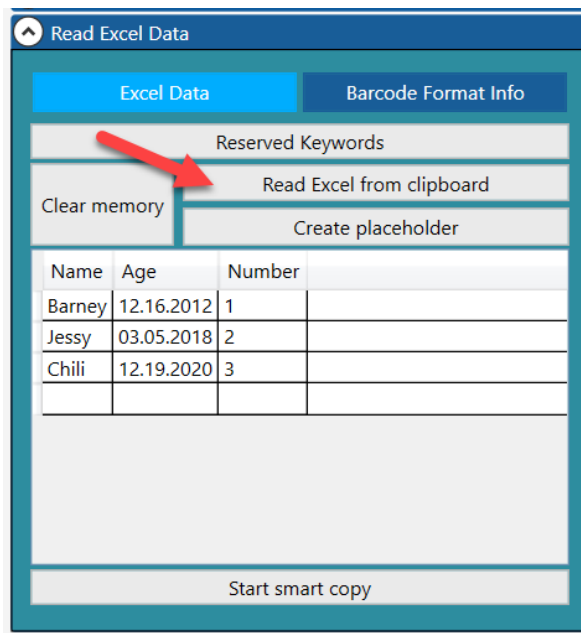
### 5.1. Read Excel from Clipboard

	A	B	C
	Name	Age	Number
	Barney	12.16.2012	1
	Jessy	03.05.2018	2
	Chili	12.19.2020	3

In the following example we have a list of dog names, as well as their age and a number. The first line must contain the placeholder and the following lines contain the values.

Select the desired area and copy it to the clipboard

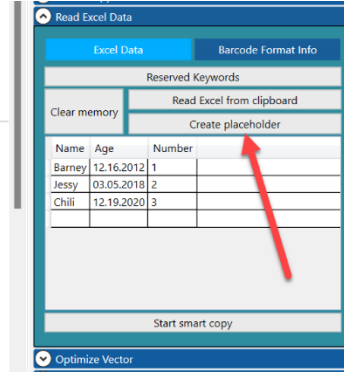
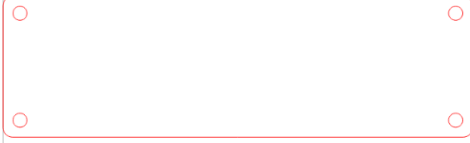
(Ctrl. + C).



Then load the data from the clipboard with the button (red arrow)



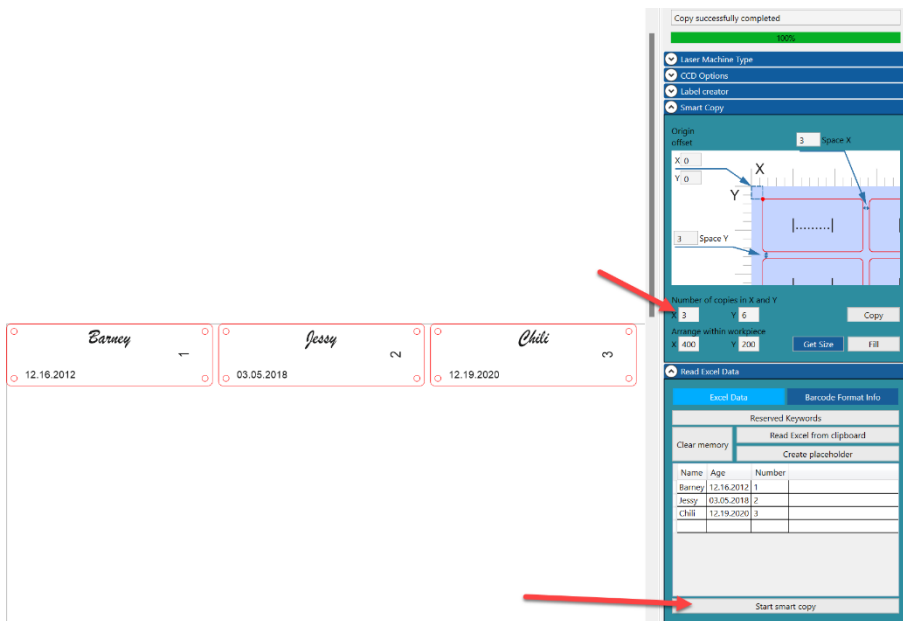
|Name| |Age| |Number|



Press «Create placeholder». Placeholders are created, which must be placed by you in the right place.



You should also adjust the formatting (font, alignment, etc.)



Now all 3 signs are created. The parameters of the copies are taken from the settings in the «Smart Copy» window.

## 5.2. Copy fields multiple times (xCopy)

Benötigen Sie z.B. unterschiedliche Mengen der Kopien:

A	B	C	D
Name	Age	Number	xCopy
Barney	12.16.2012	1	4
Jessy	03.05.2018	2	2
Chili	12.19.2020	3	1

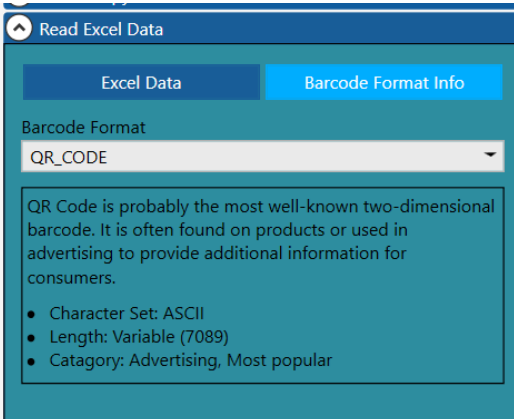
you can specify it with the placeholder «xCopy». After that, the shield Barney is created 4x in the example.

## 5.3. Create machine-readable codes





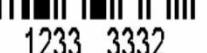










You also have the possibility to generate various common codes. To do this, you simply have to move the placeholder with the corresponding code name. The following placeholders are possible:

**Reserved Keywords:**

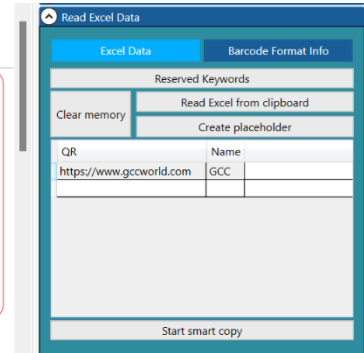
- xCopy = Value for duplicates on this Excel Row
- QR or QR\_CODE = Create a QR Code on this Column,
- AZTEC = Creates a two-dimensional Aztec barcode on this Column,
- CODABAR = Creates a Codabar barcode on this Column,
- CODE\_39 = Creates a Code 39 barcode on this Column,
- CODE\_93 = Creates a Code 93 barcode on this Column,
- CODE\_128 = Creates a Code 128 barcode on this Column,
- DATA\_MATRIX = Creates a two-dimensional Data Matrix barcode on this Column,
- EAN\_8 = Creates a EAN-8 format barcode on this Column,
- EAN\_13 = Creates a EAN-13 format barcode on this Column,
- ITF = Creates a ITF format barcode on this Column,
- PDF\_417 = Creates a barcode in PDF417 format on this Column,
- UPC\_A = Creates a UPC-A format barcode on this Column,
- UPC\_E = Creates a barcode in UPC-E format on this Column,
- MSI = Creates a barcode in MSI format on this Column,
- PLESSEY = Creates a PLESSEY format barcode on this Column



You can also view the information about the code at any time.

<b>PDF_417</b> 	<b>EAN_8</b>  9031 1017	<b>PLESSEY</b> 	<b>EAN_13</b>  9 780201 379624	<b>UPC_E</b>  1233 3332
<b>UPC_A</b>  1 11111 11111 7	<b>ITF</b>  12345678901234	<b>CODE_128</b>  <small>ABC-1234</small>	<b>CODABAR</b>  123456789012345	<b>CODE_39</b>  ABC-1234
<b>MSI</b>  1234567	<b>CODE_93</b>  ABC-1234+	<b>AZTEC</b> 	<b>QR</b> 	<b>DATA_MATRIX</b> 

QR	Name
<a href="https://www.gccworld.com/">https://www.gccworld.com/</a>	GCC

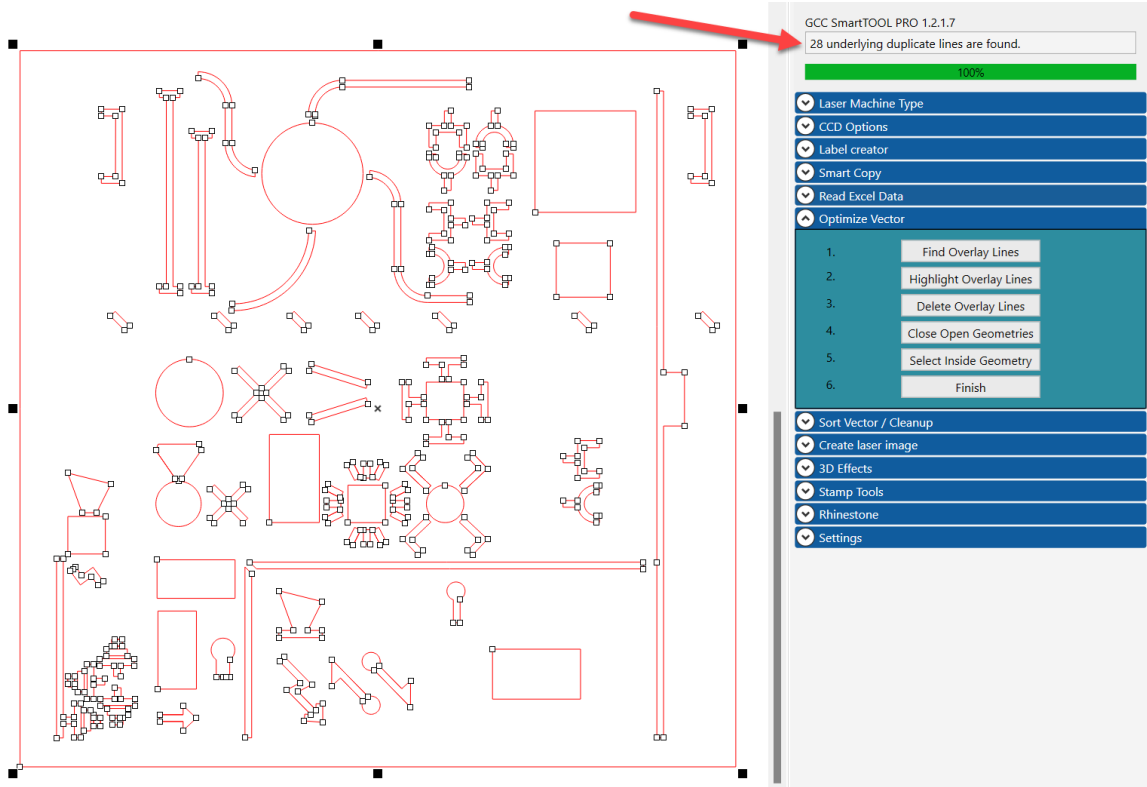


Of course, you can also combine codes with names. The multiple copy option "XCopy" also works in this combination



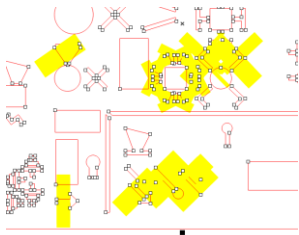
## 6. Optimize vectors

For some contours that have been created / exported by another program, there may be superimposed contours. As in the example, you can select everything and press «Find superimposed lines».



Then you can see the number of overlaid lines/objects found in the info bar at the top

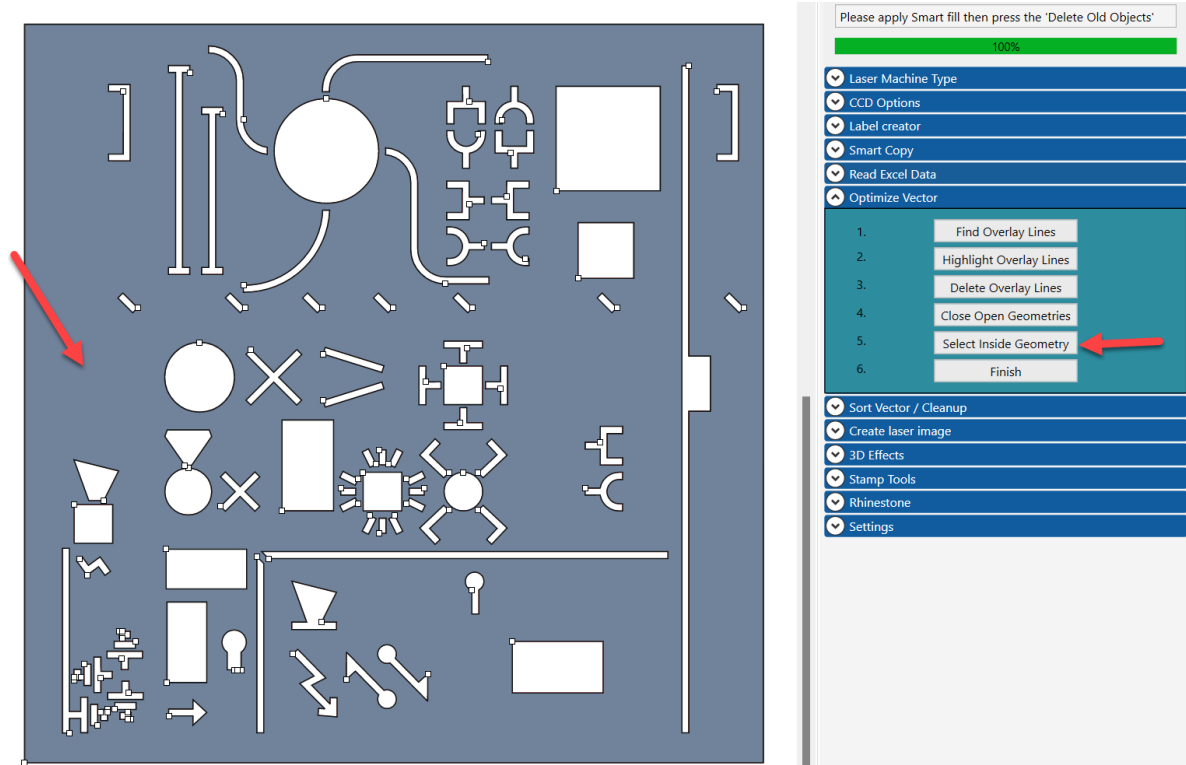
In the next step, you can display the superimposed lines in yellow.



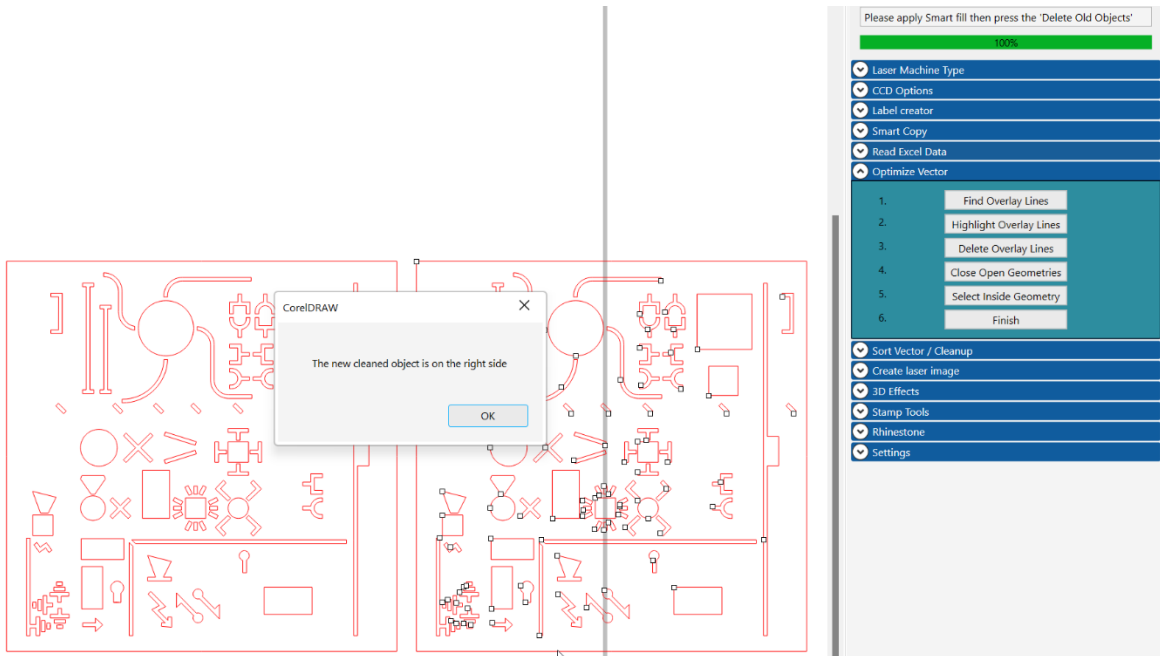
use step 3 to delete the overlaid lines

Step 4 closes the open contours (select everything again)

Then click on the object in step 5 so that the tool recognizes which is the basic body of the geometry.

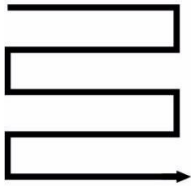


Press Finish. The tool then creates a completely new and clean cutting geometry on the right side. The original left file is used for control and can then be deleted.

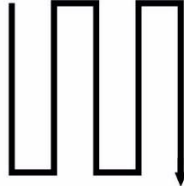


## 6.1. Sort Vector / Cleanup

So that the laser does not make unnecessary "empty runs", it makes sense to sort geometries with many objects according to the 3 strategies when cutting geometries.



1. From left to right



2. From top to bottom



3. Smart

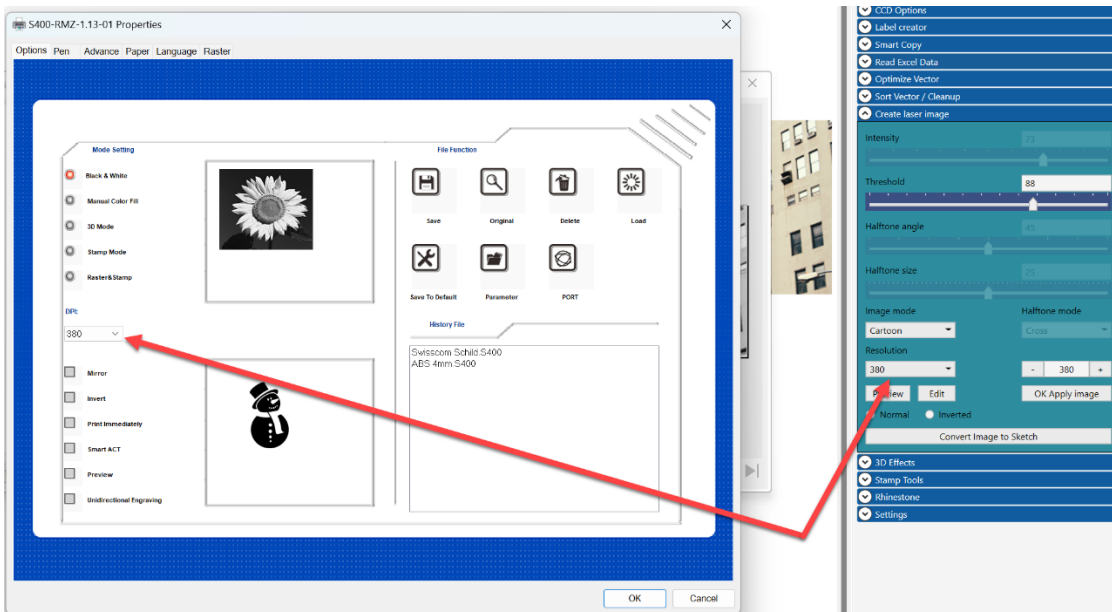
the tool tries to take the shortest route

# 7. Create laser image

## 7.1. Cartoon

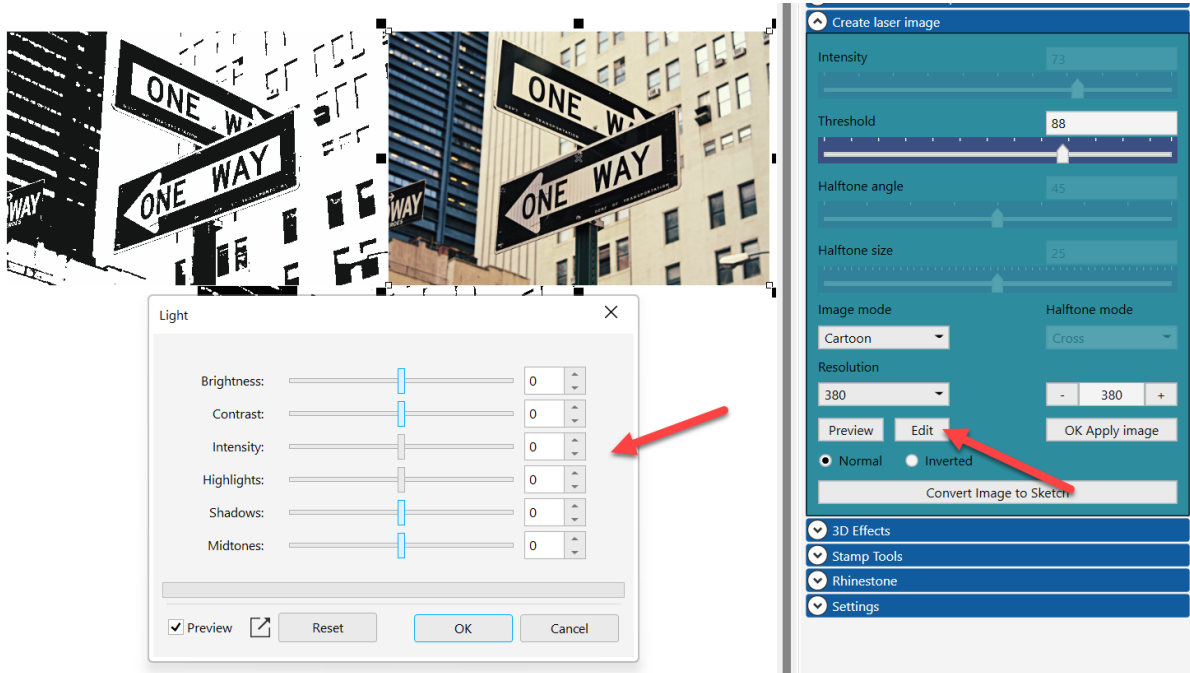


In Caricature mode, select the resolution, which should be identical when lasering



You can adjust the gradation with the «Threshold» slider.

If you want to adjust the image again in general, press «Change»



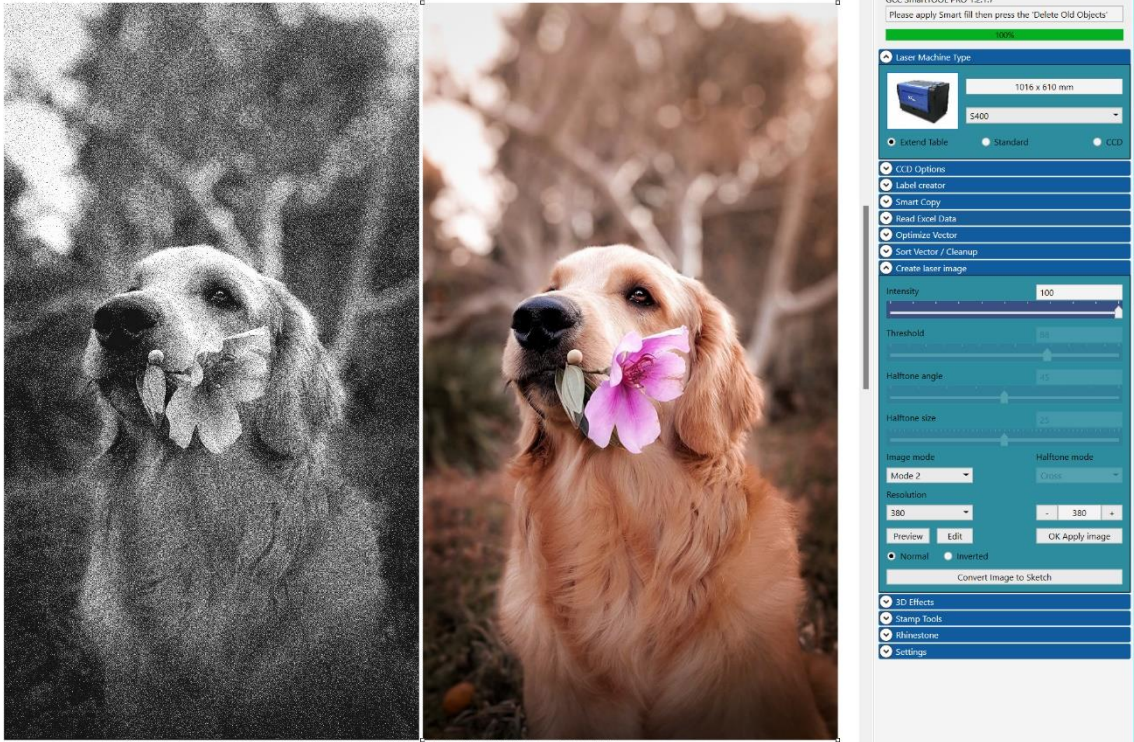
Then select the original image in the upper right corner and if you are satisfied with the result, press OK Apply image.

Then the "laser image" jumps to the original image so that the original is still available in the background. The lower image is "only" used for preview, as it is transparent. You can put this preview image over a wood or similar and show it to the customer.



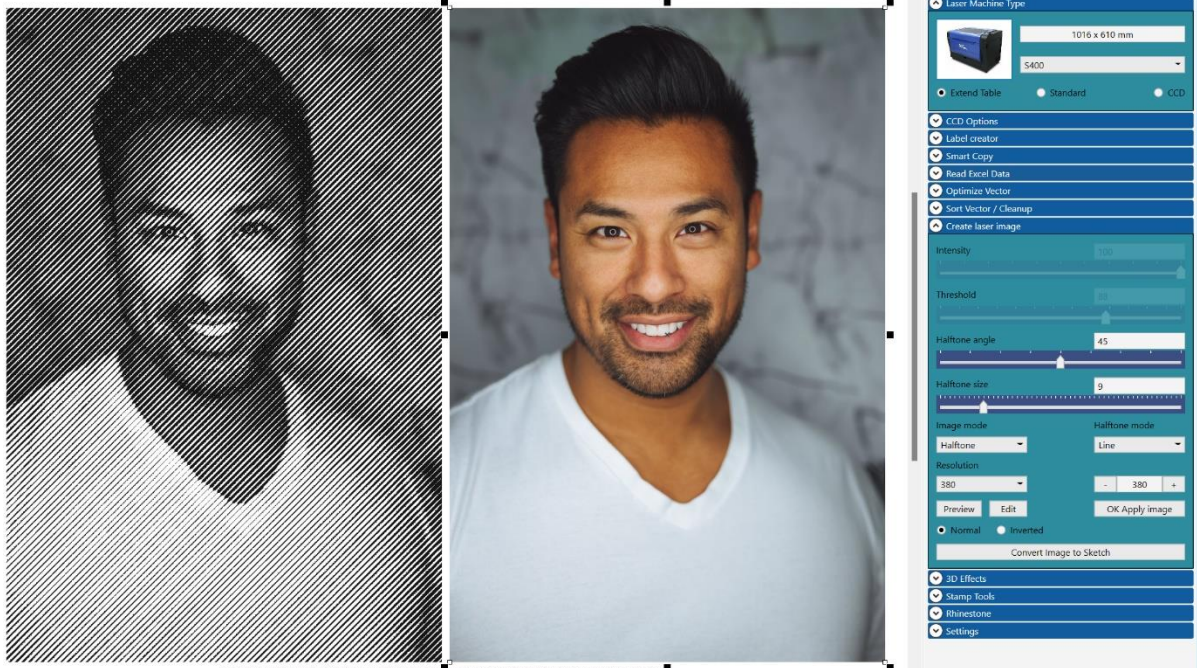
## 7.2. Mode Structured 1, 2 (Standard), 3, K

These 5 modes are ideal for all kinds of images with people, faces, etc.



You can also make adjustments in this mode using the «Intensity» slider. The other steps are identical to caricature.

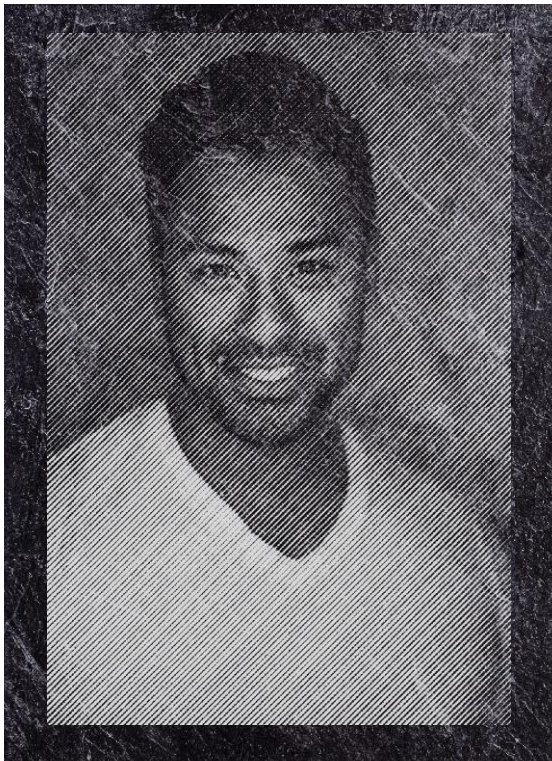
### 7.3. Halftone



In halftone mode, you can select the «angle» and «size», as well as the different patterns: square, round, line, cross, 4x4, 8x8

Try all the patterns.

With the option «inverted» you create an image for a black slate or similar. You then have to invert the image.



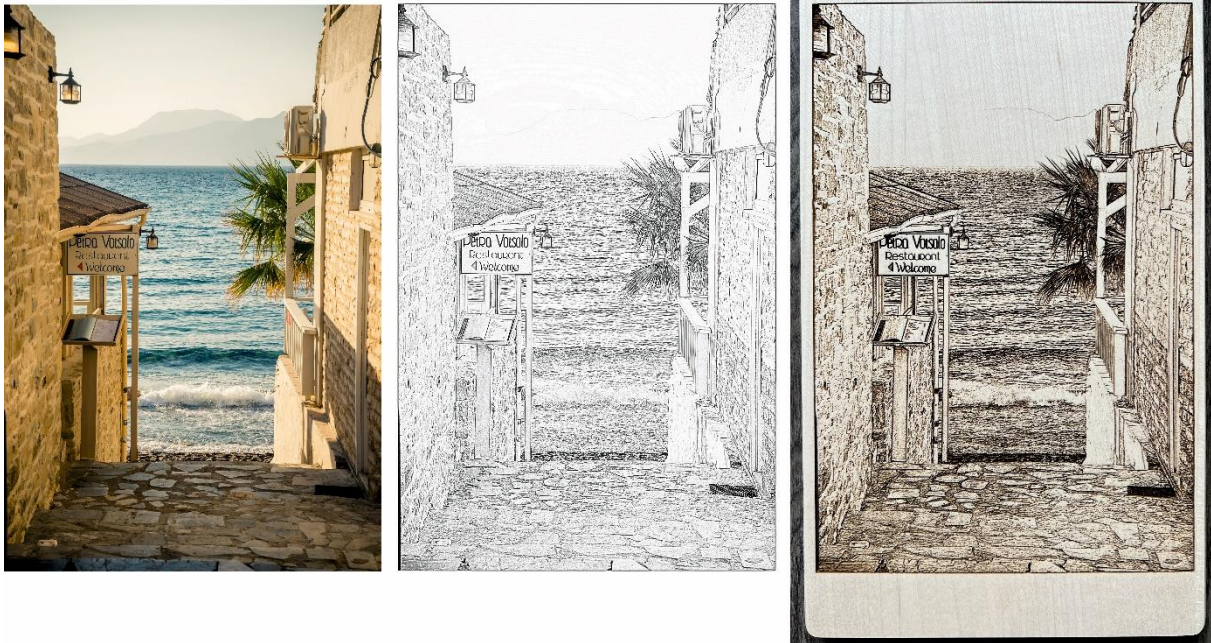
## 7.4. Convert image to sketch

With this function you create a sketch, which is generated exactly for the laser (500 DPI).

The sketch function has nothing to do with the other modes. All you have to do is press the button «Convert image to sketch» and you will be guided through different steps.

In the first step you have to set the saturation to -100, then press 2x OK, the image will now be inverted. You do not have to pay attention to this, but press OK again. A slider comes in the last step. Adjust the image as «finely» as possible. Lines that are as thin as possible should be shown. The image automatically darkens when finished. To do this, you have to press OK again 2x.

Below you can see the original image as well as the sketch and the result on maple wood.

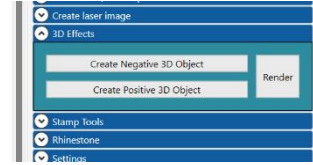




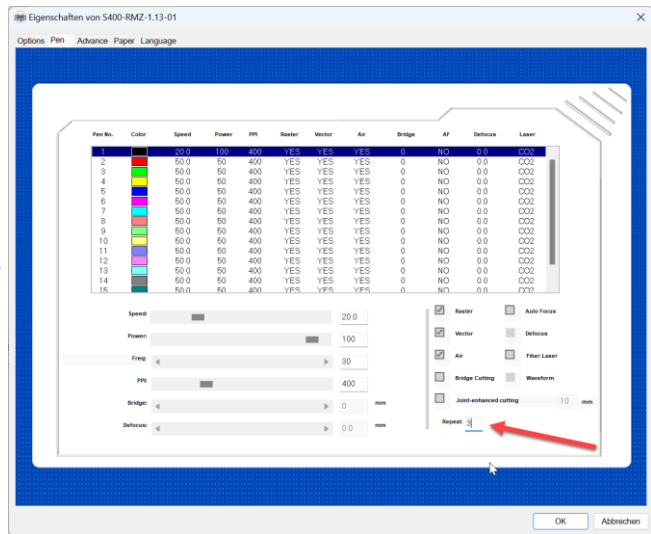
# 8. 3D Effects

## 8.1. Negative 3D object (Wood Carving)

Wood Carving

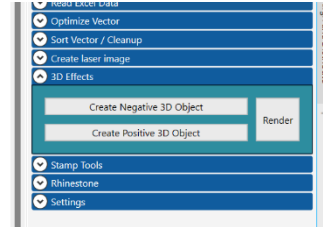


With the negative conversion of a text or other suitable geometries, you can create a notch carving with the laser in 3D mode. To do this, you must activate the 3D option in the laser menu. It is best to do the engraving in 3 passes.



## 8.2. Create a positive 3D object

Analogous to the negative, the writing is raised to the outside. But you have to put a frame in the color RGB black behind the font.

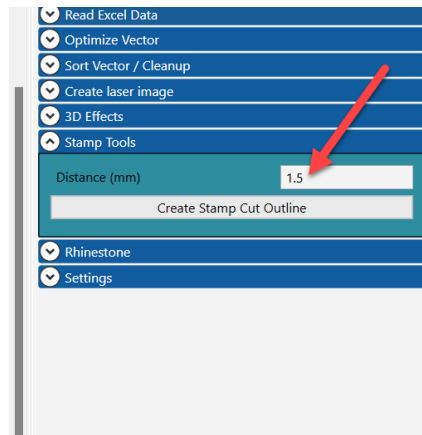


## 9. Stamp Tools

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### 9.1. Create a cutting outline

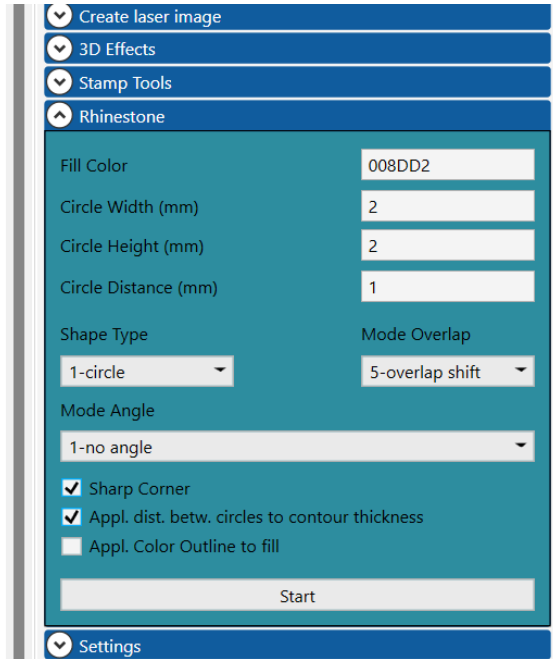
With just one click, you can create the cutting edge contour for the stamp. To do this, you can adjust the distance yourself. In practice, 1.5mm has proven itself.



# 10. Rhinestone Module / LED

## 10.1. Create Rhinestone Template

With this function you can create a stencil that you can cut with the laser. With this template you can incorporate the rhinestones with the brush as usual.



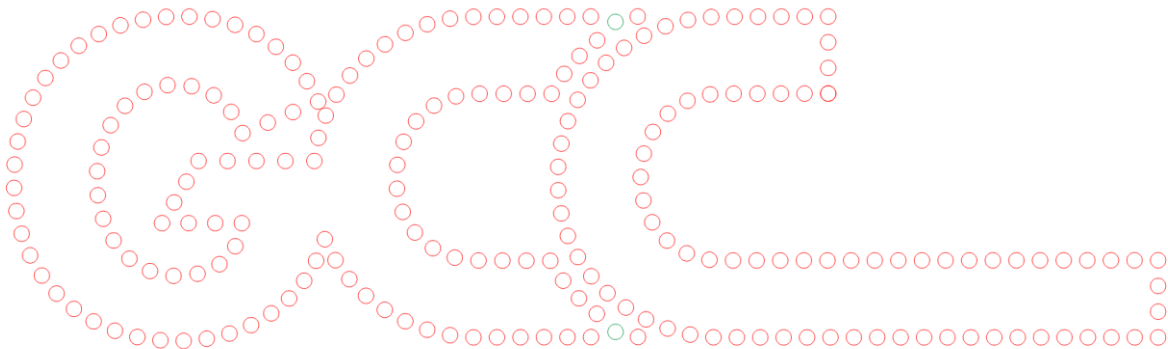
Select the size of the rhinestones and select the desired text or geometry.



This calculation may take some time. Depending on Corel version or computer performance



You get a preview and the circles already have a hairline RGB red for cutting.



You still have to check the green circles manually whether the position is OK. A different color was chosen to recognize the problem areas.

## 10.2. LED

You can also use a rectangle instead of Round, so you can create neon signs or something similar.

