

# Instructions for creating a milling file with CAD programs

If you cannot work with one of the file templates from the tutorial, you should create the following layer structure yourself.

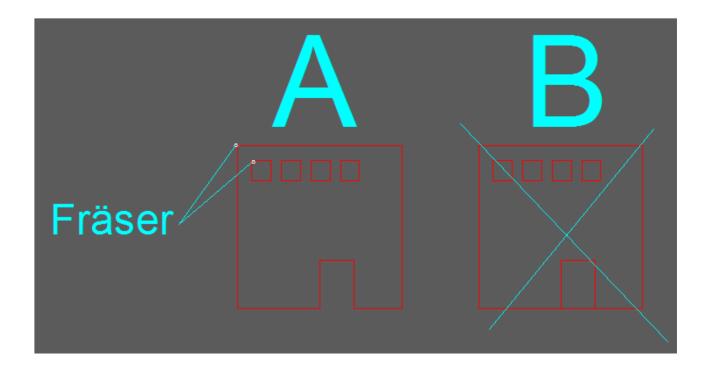
Machine table / RGB white /black (depending on background color)
Cutting / RGB red
Engraving / RGB green
Pockets / RGB blue, magenta, ...
Customer text / RGB same

- \* Set the line type to "Continuous" and to line thickness 0.0mm. In some programs the lines are not visible then. In this case, please increase the decimal place slowly until you can see the lines (e.g.: 0.1mm; 0.2mm; ...).
- \* Start drawing the machine table as a rectangle of size 1250mm x 1000mm on the corresponding layer.
- \* Since we do not cut to the edge of the material, please indent your components by 5mm all around when arranging them.
- \* When drawing, please also note that the selected cutter can go around all components with its diameter
- \* All components must fit on the machine table. Larger parts must be separated in the CAD drawing.
- \* Make sure in advance that your material can also be obtained in at least the table size or component size. Larger materials can be cut to table size.
- \* For materials that have a surface texture or grain, remember to arrange your parts accordingly and indicate in which direction the texture should run.
- \* Create 2D contours only.

- \* If you are working with fonts, resolve them into curves. After that the font has no more text attributes and will be understood by other programs as a graphic.
- \* Avoid double or multiple lines on top of each other.
- \* If you need several machine tables of the same material and thickness, copy the table outline (white/black) on the same layer as often as necessary.
- \* If you have different materials or thicknesses, copy the table outline next to each other an appropriate number of times and label it with the appropriate material and material thickness.

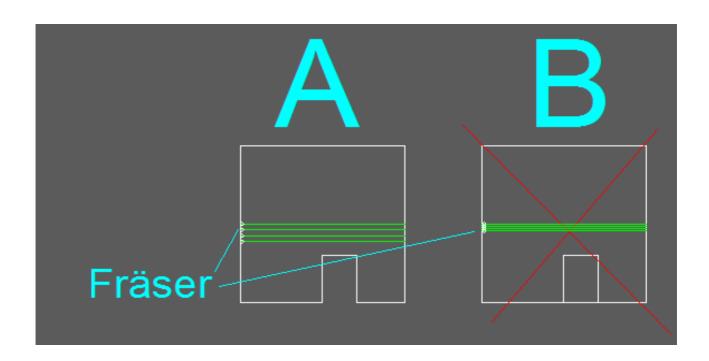
## **Cutting:**

Anything that needs to be cut, please draw as closed polylines in RGB Red, in the size you need it, if possible. It doesn't matter if the contours are inside or outside. We will take care of the corresponding milling offset.



# **Engraving:**

- \*When engraving, the cutter moves centrally on the drawn line and leaves an engraving in the width of the selected tool.
- \*Make sure here, that the engraving lines are not too close together, as they will create a recessed area when overlapped by the cutter.
- \*Please specify cutter diameter and plunge depth.
- \*Please create in the color RGB green.



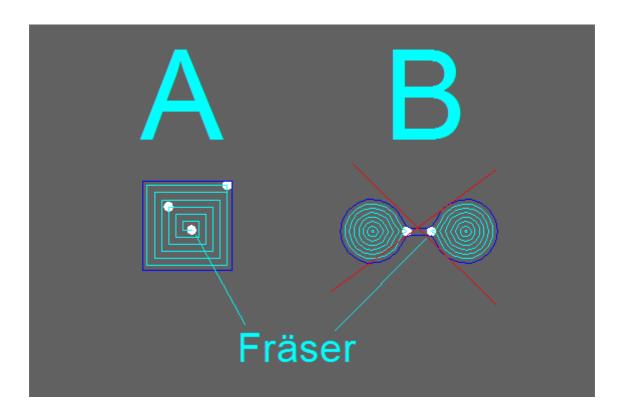
## Pocket milling/deepened surfaces:

In this type of machining, the cutter meanders surfaces to a defined depth.

- \* Draw only the outer contour of the surfaces without filling and enter the cutter diameter and plunge depth. Our CAM program then generates the milling path independently.
- \* It does not matter whether the contours are round or angular. The only important thing is

that the cutter fits through the narrowest passages. If the passages are too narrow, they will not be milled. See the following graphic: Example "B"

\* If you need different pocket depths, please indicate this using the colors and layers. Please use the color RGB blue, magenta...



#### Your comments:

Explanations about the material and thickness and possibly grain direction, please write on the layer customer text in RGB (colour does not matter).

At the end save the drawing in the following format.

DWG 2000 / or older.

More explanations about milling and file templates can be found in our tutorials.

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