

LASER CUTTING AND ENGRAVING INSTRUCTIONS (Co2)

File format: the file has to be a .dxf version 2000, you can export from every vectorial programs.

Materials: you can choose to use paper, cardboard, wood, Plexiglas (only PMMA, not synthetic glass), PS, PETG and Selitron/styrene, textiles and almost every kind of natural materials.

If you want to cut a material not from the list above, you can bring us a sample and we will see if we can work with it.

Maximum dimensions of the sheets: for most of the materials the maximum dimensions are 880x580mm; but there are some exceptions, for the planks of wood (linden, walnut, obeche), the maximum size is 490x90mm, the avio birch plywood (from 0/4mm to 2mm) has a maximum size of 880x290mm and for the other thickness of birch plywood (from 3mm to 5mm) the size could reach 880x370mm.

If you are going to bring us your materials the maximum layout area is 880x580mm.

It's necessary to draw the layout area to point out the operating limit of the cutting machine and verify that the scale of the drawing is right.

If you are working with Illustrator it's not enough to set up the Artboard with the maximum dimensions but you have to draw it, otherwise the exported file won't have the layout area.

Scale and units of measurement: the scale of the file has to be the scale of the model that you want to realize (1:1) and the units of measurement have to be millimeters (example: 50 units in your file = 50 mm in the model).

Offset: the laser beam has a diameter around 0/4 mm (four tenths of millimeter) then it bourns/melts around 0/2mm of material from both sides of the cut tracing.

To prevent this material consumption and have much more precise pieces, we advise to make 0/2mm offset of the tracing, towards the outside for the external perimeter and towards the inside for the holes.

If you have to realize joints we ask you to let us know during the evaluation phase.

Name of the file: the file must be named according to the material and the thickness that you want to cut (example: ivorycardboard3mm.dxf or trasparenteplexiglas2mm.dxf)

Please remember the version 2000 of the .dxf.

Find out the pieces: We advise, if you have a lot of small pieces, to interrupt for 2 or 3 times the cutting line for 1mm, in this case the pieces will be in order, they won't fall down and they will cling to the sheet. Don't do this operation if you are cutting plexiglass.

Alternatively, if you have the possibility, the laser can engrave numbers or letters to the single piece, the minimum dimension of this text is 2mm, the better font is CNC Vector, you can download for free from the link below: <http://www.dafont.com/it/cnc-vector.font>.

Texts, font and double lines: the laser cutting software don't handle texts and fonts, if you want to cut or engrave it's necessary to explode or convert them in a vector tracing.

In the files avoid to draw double lines because they affect the final cost and they can ruin the final result, so we advise to delete them (Overkill command in Autocad).

Price and delivery time: the quote for the laser work will be done with a simulation of the cutting through a dedicated software so it's not possible to make an estimation without a file.

If you send a file by mail usually we are able to give you a quote in about one hour, instead if you come in person the quote will be done in real time.

The delivery is agreed with the customer, after the acceptance of the price. Usually it will be in 24/48 hours.

How to hand a file: in person to our shop on a USB key, from Monday to Friday from 9:00 to 17:30; or by e-mail to info@protosign.it, remember to give us your telephone number in order to contact you quickly for any type of communication.

For other information: 02-33004918, info@protosign.it.