GRAVOFOIL

ENGRAVING TIPS

Gravofoil is a silk-screened PVC material. It is 0.2 mm thick. Because it is flexible, it is used for curved surface identification.

CAUTION : The suppleness of Gravofoil may cause difficulty when handling it.

CUTTING GRAVOFOIL

Use 'plastic' type table shears , a Stanley knife® or a pair of scissors.

> Table shears
> # 06 351 000

ENGRAVING GRAVOFOIL

Always work on a clean surface.

> Gravofoil engraving support #B5 203 000

➢ **CLAMPING GRAVOFOIL :** It can be clamped on a **clamping table** or on a **vaccum table**, by fixing thepiece of Gravofoil on a plate that is more rigid (3M spray mount : spray lightly).
You can also use a special Gravofoil vice, to be placed in the jigs.

➢ **ENGRAVING WITH A CUTTER : Only with a regulating nose**.
You select the regulating nose according the engraving width, the tools and the letters to engrave.
Just place the cutter on the material to set the engraving depth.
The use of a swarf extractor is not essential with Gravofoil as it does not produce much chip.
A standard spindle is used.
- Engraving with a pantograph : you should not apply too strong a pressure on the tool-holder in order not to scratch the plate with the regulating nose. We recommend a constant average pressure.
- Engraving with an electronic machine : ensure that the spindle spring is released so that the spindle remains supple (by using strong pressure, the regulating nose may scratch the plate).

NB : You can use a collet spindle.

TOOLS
Cutter :
▪ steel
▪ carbide

In order to set the engraving depth, you only have to lower the cutter onto the plate (it needn't be deep)

Grinding	
Cutting angle	**40°**
Half-taper angle	**18°**
Tip angle	**7°**
Clearance angle	**15°**

Type of tools	Steel	Carbide
⌀ 3.17	05 576 xxx	05 410 xxx
⌀ 4.36	58 106 xxx	58 101 xxx
TwinCut® Insert	-	B7 301* xxx

Warning : these parameters are only valid with Gravograph's standard cutters   * for best results
NB : The size of the tip depends on the engraving width you wish to obtain.

MACHINE PARAMETERS

	Speed (mm/s)			Dwelling time	Engraving depth
	Z	X-Y	Rotation (Revolution /mn)		
CUTTER	35	20 to 35	18 to 20 000	0	0.025 mm

Number of passes : 1

MATRIX

The Matrix function that is used for engraving and cutting plates produced in series (i.e. labels) is found in the Gravostyle'98 software (optional on the Discovery level and integrated in higher levels).
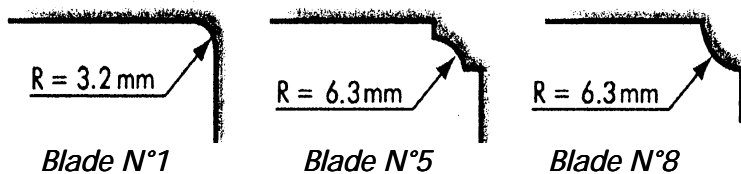
The method consists of :
➢ Setting the tool : screw the cutter knob (caution : left thread) and position the tool in the spindle in order to make contact with the material (check through the little openning of the regulating nose that the cutter has actually gone down). Save the position of the spindle (average pressure with Gravofoil). Validate the Z axis.

➢ Selecting the engraving depth, which should be equal to the material depth.
➔ i.e. 8 scales on the micrometric vernier.

FINISH

❖ **CORNER CUTTING :** if you want to cut special corners, we recommend that you use the corner table shears (CSC).
Examples of blades available :

CSC Table shears # D4 000 000

R = 3.2 mm

R = 6.3 mm

R = 6.3 mm

Blade N°1   *Blade N°5*   *Blade N°8*

Different measures exist for various radius and width.