



# GRAVOSTRAL

## ENGRAVING TIPS

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Gravostral is made up of one aluminium layer, one black phenolic layer and another aluminium layer. It can be engraved on both sides.

When engraving, always take care not to SCRATCH the plate.

### CUTTING GRAVOSTRAL



We advise you to use a saw

Circular saw  
VA 1 # 68 000 000  
VA 11 # 68 001 000

It is preferable to bevel the plate after the cutting operation to smooth out the sides and thus avoid sharp edges.

Caution : check the grain of the material plate.

### ENGRAVING GRAVOSTRAL

Always work on a clean surface and check that the tools are well sharpened

➤ **CLAMPING GRAVOSTRAL** : It can be clamped according to its shape and dimensions on a **clamping table** or on a vice with **celoron or aluminium jigs** ( for a small piece of material ).

➤ **ENGRAVING WITH A CUTTER** : Gravostral is sensitive to scratches  
Caution :  
 - engraving with a pantograph : we recommend you leave the protection and **do not apply strong pressure on the spindle**.  
 - engraving with an electronic machine : **without regulating nose, gripping the spindle spring in order to have a regular engraving depth**.



NB : You can use a high frequency spindle or a collet spindle.

**TOOLS :**

- **Cutter** : Gravostral is very abrasive. **Carbide** is strongly recommended because it is more resistant on the long run.



Grinding	
Cutting angle	40°
Half-taper angle	23°
Tip angle	7°
Clearance angle	15°

Type of tools	<u>Carbide</u>
Ø 3,17	05 410 xxx
Ø 4,36	58 101 xxx
TwinCut® Insert	B7 300 xxx

warning : these parameters are only valid with Gravograph's standard cutters.

**NB** : The size of the tip depends on the engraving width you wish to obtain.

## MACHINE PARAMETERS :

CUTTER	Speed (mm/s)			Dwelling time	Engraving depth
	<u>Z</u>	<u>X-Y</u>	<u>Rotation</u> (Revolution / mn) 18 to 20 000		
	15	20		0	0.3 mm

We advise you to apply **a little** lubricant on the surface to be engraved during the engraving in order to avoid a swarf accumulation

## FINISH

- ❖ Gravostral is made up of 3 different colour layers superimposed. It is intended to be engraved on the 2 opposite sides, the black central layer gives the script colour.

In order to obtain a glossier engraving, we advise you to apply a little oil on the characters.

- ❖ **BEVELLING** : Use the B4 and B6 machines to enhance the finish of the plate, to obtain different types of bevelling according to your requirement.

Examples:



*Professional tip*

B4 : #.00 014 001  
B6 : #.00 014 101