

# CO<sub>2</sub> Laser parameters for: LS100, LS100Ex (35 W)



This document provides a base of engraving parameters to be used on Gravograph laserable materials. They are indicative values that can be subject to modification, that are recommended by professional engravers and have been tested and verified for the LS100Ex & LS100 35 W.

Plastics Laser	% Power	% Speed	 Passes	 Focus	 Refocus	 Air	 Type	Dpi	Thickness	Comments
Gravoply™ Laser	10%	100%	1	-	Before	no	Vector	500	-	
	40%	100%	1	-	Before	no	Raster	500	-	
	80%	30%	1	-	Before	yes	Cutting	500	0.8mm (.030")	
	100%	28%	1	-	Before	yes	Cutting	500	1.3mm (.050")	
Gravoply™ Ultra	10%	100%	1	-	Before	no	Vector	500	-	
	40%	100%	1	-	Before	no	Raster	500	-	
	70%	40%	1	-	Before	yes	Cutting	500	0.5mm (.020")	
	100%	25%	1	-	Before	yes	Cutting	500	1.6mm (1/16")	
	100%	10%	1	-	Before	yes	Cutting	500	2.4mm (3/32")	
Gravoply™ 2	10%	100%	1	-	Before	no	Vector	500	-	
	50%	100%	1	-	Before	no	Raster	500	-	
Gravoglas™ 1	80%	40%	1	-	Before	no	Vector	500	-	Subsurface engraving
	80%	40%	1	3.0mm (1/8")	Before	no	Raster	500	-	Subsurface engraving
	100%	18%	1	-	Before	yes	Cutting	500	1.5mm (1/16")	Keep the plastic film on
	100%	10%	1	-	Before	yes	Cutting	500	3.0mm (1/8")	Keep the plastic film on
	100%	5%	1	-	Before	yes	Cutting	500	5.0mm (.20")	Keep the plastic film on
Acrylic	30%	100%	1	-	Before	no	Vector	500	-	
	60%	100%	1	-	Before	no	Raster	500	-	
	100%	8%	1	-	Before	yes	Cutting	500	3.0mm (1/8")	
	100%	5%	1	-	Before	yes	Cutting	500	5.0mm (.20")	
	100%	1%	1	-	Before	yes	Cutting	500	10mm (.40")	
Gravotac™ Exterior	50%	20%	1	-	Before	yes	Cutting	500	0.8mm (.030")	
	100%	25%	1	-	Before	yes	Cutting	500	1.6mm (1/16")	
Flexilase™	10%	100%	1	-	Before	no	Vector	500	-	
	30%	100%	1	-	Before	no	Raster	500	-	Gravogrip advised
	100%	5%	1	-	Before	yes	Cutting	500	0.25mm (.01")	
Stickalase™	10%	100%	1	-	Before	no	Vector	500	-	
	40%	100%	1	-	Before	no	Raster	500	-	Gravogrip advised
	20%	30%	1	-	Before	yes	Cutting	500	0.09mm (.004")	
Gravostrat™	50%	60%	1	-	Before	no	Vector	500	-	
	100%	60%	1	-	Before	no	Raster	500	-	
Rubbalase™	100%	20%	1	-1.5mm (-1/16")	Before	no	Vector	500	-	
	100%	20%	1	-1.5mm (-1/16")	Before	yes	Raster	500	-	
	100%	5%	1	-	Before	yes	Cutting	500	2.2mm (.087")	








# LASER PARAMETERS

The purpose of this document is to help each engraver get an idea as to how to engrave on Gravograph laserable materials.

The parameters are sorted by product range. Every material can have up to 3 different types of engraving process:

- Vector, for lightweight linear tracing
- Raster, for heavy marking
- Cutting

Some materials may not be engraved with a certain type of engraving process: if the specific type is not in the grid of the material, then it's most likely that it we do not recommend this engraving method on the indicated material.

Metallics Laser								Dpi	Thickness	Comments
	Power	Speed	Passes	Focus	Refocus	Air	Type			
Gravolase™ Metallics	10%	100%	1	-	Before	no	Vector	500	-	
	40%	100%	1	-	Before	no	Raster	500	-	
	70%	40%	1	-	Before	yes	Cutting	500	0.5mm (.020")	
	100%	25%	1	-	Before	yes	Cutting	500	1.6mm (1/16")	
Metallex™	10%	100%	1	-	Before	no	Vector	500	-	
	40%	100%	1	-	Before	no	Raster	500	-	All Metallex™ material surfaces
Gravoxal™	30%	100%	1	-	Before	no	Vector	500	-	All Gravoxal™ material surfaces
	50%	100%	1	-	Before	no	Raster	500	-	All Gravoxal™ material surfaces
Gravometall™	30%	100%	1	-	Before	no	Vector	500	-	
	50%	100%	1	-	Before	no	Raster	500	-	All Gravometall™ material surfaces
AlumaMark™	30%	50%	1	-	Before	no	Vector	500	-	
	30%	80%	1	-	Before	no	Cutting	500	-	
DuraBlack™	20%	80%	1	-	Before	no	Raster	500	-	

## TECH TIPS

**Floating Pin Table Cutting** - When using a floating pin table, place an aluminum plate under the strips to avoid laser reflection to prevent engraving under the material.

**Gravogrip Raster** - Use Gravogrip when engraving on thin materials as they can have uneven surfaces.  
- Avoid using too much power when engraving to prevent damage to the Gravogrip plate.

Nb : in case of unexpected behavior during the engraving process, please refer to the machine's User Manual for troubleshooting.