

Average Laser Engraving Settings

Conversion Tool: Line To Line Tracing	Power: 1	S-Max
Quality: 5 lines/mm	Linear: 1	In Grbl Settings: 1000
Image Resolution: 300 DPI	Rapid: 1	

Material	3.5W			5.5W		
	mm/min	S-Max	%	mm/min	S-Max	%
Brown Craft Board	300	400	40%	300	400	40%
3 mm Plywood	200	500	50%	200	500	50%
White Card	200	500	50%	100	500	50%
Cork	300	300	20%	300	200	20%
Mirror*	100	900	80%	100	800	80%
Slate	X	X	X	25	1000	100%
Cherry Wood	300	500	40%	300	400	40%
Pine	150	700	60%	150	600	60%
Bamboo	300	600	60%	300	600	60%
Black Card	500	400	30%	500	300	30%
Blue Acrylic	50	800	70%	50	700	70%
Translucent Red Acrylic	50	800	70%	50	700	70%
Solid Pink Acrylic	50	800	70%	50	700	70%
Clear Acrylic**	X	X	X	10	1000	100%
Real Leather	300	600	60%	500	500	50%
Faux Leather	300	500	50%	500	400	40%
Glass***	X	X	X	100	800	80%
Anodized Aluminum	X	X	X	X	X	X
Coated Stainless Steel	X	X	X	X	X	X

Material	15W			40W		
	mm/min	S-Max	%	mm/min	S-Max	%
Brown Craft Board	300	200	20%	300	50	5%
3 mm Plywood	300	300	30%	300	80	8%
White Card	300	500	50%	300	80	8%
Cork	300	100	10%	300	30	3%
Mirror*	100	600	60%	100	80	8%
Slate	100	600	60%	100	150	15%
Cherry Wood	300	200	20%	400	80	8%
Pine	150	200	20%	200	80	8%
Bamboo	150	200	20%	200	80	8%
Black Card	500	100	10%	500	40	4%
Blue Acrylic	50	300	30%	50	100	10%
Translucent Red Acrylic	50	300	30%	50	100	10%
Solid Pink Acrylic	50	300	30%	50	100	10%
Clear Acrylic**	50	500	50%	50	200	20%
Real Leather	500	300	30%	1000	100	10%
Faux Leather	500	200	20%	1000	80	8%
Glass***	50	500	50%	300	500	50%
Anodized Aluminum	100	400	40%	300	100	10%
Coated Stainless Steel	100	600	60%	100	300	30%

X: No mark

*: When engraving mirrors, engrave from the rear.

** : When engraving clear acrylic, mask it first and leave a 2mm gap under it.

***: When engraving glass, paint it with black acrylic.

Disclaimer: Please remember, these are just guidelines to give you a starting point. You can make further adjustments and change the results again. All materials are different. Practice will make perfect.