

Material Parameters–Recommended Settings

Aurora Lite Marking Machine | Fiber 50W

Purpose & Scope:

This document provides recommended material parameters for the Aurora Lite Fiber 50W marking machine. The parameters are intended as typical starting points for standard marking applications.

Material	Processing	Speed (mm/s)	Power (%)	Pulse Width (ns)	Frequency (kHz)	LPI (DPI)	Processing Times
304 Stainless Steel	Blacken	200	0.1	/	100	1270	10
305 Stainless Steel	Whiten	1700	0.2	/	50	1270	1
Carbon Steel	Blacken	100	0.1	/	50	1270	1
Carbon Steel	Whiten	900	0.2	/	60	1270	1
Brass	Blacken	100	0.5	/	50	1270	1
Brass	Whiten	100	0.3	/	50	1270	1
Aluminum Sheet	Whiten	3500	0.8	/	50	1270	1
ABS	Blacken	1000	0.2	/	50	635	1
Mirror Stainless Steel	Blacken	100	0.2	/	90	1270	1
Mirror Stainless Steel	Whiten	1000	0.3	/	80	635	1
Galvanized Iron Sheet	Blacken	100	0.4	/	100	907	1
Galvanized Iron Sheet	Whiten	800	0.5	/	100	600	1
Slate	Whiten	200	0.2	/	60	1270	1

Material	Processing	Speed (mm/s)	Power (%)	Pulse Width (ns)	Frequency (kHz)	LPI (DPI)	Processing Times
Magnesium Plate	Whiten	4000	0.4	/	100	1270	1
Magnesium Plate	Blacken	100	0.4	/	50	1270	1
Nickel Plate	Whiten	3000	0.3	/	50	1270	1
Nickel Plate	Blacken	100	0.4	/	60	5080	1
Titanium Plate	Icy Crystal	1000	0.2	/	100	1270	5
Titanium Plate	Blue Gray	100	0.1	/	90	24500	1
Acrylic (Black)	Whiten	3500	0.15	/	100	1270	2
Gold	Whiten	1000	0.35	/	50	1270	3
Silver	Whiten	1000	0.3	/	50	1270	1
Silver	Engraving	50	0.7	/	50	2450	3
PU Leather	Blacken	1000	0.25	/	50	564	1
PET	Blacken	4000	0.45	/	50	1270	1
PBT	Blacken	3000	0.4	/	100	1270	1

Disclaimer:

These parameters are provided as recommended values only. Actual results may vary due to material differences, environment, and machine condition. Always perform a small test before production.

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