

40-Watt Laser Parameters

CUTTING

Laser head type: Standard Laser Head

Materials	Thickness (mm)	Speed (mm/s)	Max Power
MDF	2.3	3	90
Acrylic	5.0	5	60
Acrylic	10.0	1	60
Foam	17.0	5	40
Plywood	2.0	35	60
Plywood	4.5	11	60
Cardboard	6.0	15	60
non-dust cloth	0.2	300	50
Leather	1.5	6	60
Rubber	4.0	2	80
Double Color Boards	1.5	18	60
Bamboo	/	/	50
Paper	0.1	300	17
Kraft paper	1.0	85	50
Peach Wood	5.0	9	80
Plastics	/	/	/
Glass	/	/	/
Granite	/	/	/
Marble	/	/	/
Ceramic Cup	/	/	/
Rostone	/	/	/
Anodized Aluminum	/	/	/
Grip Tape	/	/	/

ENGRAVING

Laser head type: Standard Laser Head

Materials	Speed (mm/s)	Max Power	Interval (mm)
MDF	500	25	0.08
Acrylic	450	30	0.08
Bamboo	500	30	0.08
Plywood	500	35	0.08
Cardboard	500	15	0.08
Paper	500	13	0.08
Painted Aluminum	450	35	0.08
Cherry Wood	500	25	0.08
Anodoized Aluminum	400	30	0.08
Plastic	500	17	0.08
Glass	200	20	0.08
Kraft paper	500	20	0.08
Leather	500	20	0.08
Cloth	500	18	0.08
Rubber	300	40	0.06
Metal	500	/	0.08
Double Color Boards	500	20	0.08
Granite	500	30	0.08
Marble	500	30	0.08
Ceramic Cup	500	30	0.08
Rostone	500	30	0.08
Grip Tape	500	20	0.08
Foam	/	/	/

CUTTING

Laser head type: 4" Laser Head

Materials	Thickness (mm)	Speed (mm/s)	Max Power
MDF	2.3	3	90
Acrylic	5.0	6	60
Acrylic	10.0	2	60
Foam	17.0	6	60
Plywood	2.0	26	60
Plywood	4.5	11	60
Cardboard	2.0	26	60
non-dust Cloth	0.2	300	50
Leather	1.5	4	60
Rubber	4.5	2	80
Double Color Boards	1.5	16	60
Bamboo	6.7	2.5	60
Paper	0.1	300	20
Kraft paper	1.0	85	50
Plastics	/	/	/
Glass	/	/	/
Granite	/	/	/
Ceramic Cup	/	/	/
Gripe Tape	/	/	/

ENGRAVING

Laser head: HR laser head

Materials	Speed (mm/s)	Max Power	Interval (mm)
MDF	400	12	0.06
Acrylic	350	18	0.04
Bamboo	400	15	0.06
Plywood	400	18	0.06
Cardboard	400	13	0.06
Paper	/	/	/
Painted Aluminum	400	18	0.05
Cherry Wood	500	15	0.06
Anodized Aluminum	500	20	0.05
Plastic	500	20	0.06
Kraft paper	/	/	/
Leather	500	15	0.06
Cloth	500	17	0.06
Rubber	500	50	0.06
Double Color Boards	400	15	0.06
Granite	500	28	0.06
Marble	500	28	0.06
Ceramic Cup	500	28	0.06
Rostone	500	28	0.06
Grip Tape	500	18	0.06

Cutting and Engraving a variety of plastic

Material	Abbreviation	Trade name
Polyamide	PA	Kevlar®, Nylon®
Polyoxymethylene	POM	Delrin®
Polyester	PES	Thermolite®, Polarguard®
Polyethylene terephthalate	PET	Mylar®
Polyimide	PI	Kapton®
Polystyrene	PS	
Polymethyl-methacrylate	PMMA	Plexiglas®
Polycarbonate	PC	Lexan®, Makrolon®
Polypropylene	PP	
Acrylonitrile butadiene styrene co-polymerisate	ABS	

Please note: All materials are different. These are general suggestions and starting places