

### 80-Watt Laser Parameters

#### CUTTING

Laser head: Standard Head (2")

Materials	Thickness (mm)	Speed (mm/s)	Max Power
MDF	2.3	38	90
Acrylic	5.0	14	90
Acrylic	8.0	5	90
Acrylic	10.0	3.5	90
Acrylic	20.0	0.8	100
Foam	17.0	10	90
Plywood	2.0	80	90
Plywood	4.5	35	90
Cardboard	6.0	70	90
Cloth	1.0	300	50
Leather	1.5	55	90
Rubber	4.5	7.5	90
Double Color Boards	1.5	45	90
Bamboo	7.0	10	90
Paper	0.2	300	90
Kraft paper	1.0	300	30
Plastics	/	/	90
Composite Wood	7.0	10	90
Granite	/	/	/
Marble	/	/	/
Ceramic Cup	/	/	/
Rostone	/	/	/
Anodized Aluminum	/	/	/
Grip Tape	/	/	/

#### ENGRAVING

Laser head: Standard Head (2")

Materials	Speed (mm/s)	Max Power	Interval (mm)
MDF	500	28	0.08
Acrylic	500	20	0.08
Bamboo	500	28	0.08
Plywood	500	18	0.08
Cardboard	500	20	0.08
Paper	500	18	0.08
Painted Aluminum	500	35	0.08
Cherry Wood	500	20	0.08
Anodoized Aluminum	500	28	0.08
Plastic	500	20	0.08
Glass	500	20	0.08
Kraft paper	500	25	0.08
Leather	500	20	0.08
Cloth	500	18	0.08
Rubber	500	60	0.06
Metal	/	/	/
Double Color Boards	500	20	0.08
Granite	500	20	0.08
Marble	500	55	0.08
Ceramic Cup	500	30	0.08
Rostone	500	35	0.08
Grip Tape	500	25	0.08

## CUTTING

### Laser head: 4" Laser Head

Materials	Thickness (mm)	Speed (mm/s)	Max Power
MDF	2.3	25	90
Acrylic	2.7	12	90
Acrylic	5.0	8	90
Acrylic	10.0	3.5	90
Acrylic	20.0	0.9	90
Foam	17.0	12	90
Plywood	4.5	25	90
Plywood	10.0	5	90
Peach wood	18.5	1.5	100
Leather	1.5	40	90
Rubber	4.5	7	90
Cherry Wood	12.0	6	90
Bamboo	7.0	15	90
Taekwondo Wood	8.0	18	90

## ENGRAVING

### Laser head: HR laser head

Materials	Speed (mm/s)	Max Power	Interval (mm)
MDF	400	18	0.06
Acrylic	400	20	0.04
Bamboo	500	20	0.06
Plywood	500	20	0.06
Cardboard	500	20	0.06
Paper	500	/	0.06
Painted Aluminum	500	20	0.06
Cherry Wood	500	20	0.06
Anodized Aluminum	500	20	0.05
Plastic	500	20	0.06
Glass	500	20	0.06
Kraft paper	500	20	0.06
Leather	500	20	0.06
Cloth	500	20	0.06
Rubber	500	60	0.06
Double Color Boards	500	20	0.06
Granite	500	20	0.06
Marble	500	35	0.06
Ceramic Cup	500	35	0.06
Rostone	500	35	0.06
Grip Tape	500	25	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