Laser Cutting Guide

These speeds and power ratings are a guide to cutting through material in 1 pass.
Please note these are general Guidelines and are not indicative of the exact speeds that will work best for you.
Wood product has highly variable hardness which can provide some difficulty, these speeds are meant as a starting point when working out which power and speed will work best for you.

Acrylic	Power 40W	Power 60W	Power 80W	Power 100W
	Speed	Speed	Speed	Speed
1/8"	10-15mm/s	15-20mm/s	20-25mm/s	25-30mm/s
1/4"	2-5mm/s	3-6mm/s	6-10mm/s	10-15mm/s
3/8"	--	2-4mm/s	3-6mm/s	4-7mm/s
1/2"	--	1-2mm/s	2-4mm/s	3-5mm/s
3/4"	--	--	1mm/s	1-2mm/s
1"	--	--	--	0.5mm/s

Soft Wood *	Power 40W	Power 60W	Power 80W	Power 100W
	Speed	Speed	Speed	Speed
1/8"	8-10mm/s	12-15mm/s	18-20mm/s	22-25mm/s
1/4"	1-5mm/s	6-8mm/s	9-14mm/s	18-20mm/s
3/8"	--	2-4mm/s	6-8mm/s	10-12mm/s
1/2"	--	--	--	5-8mm/s
3/4"	--	--	--	--
1"	--	--	--	--

Hard Wood **	Power 40W	Power 60W	Power 80W	Power 100W
	Speed	Speed	Speed	Speed
1/8"	7-9mm/s	9-13mm/s	13-17mm/s	18-20mm/s
1/4"	3.5-5mm/s	6-8mm/s	7-10mm/s	11-14mm/s
3/8"	--	3mm/s	3-6mm/s	4-7mm/s
1/2"	--	--	--	2.5mm/s
3/4"	--	--	--	--
1"	--	--	--	--

* Soft wood refers to medium soft wooden boards(such as Fir, Black Cherry and Poplar), it does not refer to plywood as plywood glue adds resistance to the cut extremely soft wood such as Balsa can cut faster than the above speeds
** Hard wood refers so medium hard woods (such as hard maple), cuts on extremely dense woods (such as ebony) will require sigificantly lower speeds than listed above