

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.

Power 40W Power 60W Power 80W Power 100W					
1/8"		Power 40W	Power 60W	Power 80W	Power 100W
1/4" 2-5mm/s 3-6mm/s 3-6mm/s	Acrylic	Speed	Speed	Speed	Speed
Soft Speed	1/8" 1/4" 3/8" 1/2" 3/4"	2-5mm/s 	3-6mm/s 2-4mm/s 1-2mm/s	6-10mm/s 3-6mm/s 2-4mm/s 1mm/s	10-15mm/s 4-7mm/s 3-5mm/s 1-2mm/s
Soft ** Wood Speed					
Speed Spee	C . CL +	Power 40W	Power 60W	Power 80W	Power 100W
1/8" 8-10mm/s 12-15mm/s 18-20mm/s 22-25mm/s 18-20mm/s 18-20mm/s	3010	Speed	Speed	Speed	Speed
1/4" 1-5mm/s 6-8mm/s 9-14mm/s 18-20mm/s 10-12mm/s 1/2" 5-8mm/s 5-8mm/s 1/2" 1"	Wood 1/8"				
1/2" 5-8mm/s 3/4"	1/4"			9-14mm/s	18-20mm/s
3/4"					
Hard ** Power 40W Power 60W Power 80W Power 100W					
Hard **	1"				
Hard **					
	Hard **	Power 40W	Power 60W	Power 80W	Power 100W
70990 70990 70990 70990 70990		Speed	Speed	Speed	Speed
Wood 1/8" 7-9mm/s 9-13mm/s 13-17mm/s 18-20mm/s	WOOD 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		3.5-5mm/s			
3/8" 3mm/s 3-6mm/s 4-7mm/s 1/2" 2,5mm/s					
3/4"					
1"	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

num nara woods	(such as natu maple), cuts on extremely defise wo	ous (such as esong) will require signiculing i
(HARDEST)		
2350	BRAZILLIAN CHERRY	
2345	MESQUITE	
2200	SANTOS MAHOGANY	
1925	MERBAU	
1910	JARRAH	
1860	PURPLEHEART	
1820	HICKORY / PECAN	
1725	AFRICAN PADAUK	
1630	WENGE	
1450	HARD MAPLE	
1375	AUSTRALIAN CYPRESS	
1360	WHITE OAK	
1320	ASH	
1300	AMERICAN BEECH	
1290	RED OAK (NORTHERN)	The industry median for hardness
1260	YELLOW BIRCH	
1225	HEART PINE	
1010	BLACK WALNUT	
1000	TEAK	
950	BLACK CHERRY	
870	SOUTHERN YELLOW PINE (LONGLEAF)	
690	SOUTHERN YELLOW PINE (LOBLOBBY & SHORTLEAF)	
660	DOUGLAS FIR	
(HARD)		