

Materials & Cutting Speeds

METALS



ALUMINIUM



STAINLESS STEEL





TOOL STEEL

LOW CARBON STEEL

Material	Thickness	Cut Rate	Max Thickness
	(mm)	(mm per minute)	(mm)
Aluminium 6061	0.5 1 2 3 6 8.0 10.0 12.5	212 115 63 44 24 18 15 12	12.5
Aluminium 7075	0.5 1.0 2.0 3.0 4.5	191 114 68 50 37	4.5
Copper 110	0.5 1.0 2.0 3.0 4.5	70 40 23 17 12	4.5
Stainless Steel 316	0.5 0.75 1.0 1.5 2.0 3.0	62 46 38 28 23 17	3.0
Stainless Steel 440C	1.6 3.2	23 15	3.2
Steel 01	1.6 3.2	24 14	3.2
Steel 1008	0.5 0.75 1.0 1.5 2.0 3.0	72 55 46 35 29 22	3.0
Steel 4130	0.5 0.75 1.0 1.5 2.0 3.0	62 47 39 29 24 18	3.0

This cutting data supplied in this table is indicative and based on straight line cutting, actual cutting data may be different depending on cut quality desired, material specification, garnet type & volume used, as well as work piece geometry. E&OE





METALS Cont				
Steel 1018	3.2 4.8	15 12	4.8	
Titanium G5	0.5 1.0 2.0 3.0	85 47 26 18	3.0	

PLASTICS & RUBBERS





HDPE

SILICONE

ADPE	SILICONE		
Material	Thickness (mm)	Cut Rate (mm per minute)	Max Thickness (mm)
Acrylic	2.0 3.0 6.0 8.0 12.5	198 117 48 33 18	12.5
HDPE	2.0 6.0 8.0 12.5	165 46 33 19	12.5
Neoprene, 50A	2.0 6.0 8.0 12.5	1900 175 84 27	12.5
Polycarbonate	2.0 3.0 4.5 6.0 8.0	119 74 46 32 23	8.0
Polyurethane, 60A	2.0 3.0 4.5 6.0 8.0 12.5	1900 1000 255 96 36 8	12.5
Silicone, 50A	2.0 3.0 6.0 8.0 10.0 12.5	1900 1900 652 263 130 65	12.5

This cutting data supplied in this table is indicative and based on straight line cutting, actual cutting data may be different depending on cut quality desired, material specification, garnet type & volume used, as well as work piece geometry. E&OE





CERAMICS & STONE





MARBLE

BORO GLASS

Material	Thickness (mm)	Cut Rate (mm per minute)	Max Thickness (mm)
Glass, Borosilicate	2.0 3.0 4.5 6.0 8.0 10.0 12.5	782 337 145 80 44 27 17	12.5
Glass, Soda Lime	2.0 2.3 2.7 3.0 3.3 3.7 4.0 4.5 6.0	407 330 260 222 192 162 144 120 78	6.0
Tile, Ceramic	9.5	243	9.5
Tile, Porcelain	9.5	47	9.5

OTHER MATERIALS



CARBON FIBER

Material	Thickness	Cut Rate	Max Thickness
	(mm)	(mm per minute)	(mm)
Carbon Fiber	0.5 1.0 2.0 3.0 4.5	222 107 52 31 22	4.5

This cutting data supplied in this table is indicative and based on straight line cutting, actual cutting data may be different depending on cut quality desired, material specification, garnet type & volume used, as well as work piece geometry. E&OE