


20, 31 (FRACTIONAL)	Cut Type	Speed sfm	Feed (inch/rev)				
			1/16	1/8	1/4	3/8	1/2
● CFRP, AFRP (Carbon Fiber, Aramid Fiber)	Slot	400	0.0012	0.0024	0.0048	0.0090	0.0120
	Profile	500	0.0012	0.0024	0.0048	0.0090	0.0120
	Light	825	0.0028	0.0056	0.0111	0.0207	0.0276
● GFRP (Fiberglass)	Slot	320	0.0012	0.0024	0.0048	0.0090	0.0120
	Profile	400	0.0012	0.0024	0.0048	0.0090	0.0120
	Light	660	0.0028	0.0056	0.0111	0.0207	0.0276
● CARBON, GRAPHITE	Slot	480	0.0015	0.0030	0.0060	0.0114	0.0150
	Profile	600	0.0015	0.0030	0.0060	0.0114	0.0150
	Light	990	0.0035	0.0069	0.0138	0.0258	0.0345
● PLASTIC	Slot	800	0.0015	0.0030	0.0060	0.0114	0.0150
	Profile	1000	0.0015	0.0030	0.0060	0.0114	0.0150
	Light	1650	0.0035	0.0069	0.0138	0.0258	0.0345
MACHINABLE CERAMIC, MACHINABLE GLASS	Slot	40	0.0006	0.0012	0.0024	0.0045	0.0060
	Profile	50	0.0006	0.0012	0.0024	0.0045	0.0060
	Light	85	0.0014	0.0027	0.0054	0.0102	0.0138

Cut Type		
Slot	Profile	Light
31	31	20, 31
$R_w = D_1$	$R_w = .5 \times D_1$	$R_w = .05 \times D_1$
$Ad = D_1$	$Ad = 1.5 \times D_1$	$Ad = L_2$



rpm = sfm x 3.82 / D<sub>1</sub>  
ipm = (inch/rev) x rpm

- maximum recommended depths shown
- adjust speed and feed based upon resin type and/or fiber structure
- reduce speed when overheating causes melting or damage to resin
- reduce feed if delamination or fraying occurs
- finish cuts typically require reduced feed and cutting depths
- rates shown are for use without coolant; rates may be increased with coolant use
- dust collection is vital when machining dry
- diamond coating will increase tool life in graphite and composite materials
- refer to the SGS Tool Wizard for more complete technical information (available at )