



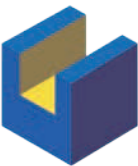
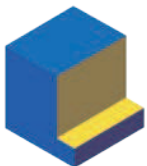
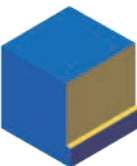
# Speed & Feed Recommendations

## 44, 45, 43CR, 43CB, 43LC, 43, 43L, 47, 47B, 47ES, 47EB Fractional

	CUT Type	SPEED sfm	FEED (inch/flute)					
			1/8	1/4	3/8	1/2	3/4	1
ALUMINUM ALLOY 2024, 5052, 5086, 6061, 6063, 7075	Slot	1600	0.0009	0.0025	0.0045	0.0060	0.0070	0.0085
	Profile	2000	0.0009	0.0025	0.0045	0.0060	0.0070	0.0085
	Light	3300	0.0021	0.0055	0.0105	0.0140	0.0165	0.0195
ALUMINUM DIE CAST ALLOY (High Silicon) A-390, A-392, B-390	Slot	600	0.0009	0.0025	0.0045	0.0060	0.0070	0.0085
	Profile	750	0.0009	0.0025	0.0045	0.0060	0.0070	0.0085
	Light	1240	0.0021	0.0055	0.0105	0.0140	0.0165	0.0195
COPPER ALLOY Aluminum Bronze, Muntz Brass, Naval Brass, Red Brass	Slot	865	0.0008	0.0020	0.0040	0.0050	0.0060	0.0070
	Profile	1080	0.0008	0.0020	0.0040	0.0050	0.0060	0.0070
	Light	1780	0.0017	0.0045	0.0085	0.0115	0.0140	0.0160
COPPER ALLOY Beryllium Copper, C110, Manganese Bronze, Tin Bronze	Slot	345	0.0008	0.0020	0.0040	0.0050	0.0060	0.0070
	Profile	430	0.0008	0.0020	0.0040	0.0050	0.0060	0.0070
	Light	710	0.0017	0.0045	0.0085	0.0115	0.0140	0.0160
PLASTIC ABS, Polycarbonate, PVC, Polypropylene	Slot	1600	0.0015	0.0040	0.0075	0.0100	0.0120	0.0140
	Profile	2000	0.0015	0.0040	0.0075	0.0100	0.0120	0.0140
	Light	3300	0.0034	0.0090	0.0170	0.0230	0.0275	0.0320

## 44M, 43MCR, 43MCB, 43M, 47M, 47MB, 47MES, 47MEB Metric

	CUT Type	SPEED m/min	FEED (mm/flute)					
			3	6	10	12	20	25
ALUMINUM ALLOY 2024, 5052, 5086, 6061, 6063, 7075	Slot	490	0.022	0.060	0.120	0.144	0.187	0.213
	Profile	610	0.022	0.060	0.120	0.144	0.187	0.213
	Light	1005	0.050	0.132	0.280	0.336	0.440	0.488
ALUMINUM DIE CAST ALLOY (High Silicon) A-390, A-392, B-390	Slot	185	0.022	0.060	0.120	0.144	0.187	0.213
	Profile	230	0.022	0.060	0.120	0.144	0.187	0.213
	Light	380	0.050	0.132	0.280	0.336	0.440	0.488
COPPER ALLOY Aluminum Bronze, Muntz Brass, Naval Brass, Red Brass	Slot	265	0.019	0.048	0.107	0.120	0.160	0.175
	Profile	330	0.019	0.048	0.107	0.120	0.160	0.175
	Light	545	0.041	0.108	0.227	0.276	0.373	0.400
COPPER ALLOY Beryllium Copper, C110, Manganese Bronze, Tin Bronze	Slot	105	0.019	0.048	0.107	0.120	0.160	0.175
	Profile	130	0.019	0.048	0.107	0.120	0.160	0.175
	Light	215	0.041	0.108	0.227	0.276	0.373	0.400
PLASTIC ABS, Polycarbonate, PVC, Polypropylene	Slot	490	0.036	0.096	0.200	0.240	0.320	0.350
	Profile	610	0.036	0.096	0.200	0.240	0.320	0.350
	Light	1005	0.082	0.216	0.453	0.552	0.733	0.800

CUT TYPE					
SLOT		PROFILE		LIGHT*	
Short, Regular Rw = D <sub>1</sub> Ad = .6 x D <sub>1</sub>	Long Reach, Long Flute Rw = D <sub>1</sub> Ad = .5 x D <sub>1</sub>	Short, Regular Rw = .5 x D <sub>1</sub> Ad = L <sub>2</sub>	Long Reach, Long Flute Rw = .3 x D <sub>1</sub> Ad = 1.5 x D <sub>1</sub>	Short, Regular, Long Reach Rw = .05 x D <sub>1</sub> Ad = L <sub>2</sub>	Long Flute, Extra Long Flute Rw = .02 x D <sub>1</sub> Ad = 3 x D <sub>1</sub>
					

rpm = sfm x 3.82 / D<sub>1</sub>  
rpm = (1000 x m/min) / (3.14 x D<sub>1</sub>)

ipm = (inch/flute) x no. of flutes x rpm  
mm/min = (mm/flute) x no. of flutes x rpm

- maximum recommended depths shown

\* finish cuts typically require reduced feed and cutting depths of .02 x D<sub>1</sub> maximum

- refer to the SGS Tool Wizard for more complete technical information (available at )