

High Performance Solid Carbide Square Mini End Mills Speed and Feed Chart

Material	Spindle Speed SFM*	Chipload Per Tooth		
		51660	51661	51662
		.010"	.015"	.020"
Steel: < 16 Rc	400 - 600	0.00005"	0.00007"	0.00009"
Steel: < 24 Rc (C)	300 - 470	0.00005"	0.00007"	0.00009"
Steel: 24 - 37 Rc	200 - 350	0.00005"	0.00007"	0.00009"
Steel: 37 - 45 Rc	150 - 220	N/A	N/A	N/A
Stainless Steel (400 Series)	375 - 500	0.00007"	0.00008"	0.00009"
Stainless Steel (300 Series)	150 - 225	0.00005"	0.00007"	0.00009"
Inconel/Nimonic/Waspaloy	65 - 95	0.00003"	0.00005"	0.00007"
Thermoplastics	1,500 - 2,000	0.00012"	0.00015"	0.00019"
Titanium	100 - 175	0.00003"	0.00005"	0.00007"

Operating RPM: 18,000

SFM* Surface feet per minute

Simple Machining Calculations:

To find **RPM:** SFM x 3.82 / diameter of tool

To find **SFM:** 0.262 x diameter of tool x RPM

To find **Feed Rate:** RPM x # of flutes x chip load

Depth of Cut: 1 x D Use recommended chip load
 2 x D Reduce chip load by 25%
 3 x D Reduce chip load by 50%