

SPMG SPEEDS & FEEDS



SERIES: SPMG

Carbide



Center
Cutting



4 Flute, Performance End Mill - Square & Radius
Series: SPMG

		STARTING SFM MPMG	CUTTING DIAMETER							
MATERIAL	CONDITION		1/8"	3/16"	1/4"	3/8"	1/2"	5/8"	3/4"	1"
STAINLESS STEELS		ISO-M								
		CHIP PER TOOTH								
Precipitation	Slotting @ $\leq .5 \times D$	175	0.0005	0.0007	0.0009	0.0014	0.0019	0.0024	0.0029	0.0039
13-8, 15-5, 17-4PH	Profiling @ $2 \times D$ Axial / $\leq .15 D$ Radial		0.0007	0.0010	0.0013	0.0019	0.0026	0.0033	0.0040	0.0054
Austenitic	Slotting @ $\leq .5 \times D$	225	0.0006	0.0008	0.0011	0.0017	0.0023	0.0029	0.0035	0.0047
302, 303, 304L, 316L	Profiling @ $2 \times D$ Axial / $\leq .15 D$ Radial		0.0008	0.0011	0.0015	0.0024	0.0032	0.0040	0.0048	0.0064
Martensitic	Slotting @ $\leq .5 \times D$	200	0.0006	0.0009	0.0012	0.0018	0.0025	0.0031	0.0037	0.0050
403, 410, 416	Profiling @ $2 \times D$ Axial / $\leq .15 D$ Radial		0.0009	0.0013	0.0016	0.0025	0.0034	0.0043	0.0051	0.0069
HIGH TEMP ALLOYS		ISO-S								
Cobalt Base	Slotting @ $.5 \times D$	85	0.0003	0.0003	0.0004	0.0007	0.0010	0.0013	0.0015	0.0021
Stellite, Haynes 25, 188, X-40, L-605	Profiling @ $2 \times D$ Axial / $\leq .15 D$ Radial		0.0003	0.0003	0.0006	0.0006	0.0012	0.0015	0.0019	0.0025
Nickel Base	Slotting @ $.5 \times D$	60	0.0004	0.0002	0.0006	0.0009	0.0016	0.0015	0.0025	0.0025
Inconel 600, 625, 718, Nickel 200, 270, Invar, Monel 400, 405, K-Monel, PermaNickel 300, Inconel 600	Profiling @ $2 \times D$ Axial / $\leq .15 D$ Radial		0.0004	0.0003	0.0006	0.0010	0.0017	0.0017	0.0021	0.0021
Iron Base	Slotting @ $\leq .5 \times D$	70	0.0004	0.0004	0.0008	0.0013	0.0018	0.0022	0.0027	0.0036
Incoloy 800-802, Multimet N-155, Timken 16-26-6	Profiling @ $2 \times D$ Axial / $\leq .15 D$ Radial		0.0004	0.0004	0.0009	0.0015	0.0020	0.0025	0.0030	0.0041
STEELS		ISO-P								
High Strength Steels	Slotting @ $\leq .5 \times D$	225	0.0006	0.0008	0.0012	0.0018	0.0025	0.0031	0.0037	0.0050
4140, 4340, 52100	Profiling @ $2 \times D$ Axial / $\leq .15 D$ Radial		0.0009	0.0012	0.0016	0.0025	0.0034	0.0043	0.0051	0.0069
High Alloy Steels - Mold & Die	Slotting @ $\leq .5 \times D$	200	0.0005	0.0007	0.0010	0.0015	0.0021	0.0026	0.0031	0.0042
A-2, P20, 01, 02, D2, H-13	Profiling @ $2 \times D$ Axial / $\leq .15 D$ Radial		0.0007	0.001	0.0014	0.0021	0.0028	0.0036	0.0043	0.0058
Medium Alloy Steels	Slotting @ $\leq .5 \times D$	250	0.0005	0.0004	0.0011	0.0019	0.0024	0.0034	0.0039	0.0049
200, 250, 300	Profiling @ $2 \times D$ Axial / $\leq .15 D$ Radial		0.0005	0.0004	0.0014	0.0023	0.0029	0.0039	0.0049	0.0059
Low Alloy Steels-Maraging	Slotting @ $\leq .5 \times D$	265	0.0007	0.0009	0.0013	0.0020	0.0027	0.0034	0.0041	0.0055
10XX, 11XX, 13XX	Profiling @ $2 \times D$ Axial / $\leq .15 D$ Radial		0.0010	0.0014	0.0018	0.0028	0.0037	0.0047	0.0056	0.0075
CAST IRONS		ISO-K								
Ductile Iron	Slotting @ $\leq .5 \times D$	300	0.0005	0.0007	0.0009	0.0014	0.0019	0.0024	0.0029	0.0039
Ductile Cast Iron	Profiling @ $2 \times D$ Axial / $\leq .15 D$ Radial		0.0007	0.0009	0.0013	0.0019	0.0026	0.0033	0.0040	0.0054
Cast Iron	Slotting @ $\leq .5 \times D$	375	0.0006	0.0009	0.0011	0.0017	0.0023	0.0029	0.0035	0.0047
Grey Cast Iron	Profiling @ $2 \times D$ Axial / $\leq .15 D$ Radial		0.0008	0.0011	0.0015	0.0024	0.0032	0.004	0.0048	0.0064
TITANIUM		ISO-S								
Titanium Alloys	Slotting @ $\leq .5 \times D$	150	0.0005	0.0006	0.0008	0.0013	0.0017	0.0022	0.0027	0.0036
6AL-4V, ASTM 1, 2, 3, 6AL-2S	Profiling @ $2 \times D$ Axial / $\leq .15 D$ Radial		0.0006	0.0009	0.0012	0.0018	0.0024	0.0030	0.0037	0.0049

For 5553, decrease SFM and IPM by 25%

