SPEED & FEED:

SPT SUNCOAST BRAND CARBIDE END MILLS

2, 3, & 4 FLUTES: AMG, EMG, & CCMG SERIES

MATERIAL	CONDITIONS	START-ING SFM	FL	CUTTING DIAMETER							
				.005 - .015	.015 - .030	.030 - .045	.045 - .060	.060 - .075	.075 - .090	.090 - .105	.105 - .125
				CHIP PER TOOTH							
STAINLESS STEELS	**ISO-M**										
Precipitation											
13-8, 15-5, 17-4PH	Slotting @ ≤ 10% of D	90	2 or 4	0.0002	0.0002	0.0003	0.0003	0.0004	0.0004	0.0005	0.0005
	Profiling @ 6% of D Axial / ≤ 20% of D Radial	250	2 or 4	0.0002	0.0002	0.0003	0.0003	0.0004	0.0004	0.0005	0.0005
Austenitic											
302, 303, 304L, 316L	Slotting @ ≤ 15% of D	100	2 or 4	0.0002	0.0002	0.0003	0.0003	0.0004	0.0004	0.0005	0.0005
	Profiling @ 6% of D Axial / ≤ 30% of D Radial	250	2 or 4	0.0002	0.0002	0.0003	0.0003	0.0004	0.0004	0.0005	0.0005
Martensitic											
403, 410, 416	Slotting @ ≤ 15% x D	100	2 or 4	0.0002	0.0002	0.0003	0.0003	0.0004	0.0004	0.0005	0.0005
	Profiling @ 6% of D Axial / ≤ 30% of D Radial	250	2 or 4	0.0002	0.0002	0.0003	0.0003	0.0004	0.0004	0.0005	0.0005
HIGH TEMP ALLOYS	**ISO-S**										
Cobalt Base											
Stellite, Haynes 25, 188, X-40,	Slotting @ 7% of D	50	2 or 4	0.0001	0.0001	0.0002	0.0002	0.0003	0.0003	0.0004	0.0004
L-605	Profiling @ 5% of D Axial / ≤ 20% of D Radial	80	2 or 4	0.0001	0.0001	0.0002	0.0002	0.0003	0.0003	0.0004	0.0004
Nickel Base											
Inconel 600, 625, 718, Nickel 200,	Slotting @ 7% of D	40	2 or 4	0.0001	0.0001	0.0002	0.0002	0.0003	0.0003	0.0004	0.0004
270, Invar, Monel 400, 405, K-Monel, PermaNickel 300, Incoly 600	Profiling @ 5% of D Axial / ≤ 20% of D Radial	60	2 or 4	0.0001	0.0001	0.0002	0.0002	0.0003	0.0003	0.0004	0.0004
Iron Base											
Incoloy 800-802, Multimet N-155,	Slotting @ 7% of D	80	2 or 4	0.0001	0.0001	0.0002	0.0002	0.0003	0.0003	0.0004	0.0004
Timken 16-26-6	Profiling @ 5% of D Axial / ≤ 20% of D Radial	100	2 or 4	0.0001	0.0001	0.0002	0.0002	0.0003	0.0003	0.0004	0.0004
STEELS	**ISO-P**										
High Strength Steels											
4140, 4340, 52100	Slotting @ ≤ 15% of D	100	2 or 4	0.0002	0.0002	0.0003	0.0003	0.0004	0.0004	0.0005	0.0005
	Profiling @ 6% of D Axial / ≤ 30% of D Radial	180	2 or 4	0.0002	0.0002	0.0003	0.0003	0.0004	0.0004	0.0005	0.0005
High Alloy Steels - Mold & Die											
A-2, P20, 01, 02, D2, H-13	Slotting @ ≤ 10% of D	125	2 or 4	0.0002	0.0002	0.0003	0.0003	0.0004	0.0004	0.0005	0.0005
	Profiling @ 6% of D Axial / ≤ 20% of D Radial	250	2 or 4	0.0002	0.0002	0.0003	0.0003	0.0004	0.0004	0.0005	0.0005
Medium Alloy Steels											
200, 250, 300	Slotting @ ≤ 15% of D	125	2 or 4	0.0003	0.0003	0.0004	0.0004	0.0005	0.0005	0.0006	0.0006
	Profiling @ 6% of D Axial / ≤ 30% of D Radial	250	2 or 4	0.0003	0.0003	0.0004	0.0004	0.0005	0.0005	0.0006	0.0006
Low Alloy Steels-Maraging											
10XX, 11XX, 13XX	Slotting @ ≤ 15% of D	150	2 or 4	0.0004	0.0004	0.0005	0.0005	0.0006	0.0006	0.0007	0.0007
	Profiling @ 6% of D Axial / ≤ 35% of D Radial	300	2 or 4	0.0004	0.0004	0.0005	0.0005	0.0006	0.0006	0.0007	0.0007
CAST IRONS	**ISO-K**										
Ductile Iron											
Ductile Cast Iron	Slotting @ 15% of D	100	2 or 4	0.0004	0.0004	0.0005	0.0005	0.0006	0.0006	0.0007	0.0007
	Profiling @ 10% of D Axial / ≤ 25% of D Radial	250	2 or 4	0.0004	0.0004	0.0005	0.0005	0.0006	0.0006	0.0007	0.0007
Cast Iron											
Grey Cast Iron	Slotting @ 25% of D	125	2 or 4	0.0004	0.0004	0.0005	0.0006	0.0008	0.0008	0.0010	0.0010
	Profiling @ 10% of D Axial / ≤ 35% of D Radial	400	2 or 4	0.0004	0.0004	0.0005	0.0006	0.0008	0.0008	0.0010	0.0010
TITANIUMS	**ISO-S**										
Titanium Alloys											
6AL-4V, ASTM 1, 2, 3, 6AL-2S	Slotting @ ≤ 15% of D	125	2 or 4	0.0002	0.0002	0.0003	0.0003	0.0004	0.0004	0.0005	0.0005
For 5553, decrease SFM and IPM by 25%	Profiling @ 6% of D Axial / ≤ 20% of D Radial	250	2 or 4	0.0002	0.0002	0.0003	0.0003	0.0004	0.0004	0.0005	0.0005
ALUMINUM	**ISO-N**										
Aluminum Alloys											
6061-T6, 7075	Slotting @ ≤ 15% of D	650	2 or 4	0.0004	0.0004	0.0005	0.0006	0.0008	0.0008	0.0010	0.0010
	Profiling @ 10% of D Axial / ≤ 35% of D Radial	775	2 or 4	0.0004	0.0004	0.0005	0.0006	0.0008	0.0008	0.0010	0.0010

SPT SUNCOAST PRECISION TOOLS ESTABLISHED 1963

Note: All technical data provided are suggested starting points. They may be increased or decreased depending on machine condition, depth of cut, finish required, coolant, etc.