



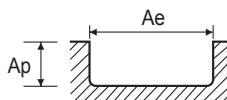
4G MILL END MILLS

RECOMMENDED CUTTING CONDITIONS

SEMD99 SERIES

2FLUTE CORNER RADIUS - SLOTTING

ISO	VDI 3323	Material Description	Ae	Ap	Parameter	Diameter (Ø)															
						0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0	1.2	1.5	2.0	2.5			
P	1-8	Non-alloy steel	1.0D	0.2D	SFM(Vc)	90	125	170	185	185	215	245	280	285	305	340	370	385			
					IPT(fz)	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0002	.0002	.0002	.0003	.0004		
					RPM	44000	41000	41000	36000	30000	30000	30000	30000	27600	24800	22000	18000	15000			
	9	Low alloy steel	1.0D	0.2D	SFM(Vc)	60	85	110	120	120	145	165	175	185	195	210	240	245			
					IPT(fz)	.00004	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0002	.0002	.0003			
					RPM	28800	27000	27000	23400	19800	19800	19800	18900	18000	15750	13500	11560	9500			
	10-11.1	High alloyed steel, and tool steel	1.0D	0.2D	SFM(Vc)	90	125	170	185	185	215	245	280	285	305	340	370	385			
					IPT(fz)	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0002	.0002	.0002	.0003	.0004			
					RPM	44000	41000	41000	36000	30000	30000	30000	30000	27600	24800	22000	18000	15000			
	11.2	High alloyed steel, and tool steel	1.0D	0.2D	SFM(Vc)	60	85	110	120	120	145	165	175	185	195	210	240	245			
					IPT(fz)	.00004	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0002	.0002	.0003			
					RPM	28800	27000	27000	23400	19800	19800	19800	18900	18000	15750	13500	11560	9500			
K	15-20	Grey cast iron Nodular cast iron Malleable cast iron	1.0D	0.2D	SFM(Vc)	90	125	170	185	185	215	245	280	285	305	340	370	385			
					IPT(fz)	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0002	.0002	.0002	.0003	.0004		
					RPM	44000	41000	41000	36000	30000	30000	30000	30000	27600	24800	22000	18000	15000			
H	38.1-38.2	Hardened steel	1.0D	0.2D	SFM(Vc)	35	50	70	75	75	85	100	105	115	120	130	150	155			
					IPT(fz)	.00004	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0002	.0002			
					RPM	17600	16500	16500	14300	12100	12100	12100	11550	11000	9750	8500	7200	6100			
	40	Chilled Cast Iron	1.0D	0.2D	SFM(Vc)	60	85	110	120	120	145	165	175	185	195	210	240	245			
					IPT(fz)	.00004	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0002	.0002	.0003			
					RPM	28800	27000	27000	23400	19800	19800	19800	18900	18000	15750	13500	11560	9500			
	41	Hardened Cast Iron	1.0D	0.2D	SFM(Vc)	35	50	70	75	75	85	100	105	115	120	130	150	155			
					IPT(fz)	.00004	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0002	.0002				
					RPM	17600	16500	16500	14300	12100	12100	12100	11550	11000	9750	8500	7200	6100			



SFM = Surface Feet per Minute
 RPM = Revolutions Per Minute
 IPT = Inches Per Tooth
 IPM = Inches Per Minute
 Ap : Inch (Axial Depth of Cut)
 Ae : Inch (Radial Depth of Cut)

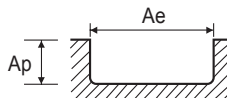
YG 4G MILL END MILLS

RECOMMENDED CUTTING CONDITIONS

SEMD99 SERIES 2FLUTE CORNER RADIUS - **SLOTTING**

ISO	VDI 3323	Ae	Ap	Parameter	Diameter (Ø)														
					3.0	3.5	4.0	4.5	5.0	5.5	6.0	7.0	8.0	10.0	11.0	12.0	14.0	16.0	20.0
P	1-8	1.0D	0.2D	SFM(Vc)	410	430	440	460	470	485	490	500	495	520	520	510	520	510	520
				IPT(fz)	.0004	.0005	.0006	.0008	.0009	.0011	.0012	.0015	.0018	.0021	.0021	.0020	.0021	.0023	.0022
				RPM	13240	11980	10720	9940	9160	8530	7900	6950	6000	5040	4580	4120	3610	3100	2520
				IPM(FEED)	11	12	13	15	17	18	20	20	21	21	19	17	15	14	11
	9	1.0D	0.2D	SFM(Vc)	265	275	280	295	300	305	310	320	315	340	345	345	350	345	340
				IPT(fz)	.0003	.0004	.0005	.0006	.0007	.0008	.0010	.0011	.0013	.0015	.0016	.0016	.0016	.0016	.0014
				RPM	8560	7690	6820	6310	5800	5420	5040	4420	3800	3280	3030	2780	2440	2100	1640
				IPM(FEED)	6	6	7	7	8	9	10	10	10	10	9	9	8	7	5
	10-11.1	1.0D	0.2D	SFM(Vc)	410	430	440	460	470	485	490	500	495	520	520	510	520	510	520
				IPT(fz)	.0004	.0005	.0006	.0008	.0009	.0011	.0012	.0015	.0018	.0021	.0021	.0020	.0021	.0023	.0022
				RPM	13240	11980	10720	9940	9160	8530	7900	6950	6000	5040	4580	4120	3610	3100	2520
				IPM(FEED)	11	12	13	15	17	18	20	20	21	21	19	17	15	14	11
11.2	1.0D	0.2D	SFM(Vc)	265	275	280	295	300	305	310	320	315	340	345	345	350	345	340	
			IPT(fz)	.0003	.0004	.0005	.0006	.0007	.0008	.0010	.0011	.0013	.0015	.0016	.0016	.0016	.0016	.0014	
			RPM	8560	7690	6820	6310	5800	5420	5040	4420	3800	3280	3030	2780	2440	2100	1640	
			IPM(FEED)	6	6	7	7	8	9	10	10	10	10	9	9	8	7	5	
K	15-20	1.0D	0.2D	SFM(Vc)	410	430	440	460	470	485	490	500	495	520	520	510	520	510	520
				IPT(fz)	.0004	.0005	.0006	.0008	.0009	.0011	.0012	.0015	.0018	.0021	.0021	.0020	.0021	.0023	.0022
				RPM	13240	11980	10720	9940	9160	8530	7900	6950	6000	5040	4580	4120	3610	3100	2520
				IPM(FEED)	11	12	13	15	17	18	20	20	21	21	19	17	15	14	11
H	38.1-38.2	1.0D	0.2D	SFM(Vc)	165	175	175	200	195	200	205	210	210	210	210	215	210	205	
				IPT(fz)	.0003	.0003	.0004	.0004	.0005	.0006	.0007	.0008	.0009	.0012	.0012	.0012	.0012	.0012	.0012
				RPM	5280	4790	4300	4300	3800	3540	3280	2900	2520	2020	1850	1680	1480	1280	1000
				IPM(FEED)	3	3	3	4	4	4	5	5	5	5	4	4	4	3	2
	40	1.0D	0.2D	SFM(Vc)	265	275	280	295	300	305	310	320	315	340	345	345	350	345	340
				IPT(fz)	.0003	.0004	.0005	.0006	.0007	.0008	.0010	.0011	.0013	.0015	.0016	.0016	.0016	.0016	.0014
				RPM	8560	7690	6820	6310	5800	5420	5040	4420	3800	3280	3030	2780	2440	2100	1640
				IPM(FEED)	6	6	7	7	8	9	10	10	10	10	9	9	8	7	5
	41	1.0D	0.2D	SFM(Vc)	165	175	175	200	195	200	205	210	210	210	210	215	210	205	
				IPT(fz)	.0003	.0003	.0004	.0004	.0005	.0006	.0007	.0008	.0009	.0012	.0012	.0012	.0012	.0012	.0012
				RPM	5280	4790	4300	4300	3800	3540	3280	2900	2520	2020	1850	1680	1480	1280	1000
				IPM(FEED)	3	3	3	4	4	4	5	5	5	5	4	4	4	3	2

SFM = Surface Feet per Minute
 RPM = Revolutions Per Minute
 IPT = Inches Per Tooth
 IPM = Inches Per Minute
 Ap : Inch (Axial Depth of Cut)
 Ae : Inch (Radial Depth of Cut)



HSS

CBN END MILLS

i-Xmill END MILLS

i-SMART MODULAR END MILLS

X5070 END MILLS

4G MILL END MILLS

X-POWER PRO END MILLS

TitaNox-POWER END MILLS

JET-POWER END MILLS

V7 PLUS A END MILLS

V7 MILL INOX

ALU-POWER HPC END MILLS

ALU-POWER END MILLS

D-POWER GRAPHITE END MILLS

STANDARD CARBIDE

ONLY ONE COATED PM60 END MILLS

SINE-POWER

TANK-POWER END MILLS

STANDARD COBALT & HSS

TECHNICAL DATA



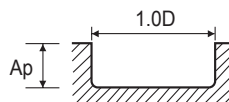
4G MILL END MILLS

RECOMMENDED CUTTING CONDITIONS

SEME61 SERIES

2FLUTE CORNER RADIUS - SLOTTING

ISO	VDI 3323	Material Description	Parameter	Diameter (Ø)																	
				0.2			0.3			0.4			0.5			0.6			0.8		
				LBS	0.5	1	1.5	2	1	2	3	1	1.5	2	2.5	3	4	1	1.5	2	
P	1-8	Non-alloy steel	SFM(Vc)	105	105	95	95	155	140	140	205	205	205	185	185	185	220	220	220		
			IPT(fz)	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	
			RPM	50000	50000	45000	45000	50000	45000	45000	50000	50000	50000	45000	45000	45000	43000	43000	43000		
			IPM(FEED)	7	7	6	6	8	6	6	8	8	8	6	6	6	9	9	9		
			Ap	.0016	.0011	.0006	.0004	.0017	.0009	.0006	.0031	.0022	.0022	.0013	.0013	.0008	.0039	.0039	.0028		
			SFM(Vc)	70	70	65	65	100	90	90	130	130	130	120	120	120	145	145	145		
	9	Low alloy steel	IPT(fz)	.00004	.00004	.00004	.00004	.00005	.00005	.00005	.0001	.0001	.0001	.0000	.0000	.0000	.0001	.0001	.0001		
			RPM	34500	34500	31050	31050	32000	28800	28800	32000	32000	32000	28800	28800	28800	28000	28000	28000		
			IPM(FEED)	3.0	3.0	2.4	2.4	3.3	2.8	2.8	3.3	3.3	3.3	2.8	2.8	2.8	3.7	3.7	3.7		
			Ap	.0012	.0008	.0005	.0003	.0013	.0007	.0004	.0024	.0017	.0017	.0009	.0009	.0006	.0030	.0030	.0021		
			SFM(Vc)	105	105	95	95	155	140	140	205	205	205	185	185	185	220	220	220		
			IPT(fz)	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	
10-11.1	High alloyed steel, and tool steel	RPM	50000	50000	45000	45000	50000	45000	45000	50000	50000	50000	45000	45000	45000	43000	43000	43000			
		IPM(FEED)	7	7	6	6	8	6	6	8	8	8	6	6	6	9	9	9			
		Ap	.0016	.0011	.0006	.0004	.0017	.0009	.0006	.0031	.0022	.0022	.0013	.0013	.0008	.0039	.0039	.0028			
		SFM(Vc)	70	70	65	65	100	90	90	130	130	130	120	120	120	145	145	145			
		IPT(fz)	.00004	.00004	.00004	.00004	.00005	.00005	.00005	.0001	.0001	.0001	.0000	.0000	.0000	.0001	.0001	.0001			
		RPM	34500	34500	31050	31050	32000	28800	28800	32000	32000	32000	28800	28800	28800	28000	28000	28000			
11.2	High alloyed steel, and tool steel	IPM(FEED)	3.0	3.0	2.4	2.4	3.3	2.8	2.8	3.3	3.3	2.8	2.8	2.8	3.7	3.7	3.7				
		Ap	.0012	.0008	.0005	.0003	.0013	.0007	.0004	.0024	.0017	.0017	.0009	.0009	.0006	.0030	.0030	.0021			
		SFM(Vc)	105	105	95	95	155	140	140	205	205	205	185	185	185	220	220	220			
		IPT(fz)	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001		
		RPM	50000	50000	45000	45000	50000	45000	45000	50000	50000	50000	45000	45000	45000	43000	43000	43000			
		IPM(FEED)	7	7	6	6	8	6	6	8	8	8	6	6	6	9	9	9			
K	15-20	Grey cast iron Nodular cast iron Malleable cast iron	SFM(Vc)	105	105	95	95	155	140	140	205	205	205	185	185	185	220	220	220		
			IPT(fz)	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	
			RPM	50000	50000	45000	45000	50000	45000	45000	50000	50000	50000	45000	45000	45000	43000	43000	43000		
			IPM(FEED)	7	7	6	6	8	6	6	8	8	8	6	6	6	9	9	9		
			Ap	.0016	.0011	.0006	.0004	.0017	.0009	.0006	.0031	.0022	.0022	.0013	.0013	.0008	.0039	.0039	.0028		
			SFM(Vc)	70	70	65	65	100	90	90	130	130	130	120	120	120	145	145	145		
H	38.1-38.2	Hardened steel	IPT(fz)	.00004	.00004	.00004	.00004	.00005	.00004	.00004	.0001	.0001	.0001	.0000	.0000	.0000	.0001	.0001	.0001		
			RPM	21150	21150	19040	19040	20000	18000	18000	20000	20000	20000	18000	18000	18000	17100	17100	17100		
			IPM(FEED)	2	2	1	1	2	2	2	2	2	2	2	2	2	2	2	2	2	
			Ap	.0009	.0007	.0004	.0002	.0010	.0006	.0004	.0019	.0013	.0013	.0007	.0007	.0005	.0024	.0024	.0017		
			SFM(Vc)	45	45	40	40	60	55	55	80	80	80	75	75	75	90	90	90		
			IPT(fz)	.00004	.00004	.00004	.00004	.00005	.00005	.00005	.0001	.0001	.0001	.0000	.0000	.0000	.0001	.0001	.0001		
	40	Chilled Cast Iron	RPM	21150	21150	19040	19040	20000	18000	18000	20000	20000	18000	18000	18000	17100	17100	17100			
			IPM(FEED)	3.0	3.0	2.4	2.4	3.3	2.8	2.8	3.3	3.3	3.3	2.8	2.8	2.8	3.7	3.7	3.7		
			Ap	.0012	.0008	.0005	.0003	.0013	.0007	.0004	.0024	.0017	.0017	.0009	.0009	.0006	.0030	.0030	.0021		
			SFM(Vc)	45	45	40	40	60	55	55	80	80	80	75	75	75	90	90	90		
			IPT(fz)	.00004	.00004	.00004	.00004	.00005	.00004	.00004	.0001	.0001	.0001	.0000	.0000	.0000	.0001	.0001	.0001		
			RPM	21150	21150	19040	19040	20000	18000	18000	20000	20000	20000	18000	18000	18000	17100	17100	17100		
41	Hardened Cast Iron	IPM(FEED)	2	2	1	1	2	2	2	2	2	2	2	2	2	2	2	2			
		Ap	.0009	.0007	.0004	.0002	.0010	.0006	.0004	.0019	.0013	.0013	.0007	.0007	.0005	.0024	.0024	.0017			
		SFM(Vc)	45	45	40	40	60	55	55	80	80	80	75	75	75	90	90	90			
		IPT(fz)	.00004	.00004	.00004	.00004	.00005	.00004	.00004	.0001	.0001	.0001	.0000	.0000	.0000	.0001	.0001	.0001			
		RPM	21150	21150	19040	19040	20000	18000	18000	20000	20000	20000	18000	18000	18000	17100	17100	17100			
		IPM(FEED)	2	2	1	1	2	2	2	2	2	2	2	2	2	2	2	2	2		



SFM = Surface Feet per Minute
 RPM = Revolutions Per Minute
 IPT = Inches Per Tooth
 IPM = Inches Per Minute
 Ap : mm (Axial Depth of Cut)
 Ae : Inch (Radial Depth of Cut)

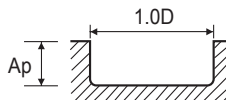


RECOMMENDED CUTTING CONDITIONS

SEME61 SERIES 2FLUTE CORNER RADIUS - **SLOTTING**

ISO	VDI 3323	Parameter	Diameter (Ø)																		
			0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.8	0.8	
			LBS	2.5	3	4	5	6	2	3	4	6	8	10	2	4	6	8	10	2	3
P	1-8	SFM(Vc)	220	200	200	200	175	225	225	205	205	180	135	265	235	235	210	210	300	300	
		IPT(fz)	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001
		RPM	43000	38700	38700	38700	34400	36400	36400	32760	32760	29120	21840	36400	32760	32760	29120	29120	36400	36400	
		IPM(FEED)	9	7	7	7	6	10	10	8	8	6	4	10	8	8	6	6	10	10	
		Ap	.0028	.0016	.0016	.0010	.0010	.0033	.0033	.0019	.0012	.0007	.0005	.0055	.0022	.0014	.0014	.0008	.0063	.0044	
	9	SFM(Vc)	145	130	130	130	115	150	150	135	135	120	90	175	155	155	140	140	200	200	
		IPT(fz)	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	
		RPM	28000	25200	25200	25200	22400	24000	24000	21600	21600	19200	14400	24000	21600	21600	19200	19200	24000	24000	
		IPM(FEED)	3.7	3.0	3.0	3.0	2.4	4.3	4.3	3.5	3.5	2.8	1.8	4.3	3.5	3.5	2.8	2.8	4.3	4.3	
		Ap	.0021	.0012	.0012	.0007	.0007	.0025	.0025	.0014	.0009	.0006	.0004	.0041	.0017	.0010	.0010	.0006	.0047	.0033	
	10-11.1	SFM(Vc)	220	200	200	200	175	225	225	205	205	180	135	265	235	235	210	210	300	300	
		IPT(fz)	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	
		RPM	43000	38700	38700	38700	34400	36400	36400	32760	32760	29120	21840	36400	32760	32760	29120	29120	36400	36400	
		IPM(FEED)	9	7	7	7	6	10	10	8	8	6	4	10	8	8	6	6	10	10	
		Ap	.0028	.0016	.0016	.0010	.0010	.0033	.0033	.0019	.0012	.0007	.0005	.0055	.0022	.0014	.0014	.0008	.0063	.0044	
	11.2	SFM(Vc)	145	130	130	130	115	150	150	135	135	120	90	175	155	155	140	140	200	200	
		IPT(fz)	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	
		RPM	28000	25200	25200	25200	22400	24000	24000	21600	21600	19200	14400	24000	21600	21600	19200	19200	24000	24000	
		IPM(FEED)	3.7	3.0	3.0	3.0	2.4	4.3	4.3	3.5	3.5	2.8	1.8	4.3	3.5	3.5	2.8	2.8	4.3	4.3	
		Ap	.0021	.0012	.0012	.0007	.0007	.0025	.0025	.0014	.0009	.0006	.0004	.0041	.0017	.0010	.0010	.0006	.0047	.0033	
K	15-20	SFM(Vc)	220	200	200	200	175	225	225	205	205	180	135	265	235	235	210	210	300	300	
		IPT(fz)	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	
		RPM	43000	38700	38700	38700	34400	36400	36400	32760	32760	29120	21840	36400	32760	32760	29120	29120	36400	36400	
		IPM(FEED)	9	7	7	7	6	10	10	8	8	6	4	10	8	8	6	6	10	10	
		Ap	.0028	.0016	.0016	.0010	.0010	.0033	.0033	.0019	.0012	.0007	.0005	.0055	.0022	.0014	.0014	.0008	.0063	.0044	
H	38.1-38.2	SFM(Vc)	90	80	80	80	70	90	90	80	80	70	55	105	95	95	85	85	120	120	
		IPT(fz)	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	
		RPM	17100	15390	15390	15390	13680	14500	14500	13050	13050	11600	8700	14500	13050	13050	11600	11600	14500	14500	
		IPM(FEED)	2	2	2	2	2	3	3	2	2	2	1	3	2	2	2	2	3	3	
		Ap	.0017	.0009	.0009	.0006	.0006	.0020	.0020	.0011	.0007	.0004	.0003	.0033	.0013	.0008	.0008	.0005	.0038	.0026	
	40	SFM(Vc)	145	130	130	130	115	150	150	135	135	120	90	175	155	155	140	140	200	200	
		IPT(fz)	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	
		RPM	28000	25200	25200	25200	22400	24000	24000	21600	21600	19200	14400	24000	21600	21600	19200	19200	24000	24000	
		IPM(FEED)	3.7	3.0	3.0	3.0	2.4	4.3	4.3	3.5	3.5	2.8	1.8	4.3	3.5	3.5	2.8	2.8	4.3	4.3	
		Ap	.0021	.0012	.0012	.0007	.0007	.0025	.0025	.0014	.0009	.0006	.0004	.0041	.0017	.0010	.0010	.0006	.0047	.0033	
	41	SFM(Vc)	90	80	80	80	70	90	90	80	80	70	55	105	95	95	85	85	120	120	
		IPT(fz)	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	
		RPM	17100	15390	15390	15390	13680	14500	14500	13050	13050	11600	8700	14500	13050	13050	11600	11600	14500	14500	
		IPM(FEED)	2	2	2	2	2	3	3	2	2	2	1	3	2	2	2	2	3	3	
		Ap	.0017	.0009	.0009	.0006	.0006	.0020	.0020	.0011	.0007	.0004	.0003	.0033	.0013	.0008	.0008	.0005	.0038	.0026	

SFM = Surface Feet per Minute
 RPM = Revolutions Per Minute
 IPT = Inches Per Tooth
 IPM = Inches Per Minute
 Ap : mm (Axial Depth of Cut)
 Ae : Inch (Radial Depth of Cut)



HSS

CBN END MILLS

i-Xmill END MILLS

i-SMART MODULAR END MILLS

X5070 END MILLS

4G MILL END MILLS

X-POWER PRO END MILLS

TitaNox-POWER END MILLS

JET-POWER END MILLS

V7 PLUS A END MILLS

V7 MILL INOX

ALU-POWER HPC END MILLS

ALU-POWER END MILLS

D-POWER GRAPHITE END MILLS

STANDARD CARBIDE

ONLY ONE COATED PM60 END MILLS

SINE-POWER

TANK-POWER END MILLS

STANDARD COBALT & HSS

TECHNICAL DATA



4G MILL END MILLS

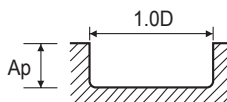
RECOMMENDED CUTTING CONDITIONS

SEME61 SERIES

2FLUTE CORNER RADIUS - SLOTTING

ISO	VDI 3323	Material Description	Parameter	Diameter (Ø)																	
				0.8		0.8		0.8		1.0		1.0		1.0		1.0		1.2		1.2	
				LBS	4	6	8	10	3	4	6	8	10	12	14	16	20	3	4	6	
P	1-8	Non-alloy steel	SFM(Vc)	300	270	270	240	340	340	305	305	305	275	275	205	205	370	370	370		
			IPT(fz)	.0001	.0001	.0001	.0001	.0002	.0002	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0002	.0002	.0002		
			RPM	36400	32760	32760	29120	33100	33100	29790	29790	29790	26480	26480	19860	19860	29750	29750	29750		
			IPM(FEED)	10	8	8	6	11	11	9	9	9	7	7	5	5	11	11	11		
	9	Low alloy steel	SFM(Vc)	200	180	180	160	225	225	200	200	200	180	180	135	135	235	235	235		
			IPT(fz)	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001		
			RPM	24000	21600	21600	19200	21600	21600	19440	19440	19440	17280	17280	12960	12960	18900	18900	18900		
			IPM(FEED)	4.3	3.5	3.5	2.8	4.7	4.7	3.7	3.7	3.7	3.0	3.0	2.0	2.0	4.9	4.9	4.9		
	10-11.1	High alloyed steel, and tool steel	SFM(Vc)	300	270	270	240	340	340	305	305	305	275	275	205	205	370	370	370		
			IPT(fz)	.0001	.0001	.0001	.0001	.0002	.0002	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0002	.0002	.0002		
			RPM	36400	32760	32760	29120	33100	33100	29790	29790	29790	26480	26480	19860	19860	29750	29750	29750		
			IPM(FEED)	10	8	8	6	11	11	9	9	9	7	7	5	5	11	11	11		
11.2	High alloyed steel, and tool steel	SFM(Vc)	200	180	180	160	225	225	200	200	200	180	180	135	135	235	235	235			
		IPT(fz)	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001			
		RPM	24000	21600	21600	19200	21600	21600	19440	19440	19440	17280	17280	12960	12960	18900	18900	18900			
		IPM(FEED)	4.3	3.5	3.5	2.8	4.7	4.7	3.7	3.7	3.7	3.0	3.0	2.0	2.0	4.9	4.9	4.9			
K	15-20	Grey cast iron Nodular cast iron Malleable cast iron	SFM(Vc)	300	270	270	240	340	340	305	305	305	275	275	205	205	370	370	370		
			IPT(fz)	.0001	.0001	.0001	.0001	.0002	.0002	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0002	.0002	.0002		
			RPM	36400	32760	32760	29120	33100	33100	29790	29790	29790	26480	26480	19860	19860	29750	29750	29750		
			IPM(FEED)	10	8	8	6	11	11	9	9	9	7	7	5	5	11	11	11		
H	38.1-38.2	Hardened steel	SFM(Vc)	120	110	110	95	135	135	120	120	120	110	110	80	80	145	145	145		
			IPT(fz)	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001		
			RPM	14500	13050	13050	11600	13200	13200	11880	11880	11880	10560	10560	7920	7920	11700	11700	11700		
			IPM(FEED)	3	2	2	2	3	3	2	2	2	2	2	1	1	3	3	3		
	40	Chilled Cast Iron	SFM(Vc)	200	180	180	160	225	225	200	200	200	180	180	135	135	235	235	235		
			IPT(fz)	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001		
			RPM	24000	21600	21600	19200	21600	21600	19440	19440	19440	17280	17280	12960	12960	18900	18900	18900		
			IPM(FEED)	4.3	3.5	3.5	2.8	4.7	4.7	3.7	3.7	3.7	3.0	3.0	2.0	2.0	4.9	4.9	4.9		
	41	Hardened Cast Iron	SFM(Vc)	120	110	110	95	135	135	120	120	120	110	110	80	80	145	145	145		
			IPT(fz)	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001		
			RPM	14500	13050	13050	11600	13200	13200	11880	11880	11880	10560	10560	7920	7920	11700	11700	11700		
			IPM(FEED)	3	2	2	2	3	3	2	2	2	2	2	1	1	3	3	3		

SFM = Surface Feet per Minute
 RPM = Revolutions Per Minute
 IPT = Inches Per Tooth
 IPM = Inches Per Minute
 Ap : mm (Axial Depth of Cut)
 Ae : Inch (Radial Depth of Cut)



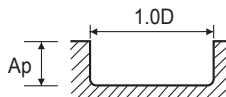
YG 4G MILL END MILLS

RECOMMENDED CUTTING CONDITIONS

SEME61 SERIES 2FLUTE CORNER RADIUS - SLOTTING

ISO	VDI 3323	Parameter	Diameter (Ø)																		
			1.2	1.2	1.2	1.2	1.2	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	2.0	2.0	2.0	
			LBS	8	10	12	16	20	4	6	8	10	12	14	16	20	22	26	6	8	10
P	1-8	SFM(Vc)	330	330	330	295	220	410	410	365	365	365	365	325	325	325	245	445	445	445	
		IPT(fz)	.0002	.0002	.0002	.0002	.0001	.0002	.0002	.0002	.0002	.0002	.0002	.0002	.0002	.0002	.0002	.0002	.0003	.0003	.0003
		RPM	26780	26780	26780	23800	17850	26400	26400	23760	23760	23760	23760	21120	21120	21120	15840	21600	21600	21600	
		IPM(FEED)	9	9	9	7	5	12	12	10	10	10	10	7	7	7	5	12	12	12	
		Ap	.0038	.0024	.0024	.0014	.0009	.0118	.0083	.0047	.0047	.0047	.0030	.0030	.0018	.0018	.0012	.0157	.0110	.0110	
	9	SFM(Vc)	210	210	210	185	140	250	250	225	225	225	225	200	200	200	150	285	285	285	
		IPT(fz)	.0001	.0001	.0001	.0001	.0001	.0002	.0002	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0002	.0002	.0002	
		RPM	17010	17010	17010	15120	11340	16200	16200	14580	14580	14580	14580	12960	12960	12960	9720	13800	13800	13800	
		IPM(FEED)	3.9	3.9	3.9	3.1	2.2	5.1	5.1	4.1	4.1	4.1	4.1	3.3	3.3	3.3	2.2	5.5	5.5	5.5	
		Ap	.0028	.0018	.0018	.0011	.0007	.0089	.0062	.0035	.0035	.0035	.0022	.0022	.0013	.0013	.0009	.0118	.0083	.0083	
	10-11.1	SFM(Vc)	330	330	330	295	220	410	410	365	365	365	365	325	325	325	245	445	445	445	
		IPT(fz)	.0002	.0002	.0002	.0002	.0001	.0002	.0002	.0002	.0002	.0002	.0002	.0002	.0002	.0002	.0002	.0003	.0003	.0003	
		RPM	26780	26780	26780	23800	17850	26400	26400	23760	23760	23760	23760	21120	21120	21120	15840	21600	21600	21600	
		IPM(FEED)	9	9	9	7	5	12	12	10	10	10	10	7	7	7	5	12	12	12	
		Ap	.0038	.0024	.0024	.0014	.0009	.0118	.0083	.0047	.0047	.0047	.0030	.0030	.0018	.0018	.0012	.0157	.0110	.0110	
	11.2	SFM(Vc)	210	210	210	185	140	250	250	225	225	225	225	200	200	200	150	285	285	285	
		IPT(fz)	.0001	.0001	.0001	.0001	.0001	.0002	.0002	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0002	.0002	.0002	
		RPM	17010	17010	17010	15120	11340	16200	16200	14580	14580	14580	14580	12960	12960	12960	9720	13800	13800	13800	
		IPM(FEED)	3.9	3.9	3.9	3.1	2.2	5.1	5.1	4.1	4.1	4.1	4.1	3.3	3.3	3.3	2.2	5.5	5.5	5.5	
		Ap	.0028	.0018	.0018	.0011	.0007	.0089	.0062	.0035	.0035	.0035	.0022	.0022	.0013	.0013	.0009	.0118	.0083	.0083	
K	15-20	SFM(Vc)	330	330	330	295	220	410	410	365	365	365	365	325	325	325	245	445	445	445	
		IPT(fz)	.0002	.0002	.0002	.0002	.0001	.0002	.0002	.0002	.0002	.0002	.0002	.0002	.0002	.0002	.0002	.0003	.0003	.0003	
		RPM	26780	26780	26780	23800	17850	26400	26400	23760	23760	23760	23760	21120	21120	21120	15840	21600	21600	21600	
		IPM(FEED)	9	9	9	7	5	12	12	10	10	10	10	7	7	7	5	12	12	12	
		Ap	.0038	.0024	.0024	.0014	.0009	.0118	.0083	.0047	.0047	.0047	.0030	.0030	.0018	.0018	.0012	.0157	.0110	.0110	
H	38.1-38.2	SFM(Vc)	130	130	130	115	85	160	160	140	140	140	140	125	125	125	95	180	180	180	
		IPT(fz)	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0002	.0002	.0002
		RPM	10530	10530	10530	9360	7020	10200	10200	9180	9180	9180	9180	8160	8160	8160	6120	8640	8640	8640	
		IPM(FEED)	2	2	2	2	1	3	3	2	2	2	2	2	2	2	1	3	3	3	
		Ap	.0023	.0014	.0014	.0009	.0006	.0071	.0050	.0028	.0028	.0028	.0018	.0018	.0011	.0011	.0007	.0094	.0066	.0066	
	40	SFM(Vc)	210	210	210	185	140	250	250	225	225	225	225	200	200	200	150	285	285	285	
		IPT(fz)	.0001	.0001	.0001	.0001	.0001	.0002	.0002	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0002	.0002	.0002	
		RPM	17010	17010	17010	15120	11340	16200	16200	14580	14580	14580	14580	12960	12960	12960	9720	13800	13800	13800	
		IPM(FEED)	3.9	3.9	3.9	3.1	2.2	5.1	5.1	4.1	4.1	4.1	4.1	3.3	3.3	3.3	2.2	5.5	5.5	5.5	
		Ap	.0028	.0018	.0018	.0011	.0007	.0089	.0062	.0035	.0035	.0035	.0022	.0022	.0013	.0013	.0009	.0118	.0083	.0083	
	41	SFM(Vc)	130	130	130	115	85	160	160	140	140	140	140	125	125	125	95	180	180	180	
		IPT(fz)	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0001	.0002	.0002	.0002
		RPM	10530	10530	10530	9360	7020	10200	10200	9180	9180	9180	9180	8160	8160	8160	6120	8640	8640	8640	
		IPM(FEED)	2	2	2	2	1	3	3	2	2	2	2	2	2	2	1	3	3	3	
		Ap	.0023	.0014	.0014	.0009	.0006	.0071	.0050	.0028	.0028	.0028	.0018	.0018	.0011	.0011	.0007	.0094	.0066	.0066	

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 Ap : mm (Axial Depth of Cut)
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HSS

CBN END MILLS

i-Xmill END MILLS

i-SMART MODULAR END MILLS

X5070 END MILLS

4G MILL END MILLS

X-POWER PRO END MILLS

TitaNox-POWER END MILLS

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V7 PLUS A END MILLS

V7 MILL INOX

ALU-POWER HPC END MILLS

ALU-POWER END MILLS

D-POWER GRAPHITE END MILLS

STANDARD CARBIDE

ONLY ONE COATED PM60 END MILLS

SINE-POWER

TANK-POWER END MILLS

STANDARD COBALT & HSS

TECHNICAL DATA



4G MILL END MILLS

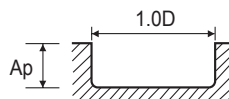
RECOMMENDED CUTTING CONDITIONS

SEME61 SERIES

2FLUTE CORNER RADIUS - SLOTTING

ISO	VDI 3323	Material Description	Parameter	Diameter (Ø)																
				2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.5	2.5	2.5	2.5	2.5	2.5	2.5	3.0	
				LBS	12	14	16	20	22	26	30	8	10	12	14	16	20	26	30	8
P	1-8	Non-alloy steel	SFM(Vc)	400	400	400	400	355	355	355	465	465	465	415	415	415	370	370	490	
			IPT(fz)	.0003	.0003	.0003	.0003	.0002	.0002	.0002	.0004	.0004	.0004	.0003	.0003	.0003	.0003	.0003	.0004	
			RPM	19440	19440	19440	19440	17280	17280	17280	18000	18000	18000	16200	16200	16200	14400	14400	15900	
			IPM(FEED)	10	10	10	10	8	8	8	13	13	13	10	10	10	8	8	13	
			Ap	.0063	.0063	.0063	.0039	.0039	.0039	.0024	.0138	.0138	.0138	.0079	.0079	.0079	.0049	.0049	.0236	
			SFM(Vc)	255	255	255	255	230	230	230	295	295	295	265	265	265	235	235	320	
	9	Low alloy steel	IPT(fz)	.0002	.0002	.0002	.0002	.0002	.0002	.0002	.0003	.0003	.0003	.0002	.0002	.0002	.0002	.0002	.0003	
			RPM	12420	12420	12420	12420	11040	11040	11040	11400	11400	11400	10260	10260	10260	9120	9120	10300	
			IPM(FEED)	4.5	4.5	4.5	4.5	3.5	3.5	3.5	5.9	5.9	5.9	4.7	4.7	4.7	3.7	3.7	6.3	
			Ap	.0047	.0047	.0047	.0030	.0030	.0030	.0018	.0104	.0104	.0104	.0059	.0059	.0059	.0037	.0037	.0177	
			SFM(Vc)	400	400	400	400	355	355	355	465	465	465	415	415	415	370	370	490	
			IPT(fz)	.0003	.0003	.0003	.0003	.0002	.0002	.0002	.0004	.0004	.0004	.0003	.0003	.0003	.0003	.0003	.0003	.0004
10-11.1	High alloyed steel, and tool steel	RPM	19440	19440	19440	19440	17280	17280	17280	18000	18000	18000	16200	16200	16200	14400	14400	15900		
		IPM(FEED)	10	10	10	10	8	8	8	13	13	13	10	10	10	8	8	13		
		Ap	.0063	.0063	.0063	.0039	.0039	.0039	.0024	.0138	.0138	.0138	.0079	.0079	.0079	.0049	.0049	.0236		
		SFM(Vc)	255	255	255	255	230	230	230	295	295	295	265	265	265	235	235	320		
		IPT(fz)	.0002	.0002	.0002	.0002	.0002	.0002	.0002	.0003	.0003	.0003	.0002	.0002	.0002	.0002	.0002	.0002	.0003	
		RPM	12420	12420	12420	12420	11040	11040	11040	11400	11400	11400	10260	10260	10260	9120	9120	10300		
11.2	High alloyed steel, and tool steel	IPM(FEED)	4.5	4.5	4.5	4.5	3.5	3.5	3.5	5.9	5.9	5.9	4.7	4.7	4.7	3.7	3.7	6.3		
		Ap	.0047	.0047	.0047	.0030	.0030	.0030	.0018	.0104	.0104	.0104	.0059	.0059	.0059	.0037	.0037	.0177		
		SFM(Vc)	400	400	400	400	355	355	355	465	465	465	415	415	415	370	370	490		
		IPT(fz)	.0003	.0003	.0003	.0003	.0002	.0002	.0002	.0004	.0004	.0004	.0003	.0003	.0003	.0003	.0003	.0003	.0004	
		RPM	19440	19440	19440	19440	17280	17280	17280	18000	18000	18000	16200	16200	16200	14400	14400	15900		
		IPM(FEED)	10	10	10	10	8	8	8	13	13	13	10	10	10	8	8	13		
K	15-20	Grey cast iron Nodular cast iron Malleable cast iron	SFM(Vc)	400	400	400	400	355	355	355	465	465	465	415	415	415	370	370	490	
			IPT(fz)	.0003	.0003	.0003	.0003	.0002	.0002	.0002	.0004	.0004	.0004	.0003	.0003	.0003	.0003	.0003	.0004	
			RPM	19440	19440	19440	19440	17280	17280	17280	18000	18000	18000	16200	16200	16200	14400	14400	15900	
			IPM(FEED)	10	10	10	10	8	8	8	13	13	13	10	10	10	8	8	13	
			Ap	.0063	.0063	.0063	.0039	.0039	.0039	.0024	.0138	.0138	.0138	.0079	.0079	.0079	.0049	.0049	.0236	
			SFM(Vc)	160	160	160	160	140	140	140	190	190	190	170	170	170	150	150	195	
H	38.1-38.2	Hardened steel	IPT(fz)	.0002	.0002	.0002	.0002	.0001	.0001	.0001	.0002	.0002	.0002	.0002	.0002	.0002	.0002	.0002	.0002	
			RPM	7780	7780	7780	7780	6910	6910	6910	7320	7320	7320	6590	6590	6590	5860	5860	6300	
			IPM(FEED)	3	3	3	3	2	2	2	3	3	3	3	3	3	2	2	3	
			Ap	.0038	.0038	.0038	.0024	.0024	.0024	.0014	.0083	.0083	.0083	.0047	.0047	.0047	.0030	.0030	.0142	
			SFM(Vc)	255	255	255	255	230	230	230	295	295	295	265	265	265	235	235	320	
			IPT(fz)	.0002	.0002	.0002	.0002	.0002	.0002	.0002	.0003	.0003	.0003	.0002	.0002	.0002	.0002	.0002	.0002	.0003
	40	Chilled Cast Iron	RPM	12420	12420	12420	12420	11040	11040	11040	11400	11400	11400	10260	10260	10260	9120	9120	10300	
			IPM(FEED)	4.5	4.5	4.5	4.5	3.5	3.5	3.5	5.9	5.9	5.9	4.7	4.7	4.7	3.7	3.7	6.3	
			Ap	.0047	.0047	.0047	.0030	.0030	.0030	.0018	.0104	.0104	.0104	.0059	.0059	.0059	.0037	.0037	.0177	
			SFM(Vc)	160	160	160	160	140	140	140	190	190	190	170	170	170	150	150	195	
			IPT(fz)	.0002	.0002	.0002	.0002	.0001	.0001	.0001	.0002	.0002	.0002	.0002	.0002	.0002	.0002	.0002	.0002	.0002
			RPM	7780	7780	7780	7780	6910	6910	6910	7320	7320	7320	6590	6590	6590	5860	5860	6300	
41	Hardened Cast Iron	IPM(FEED)	3	3	3	3	2	2	2	3	3	3	3	3	2	2	3			
		Ap	.0038	.0038	.0038	.0024	.0024	.0024	.0014	.0083	.0083	.0083	.0047	.0047	.0047	.0030	.0030	.0142		
		SFM(Vc)	160	160	160	160	140	140	140	190	190	190	170	170	170	150	150	195		
		IPT(fz)	.0002	.0002	.0002	.0002	.0001	.0001	.0001	.0002	.0002	.0002	.0002	.0002	.0002	.0002	.0002	.0002	.0002	
		RPM	7780	7780	7780	7780	6910	6910	6910	7320	7320	7320	6590	6590	6590	5860	5860	6300		
		IPM(FEED)	3	3	3	3	2	2	2	3	3	3	3	3	3	2	2	3		

SFM = Surface Feet per Minute
 RPM = Revolutions Per Minute
 IPT = Inches Per Tooth
 IPM = Inches Per Minute
 Ap : mm (Axial Depth of Cut)
 Ae : Inch (Radial Depth of Cut)



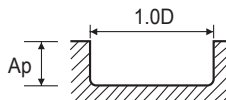
YG 4G MILL END MILLS

RECOMMENDED CUTTING CONDITIONS

SEME61 SERIES 2FLUTE CORNER RADIUS - SLOTTING

ISO	VDI 3323	Parameter	Diameter (Ø)																		
			3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
			LBS	10	12	14	16	20	26	30	35	40	10	12	14	16	20	26	30	35	40
P	1-8	SFM(Vc)	490	490	490	440	440	440	440	395	395	530	530	530	530	530	475	475	475	475	
		IPT(fz)	.0004	.0004	.0004	.0004	.0004	.0004	.0004	.0004	.0003	.0003	.0006	.0006	.0006	.0006	.0006	.0006	.0006	.0006	.0006
		RPM	15900	15900	15900	14310	14310	14310	14310	12720	12720	12800	12800	12800	12800	12800	11520	11520	11520	11520	11520
		IPM(FEED)	13	13	13	10	10	10	10	8	8	16	16	16	16	16	13	13	13	13	13
		Ap	.0165	.0165	.0165	.0094	.0094	.0059	.0059	.0059	.0035	.0315	.0315	.0315	.0220	.0220	.0220	.0126	.0126	.0079	.0079
	9	SFM(Vc)	320	320	320	285	285	285	285	255	255	340	340	340	340	340	305	305	305	305	
		IPT(fz)	.0003	.0003	.0003	.0003	.0003	.0003	.0003	.0002	.0002	.0005	.0005	.0005	.0005	.0005	.0004	.0004	.0004	.0004	
		RPM	10300	10300	10300	9270	9270	9270	9270	8240	8240	8200	8200	8200	8200	8200	7380	7380	7380	7380	
		IPM(FEED)	6.3	6.3	6.3	5.1	5.1	5.1	5.1	3.9	3.9	7.9	7.9	7.9	7.9	7.9	6.3	6.3	6.3	6.3	
		Ap	.0124	.0124	.0124	.0071	.0071	.0044	.0044	.0044	.0027	.0236	.0236	.0236	.0165	.0165	.0165	.0094	.0094	.0059	.0059
	10-11.1	SFM(Vc)	490	490	490	440	440	440	440	395	395	530	530	530	530	530	475	475	475	475	
		IPT(fz)	.0004	.0004	.0004	.0004	.0004	.0004	.0004	.0003	.0003	.0006	.0006	.0006	.0006	.0006	.0006	.0006	.0006	.0006	
		RPM	15900	15900	15900	14310	14310	14310	14310	12720	12720	12800	12800	12800	12800	12800	11520	11520	11520	11520	
		IPM(FEED)	13	13	13	10	10	10	10	8	8	16	16	16	16	16	13	13	13	13	
		Ap	.0165	.0165	.0165	.0094	.0094	.0059	.0059	.0059	.0035	.0315	.0315	.0315	.0220	.0220	.0220	.0126	.0126	.0079	.0079
	11.2	SFM(Vc)	320	320	320	285	285	285	285	255	255	340	340	340	340	340	305	305	305	305	
		IPT(fz)	.0003	.0003	.0003	.0003	.0003	.0003	.0003	.0002	.0002	.0005	.0005	.0005	.0005	.0005	.0004	.0004	.0004	.0004	
		RPM	10300	10300	10300	9270	9270	9270	9270	8240	8240	8200	8200	8200	8200	8200	7380	7380	7380	7380	
		IPM(FEED)	6.3	6.3	6.3	5.1	5.1	5.1	5.1	3.9	3.9	7.9	7.9	7.9	7.9	7.9	6.3	6.3	6.3	6.3	
		Ap	.0124	.0124	.0124	.0071	.0071	.0044	.0044	.0044	.0027	.0236	.0236	.0236	.0165	.0165	.0165	.0094	.0094	.0059	.0059
K	15-20	SFM(Vc)	490	490	490	440	440	440	440	395	395	530	530	530	530	530	475	475	475	475	
		IPT(fz)	.0004	.0004	.0004	.0004	.0004	.0004	.0004	.0003	.0003	.0006	.0006	.0006	.0006	.0006	.0006	.0006	.0006	.0006	
		RPM	15900	15900	15900	14310	14310	14310	14310	12720	12720	12800	12800	12800	12800	12800	11520	11520	11520	11520	
		IPM(FEED)	13	13	13	10	10	10	10	8	8	16	16	16	16	16	13	13	13	13	
		Ap	.0165	.0165	.0165	.0094	.0094	.0059	.0059	.0059	.0035	.0315	.0315	.0315	.0220	.0220	.0220	.0126	.0126	.0079	.0079
H	38.1-38.2	SFM(Vc)	195	195	195	175	175	175	175	155	155	210	210	210	210	210	190	190	190	190	
		IPT(fz)	.0002	.0002	.0002	.0002	.0002	.0002	.0002	.0002	.0002	.0004	.0004	.0004	.0004	.0004	.0003	.0003	.0003	.0003	
		RPM	6300	6300	6300	5670	5670	5670	5670	5040	5040	5150	5150	5150	5150	5150	4640	4640	4640	4640	
		IPM(FEED)	3	3	3	3	3	3	3	2	2	4	4	4	4	4	3	3	3	3	
		Ap	.0099	.0099	.0099	.0057	.0057	.0035	.0035	.0035	.0021	.0189	.0189	.0189	.0132	.0132	.0132	.0076	.0076	.0047	.0047
	40	SFM(Vc)	320	320	320	285	285	285	285	255	255	340	340	340	340	340	305	305	305	305	
		IPT(fz)	.0003	.0003	.0003	.0003	.0003	.0003	.0003	.0002	.0002	.0005	.0005	.0005	.0005	.0005	.0004	.0004	.0004	.0004	
		RPM	10300	10300	10300	9270	9270	9270	9270	8240	8240	8200	8200	8200	8200	8200	7380	7380	7380	7380	
		IPM(FEED)	6.3	6.3	6.3	5.1	5.1	5.1	5.1	3.9	3.9	7.9	7.9	7.9	7.9	7.9	6.3	6.3	6.3	6.3	
		Ap	.0124	.0124	.0124	.0071	.0071	.0044	.0044	.0044	.0027	.0236	.0236	.0236	.0165	.0165	.0165	.0094	.0094	.0059	.0059
	41	SFM(Vc)	195	195	195	175	175	175	175	155	155	210	210	210	210	210	190	190	190	190	
		IPT(fz)	.0002	.0002	.0002	.0002	.0002	.0002	.0002	.0002	.0002	.0004	.0004	.0004	.0004	.0004	.0003	.0003	.0003	.0003	
		RPM	6300	6300	6300	5670	5670	5670	5670	5040	5040	5150	5150	5150	5150	5150	4640	4640	4640	4640	
		IPM(FEED)	3	3	3	3	3	3	3	2	2	4	4	4	4	4	3	3	3	3	
		Ap	.0099	.0099	.0099	.0057	.0057	.0035	.0035	.0035	.0021	.0189	.0189	.0189	.0132	.0132	.0132	.0076	.0076	.0047	.0047

SFM = Surface Feet per Minute
 RPM = Revolutions Per Minute
 IPT = Inches Per Tooth
 IPM = Inches Per Minute
 Ap : mm (Axial Depth of Cut)
 Ae : Inch (Radial Depth of Cut)



HSS

CBN END MILLS

i-Xmill END MILLS

i-SMART MODULAR END MILLS

X5070 END MILLS

4G MILL END MILLS

X-POWER PRO END MILLS

TitaNox-POWER END MILLS

JET-POWER END MILLS

V7 PLUS A END MILLS

V7 MILL INOX

ALU-POWER HPC END MILLS

ALU-POWER END MILLS

D-POWER GRAPHITE END MILLS

STANDARD CARBIDE

ONLY ONE COATED PM60 END MILLS

SINE-POWER

TANK-POWER END MILLS

STANDARD COBALT & HSS

TECHNICAL DATA



4G MILL END MILLS

RECOMMENDED CUTTING CONDITIONS

SEME61 SERIES

2FLUTE CORNER RADIUS - SLOTTING

ISO	VDI 3323	Material Description	Parameter	Diameter (Ø)																
				4.0	4.0	5.0	6.0	6.0	8.0	8.0	10.0	10.0	12.0	12.0	16.0	16.0	20.0	20.0		
				LBS	45	50	15	20	30	25	35	30	40	32	45	35	50	40	55	
P	1-8	Non-alloy steel	SFM(Vc)	420	420	565	585	585	595	595	620	620	620	620	615	615	620	620		
			IPT(fz)	.0005	.0005	.0009	.0012	.0012	.0017	.0017	.0021	.0021	.0020	.0020	.0024	.0024	.0022	.0022		
			RPM	10240	10240	11000	9500	9500	7200	7200	6000	6000	5000	5000	3720	3720	3000	3000		
			IPM(FEED)	10	10	20	24	24	25	25	25	25	20	20	18	18	13	13		
			Ap	.0079	.0079	.0394	.0331	.0331	.0441	.0441	.0787	.0551	.0945	.0661	.1260	.0882	.1575	.1575		
			SFM(Vc)	270	270	360	370	370	375	375	410	410	415	415	415	415	400	400		
	9	Low alloy steel	IPT(fz)	.0004	.0004	.0007	.0010	.0010	.0013	.0013	.0015	.0015	.0016	.0016	.0016	.0016	.0014	.0014		
			RPM	6560	6560	7000	6000	6000	4550	4550	4000	4000	3340	3340	2520	2520	1950	1950		
			IPM(FEED)	5.1	5.1	9.4	11.8	11.8	11.8	11.8	11.8	11.8	10.6	10.6	8.3	8.3	5.5	5.5		
			Ap	.0059	.0059	.0295	.0248	.0248	.0331	.0331	.0591	.0413	.0709	.0496	.0945	.0661	.1181	.1181		
			10-11.1	High alloyed steel, and tool steel	SFM(Vc)	420	420	565	585	585	595	595	620	620	620	620	615	615	620	620
					IPT(fz)	.0005	.0005	.0009	.0012	.0012	.0017	.0017	.0021	.0021	.0020	.0020	.0024	.0024	.0022	.0022
RPM	10240	10240			11000	9500	9500	7200	7200	6000	6000	5000	5000	3720	3720	3000	3000			
IPM(FEED)	10	10			20	24	24	25	25	25	25	20	20	18	18	13	13			
Ap	.0079	.0079			.0394	.0331	.0331	.0441	.0441	.0787	.0551	.0945	.0661	.1260	.0882	.1575	.1575			
SFM(Vc)	270	270			360	370	370	375	375	410	410	415	415	415	415	400	400			
11.2	High alloyed steel, and tool steel	IPT(fz)	.0004	.0004	.0007	.0010	.0010	.0013	.0013	.0015	.0015	.0016	.0016	.0016	.0016	.0014	.0014			
		RPM	6560	6560	7000	6000	6000	4550	4550	4000	4000	3340	3340	2520	2520	1950	1950			
		IPM(FEED)	5.1	5.1	9.4	11.8	11.8	11.8	11.8	11.8	11.8	10.6	10.6	8.3	8.3	5.5	5.5			
		Ap	.0059	.0059	.0295	.0248	.0248	.0331	.0331	.0591	.0413	.0709	.0496	.0945	.0661	.1181	.1181			
		K	15-20	Grey cast iron Nodular cast iron Malleable cast iron	SFM(Vc)	420	420	565	585	585	595	595	620	620	620	620	615	615	620	620
					IPT(fz)	.0005	.0005	.0009	.0012	.0012	.0017	.0017	.0021	.0021	.0020	.0020	.0024	.0024	.0022	.0022
RPM	10240				10240	11000	9500	9500	7200	7200	6000	6000	5000	5000	3720	3720	3000	3000		
IPM(FEED)	10				10	20	24	24	25	25	25	25	20	20	18	18	13	13		
Ap	.0079				.0079	.0394	.0331	.0331	.0441	.0441	.0787	.0551	.0945	.0661	.1260	.0882	.1575	.1575		
SFM(Vc)	170				170	235	245	245	250	250	250	250	245	245	255	255	245	245		
H	38.1-38.2	Hardened steel	IPT(fz)	.0003	.0003	.0005	.0007	.0007	.0009	.0009	.0011	.0011	.0012	.0012	.0012	.0011	.0011			
			RPM	4120	4120	4560	3930	3930	3020	3020	2420	2420	2000	2000	1540	1540	1200	1200		
			IPM(FEED)	2	2	5	6	6	6	6	6	6	5	5	4	4	3	3		
			Ap	.0047	.0047	.0236	.0198	.0198	.0265	.0265	.0472	.0331	.0567	.0397	.0756	.0529	.0945	.0945		
			40	Chilled Cast Iron	SFM(Vc)	270	270	360	370	370	375	375	410	410	415	415	415	415	400	400
					IPT(fz)	.0004	.0004	.0007	.0010	.0010	.0013	.0013	.0015	.0015	.0016	.0016	.0016	.0016	.0014	.0014
	RPM	6560			6560	7000	6000	6000	4550	4550	4000	4000	3340	3340	2520	2520	1950	1950		
	IPM(FEED)	5.1			5.1	9.4	11.8	11.8	11.8	11.8	11.8	11.8	10.6	10.6	8.3	8.3	5.5	5.5		
	Ap	.0059			.0059	.0295	.0248	.0248	.0331	.0331	.0591	.0413	.0709	.0496	.0945	.0661	.1181	.1181		
	SFM(Vc)	170			170	235	245	245	250	250	250	250	245	245	255	255	245	245		
	41	Hardened Cast Iron	IPT(fz)	.0003	.0003	.0005	.0007	.0007	.0009	.0009	.0011	.0011	.0012	.0012	.0012	.0011	.0011			
			RPM	4120	4120	4560	3930	3930	3020	3020	2420	2420	2000	2000	1540	1540	1200	1200		
IPM(FEED)			2	2	5	6	6	6	6	6	6	5	5	4	4	3	3			
Ap			.0047	.0047	.0236	.0198	.0198	.0265	.0265	.0472	.0331	.0567	.0397	.0756	.0529	.0945	.0945			

SFM = Surface Feet per Minute
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 Ap : mm (Axial Depth of Cut)
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