SV7CB Recommended Starting Speeds and Feeds

Material Group		Side Milling (A)		Speed		Effective Feed per Tooth (IPT=inch/th) for side milling (A) (Use Chip Thinning Calculations to correct for stepover)					
						D - Diameter					
		A		A	frac.	1/4"	3/8"	1/2"	5/8"	3/4"	1"
		ap	ae	(SFM)	dec.	0.250	0.375	0.500	0.625	0.750	1.000
P	Unalloyed Steel (AISI 1000, 1100, 1200, 1500 Series)	Ap1 max	<0.25 x D	500	IPT	0.00099	0.00162	0.00279	0.00315	0.00378	0.00441
	Low-alloy Steel (AISI 3000, 4000, 5000, 6000, 8000, 9000 Series)	Ap1 max	<0.25 x D	400	IPT	0.00099	0.00162	0.00279	0.00315	0.00378	0.00441
	High-alloy Steel/Tool Steel (SAE Classes A, D, H, O, S, M, T)	Ap1 max	<0.25 x D	350	IPT	0.0009	0.0018	0.00234	0.00261	0.00306	0.00342
M	Austenitic (AISI 200 & 300 Series)	Ap1 max	<0.25 x D	300	IPT	0.00135	0.00171	0.00198	0.00234	0.00279	0.00306
	Marensitic (AISI 400 & 500 Series)	Ap1 max	<0.25 x D	350	IPT	0.00144	0.0018	0.00207	0.00252	0.00297	0.00324
	Precipitation (PH 15-7 Mo, 15-5 PH, 17-7 PH)	Ap1 max	<0.25 x D	300	IPT	0.0009	0.00189	0.00243	0.00288	0.00324	0.0036
K	Gray Iron GG	Ap1 max	<0.25 x D	450	IPT	0.00153	0.00225	0.0027	0.00315	0.00369	0.00432
	Nodular Iron GGG	Ap1 max	<0.25 x D	500	IPT	0.00153	0.00225	0.0027	0.00315	0.00369	0.00432
	Malleable Iron GTS/GTW	Ap1 max	<0.25 x D	600	IPT	0.00153	0.00225	0.0027	0.00315	0.00369	0.00432
S	HRSA Iron-Based (Incoloy 800/909, A286)	Ap1 max	<0.25 x D	100	IPT	0.00063	0.0009	0.00135	0.00171	0.00225	0.00297
	HRSA Cobalt-Based (Stelite, Haynes 21/25/188)	Ap1 max	<0.25 x D	80	IPT	0.00063	0.0009	0.00135	0.00171	0.00225	0.00297
	HRSA Nickel-Based (Inconel 601/617/625/700/706/718, Hastelloy, Monel, Nimonic, Rene, Udimet, Waspaloy)	Ap1 max	<0.25 x D	120	IPT	0.00063	0.0009	0.00135	0.00171	0.00225	0.00297
	Titanium (Pure, ASTM 1/2/3, Ti6AL-4V, Ti6Al-2Sn-4Zr-2Mo-SI)	Ap1 max	<0.25 x D	300	IPT	0.00072	0.00099	0.00207	0.00234	0.00279	0.00315
H	Hardened Steels and Hardened or Chilled Cast Irons (42-48HRc)	Ap1 max	<0.16 x D	180	IPT	0.0008	0.0012	0.0017	0.002	0.0022	0.0025

Note:

- Ap1 max = Full length of cut of the tool
- Lower cutting speed value is recommended for high stock removal applications or higher hardness within group.
- Higher cutting speed value is recommended for finishing applications or lower hardness within group.
- All values are recommended starting points based on ideal conditions. Adjust parameters accordingly for specific applications.
- Slotting is not recommend with this end mill.