WIDIA-Hanita™ General Purpose End Mills • Roughing/Finishing



■ Series I3S..S I3S..R • TiAIN • 3-Flute Square-End End Mills

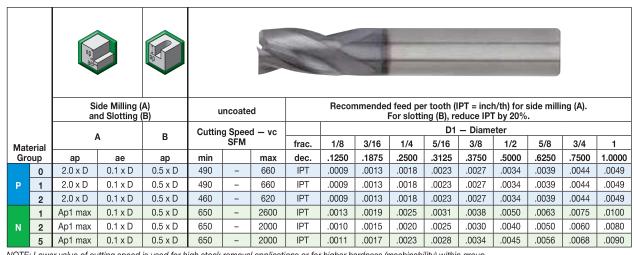
		ap																	
		Si ar									d per tooth (IPT = inch/th) for side milling (A). lotting (B), reduce IPT by 20%.								
		A		В	Cutting Speed — vc SFM			D1 — Diameter											
Material Group							frac.	1/8	3/16	1/4	5/16	3/8	1/2	5/8	3/4	1			
		ар	ae	ар	min		max	dec.	.1250	.1875	.2500	.3125	.3750	.5000	.6250	.7500	1.0000		
P	0	2.0 x D	0.1 x D	0.5 x D	490	-	660	IPT	.0009	.0013	.0018	.0023	.0027	.0034	.0039	.0044	.0049		
	1	2.0 x D	0.1 x D	0.5 x D	490	-	660	IPT	.0009	.0013	.0018	.0023	.0027	.0034	.0039	.0044	.0049		
	2	2.0 x D	0.1 x D	0.5 x D	460	-	620	IPT	.0009	.0013	.0018	.0023	.0027	.0034	.0039	.0044	.0049		
	3	2.0 x D	0.1 x D	0.5 x D	390	-	520	IPT	.0007	.0011	.0015	.0020	.0023	.0029	.0034	.0039	.0045		
	4	2.0 x D	0.1 x D	0.5 x D	300	-	490	IPT	.0007	.0010	.0014	.0017	.0020	.0026	.0030	.0034	.0039		
М	1	2.0 x D	0.1 x D	0.5 x D	300	-	380	IPT	.0007	.0011	.0015	.0020	.0023	.0029	.0034	.0039	.0045		
	2	2.0 x D	0.1 x D	0.5 x D	200	-	260	IPT	.0006	.0009	.0012	.0016	.0018	.0023	.0027	.0031	.0036		
	1	2.0 x D	0.1 x D	0.5 x D	390	-	490	IPT	.0009	.0013	.0018	.0023	.0027	.0034	.0039	.0044	.0049		
K	2	2.0 x D	0.1 x D	0.5 x D	360	_	460	IPT	.0007	.0011	.0015	.0020	.0023	.0029	.0034	.0039	.0045		

NOTE: Lower value of cutting speed is used for high stock removal applications or for higher hardness (machinability) within group.

Higher value of cutting speed is used for finishing applications or for lower hardness (machinability) within group.

Above parameters are based on ideal conditions. For smaller taper machining centers, please adjust parameters accordingly on diameters >1/2".

■ Series I3S..S I3S..R • Uncoated • 3-Flute Square-End End Mills



NOTE: Lower value of cutting speed is used for high stock removal applications or for higher hardness (machinability) within group.

Higher value of cutting speed is used for finishing applications or for lower hardness (machinability) within group.

Above parameters are based on ideal conditions. For smaller taper machining centers, please adjust parameters accordingly on diameters >1/2".



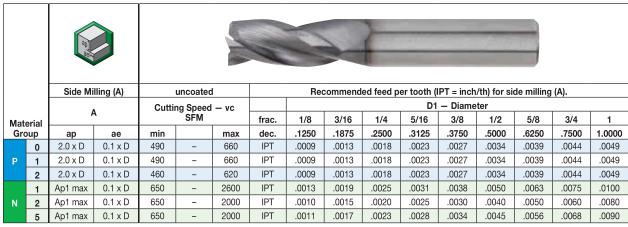
Application Data • Series I3S..L I3S..X • 3-Flute General Purpose End Mills

■ Series I3S..L I3S..X • TiAIN • 3-Flute Square-End End Mills

Material		Side Milling (A)			TiAIN Recommended feed per tooth (IPT = inch/th) for side milling (A).												
		Α		Cutting Speed - vc				D1 — Diameter									
				ŠĖM		frac.	1/8	3/16	1/4	5/16	3/8	1/2	5/8	3/4	1		
	oup	ар	ae	min		max	dec.	.1250	.1875	.2500	.3125	.3750	.5000	.6250	.7500	1.0000	
	0	2.0 x D	0.1 x D	490	-	660	IPT	.0009	.0013	.0018	.0023	.0027	.0034	.0039	.0044	.0049	
P	1	2.0 x D	0.1 x D	490	-	660	IPT	.0009	.0013	.0018	.0023	.0027	.0034	.0039	.0044	.0049	
	2	2.0 x D	0.1 x D	460	-	620	IPT	.0009	.0013	.0018	.0023	.0027	.0034	.0039	.0044	.0049	
	3	2.0 x D	0.1 x D	390	-	520	IPT	.0007	.0011	.0015	.0020	.0023	.0029	.0034	.0039	.0045	
	4	2.0 x D	0.1 x D	300	-	490	IPT	.0007	.0010	.0014	.0017	.0020	.0026	.0030	.0034	.0039	
	1	2.0 x D	0.1 x D	300	-	380	IPT	.0007	.0011	.0015	.0020	.0023	.0029	.0034	.0039	.0045	
M	2	2.0 x D	0.1 x D	200	-	260	IPT	.0006	.0009	.0012	.0016	.0018	.0023	.0027	.0031	.0036	
14	1	2.0 x D	0.1 x D	390	-	490	IPT	.0009	.0013	.0018	.0023	.0027	.0034	.0039	.0044	.0049	
K	2	2.0 x D	0.1 x D	360	-	460	IPT	.0007	.0011	.0015	.0020	.0023	.0029	.0034	.0039	.0045	

NOTE: Lower value of cutting speed is used for high stock removal applications or for higher hardness (machinability) within group.

■ Series I3S..L I3S..X • Uncoated • 3-Flute Square-End End Mills



NOTE: Lower value of cutting speed is used for high stock removal applications or for higher hardness (machinability) within group.

Higher value of cutting speed is used for finishing applications or for lower hardness (machinability) within group.

Above parameters are based on ideal conditions. For smaller taper machining centers, please adjust parameters accordingly on diameters >1/2".

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