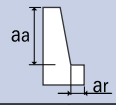
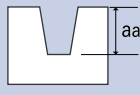


List 591: 1° Taper on Side - 3 Flute

Side Milling

Hardness	<145 Brinell		<20 HRC		20-30 HRC		30-40 HRC		40-50 HRC		-	
Work Material	Mild Steels Brass Bronze Cast Iron		Med. Carbon Steels Hard Brass and Bronze Mild Steel Forgings		High Carbon Steel Unalloyed Titanium Ferritic Low Alloys		High Carbon Steel Unalloyed Titanium Ferritic Low Alloys		Heat Resistant High Alloys Austenitic Alloys Nickel Base Alloys		Aluminum Aluminum Alloys	
Cutting Speed	80-120 SFM		60-80 SFM		45-60 SFM		25-45 SFM		16-32 SFM		150-400 SFM	
Depth of Cut	$a_a = 1.5D$ $a_r = 0.1D$ 											
Mill Dia.	Speed RPM	Feed in/min	Speed RPM	Feed in/min	Speed RPM	Feed in/min	Speed RPM	Feed in/min	Speed RPM	Feed in/min	Speed RPM	Feed in/min
5/64	4,890	6.9	3,425	4.8	2,570	3.6	1,710	2.4	1,175	1.6	13,445	19.0
3/32	4,075	5.7	2,850	4.0	2,140	3.0	1,425	1.9	980	1.2	11,200	15.8
1/8	3,055	7.2	2,140	5.1	1,600	3.8	1,070	2.6	735	1.6	8,400	19.9
3/16	2,040	6.7	1,425	4.7	1,070	3.4	715	2.3	490	1.5	5,600	18.5
1/4	1,530	5.5	1,070	3.8	800	2.7	535	2.0	365	1.2	4,200	14.9
3/8	1,020	9.6	715	6.4	535	4.9	355	3.4	245	2.2	2,800	26.4
1/2	765	8.2	535	5.9	400	4.3	270	3.0	185	1.9	2,100	23.6
5/8	610	7.3	430	5.1	320	3.9	215	2.6	145	1.6	1,680	20.8

Slotting

Hardness	<145 Brinell		<20 HRC		20-30 HRC		30-40 HRC		40-50 HRC		-	
Work Material	Mild Steels Brass Bronze Cast Iron		Med. Carbon Steels Hard Brass and Bronze Mild Steel Forgings		High Carbon Steel Unalloyed Titanium Ferritic Low Alloys		High Carbon Steel Unalloyed Titanium Ferritic Low Alloys		Heat Resistant High Alloys Austenitic Alloys Nickel Base Alloys		Aluminum Aluminum Alloys	
Cutting Speed	80-120 SFM		60-80 SFM		45-60 SFM		10 - 20 SFM		8-15 SFM		150-350 SFM	
Depth of Cut	$a_a = 1/3D$ 											
Mill Dia.	Speed RPM	Feed in/min	Speed RPM	Feed in/min	Speed RPM	Feed in/min	Speed RPM	Feed in/min	Speed RPM	Feed in/min	Speed RPM	Feed in/min
5/64	4,890	3.5	3,420	2.2	2,570	1.4	776	0.5	504	0.3	12,225	6.9
3/32	4,075	3.6	2,850	2.5	2,140	1.5	640	0.4	416	0.2	10,185	5.7
1/8	3,055	3.8	2,140	2.6	1,600	1.8	480	0.6	312	0.3	7,640	7.2
3/16	2,040	3.4	1,425	2.4	1,070	1.6	320	0.5	208	0.3	5,095	6.7
1/4	1,530	3.5	1,070	2.5	800	1.8	240	0.4	156	0.2	3,820	7.5
3/8	1,020	4.8	715	3.2	535	2.2	160	0.7	104	0.4	2,545	9.6
1/2	765	4.3	535	3.0	400	2.2	120	0.6	78	0.4	1,910	8.6
5/8	610	3.7	430	2.6	320	1.9	96	0.6	62	0.3	1,530	7.6