
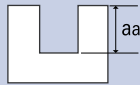
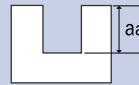


List 460: Multiple Flute - Fine Pitch (Continued)

Side Milling

Hardness	-		<20 HRC		20-30 HRC		30-40 HRC		40-50 HRC	
Work Material	Aluminum		Medium Carbon Steels Mild Steels		Pre-hardened Steels Stainless Steels Die & Alloy Steels		Pre-hardened Steels Stainless Steels Die & Alloy Steels		Hardened Steels	
Cutting Speed	390-460 SFM		130-164 SFM		100 SFM		66 SFM		50 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
1/4	6,900	21.7	2,400	10.6	1,600	6.7	1,060	3.0	800	1.2
5/16	5,200	21.7	1,800	10.6	1,200	6.7	800	3.0	600	1.2
3/8	4,200	23.6	1,400	13.4	950	6.7	640	3.0	480	1.2
1/2	3,500	23.6	1,200	14.2	800	7.1	530	3.0	400	1.2
5/8	2,600	23.6	900	15.7	600	7.1	400	3.0	300	1.2
3/4	2,100	23.6	720	16.1	480	7.9	320	3.0	240	1.2
1	1,700	23.6	580	13.8	380	7.1	250	3.0	190	1.2

Slotting

Hardness	<20 HRC		20-30 HRC		30-40 HRC		40-50 HRC							
Work Material	Medium Carbon Steels Mild Steels		Pre-hardened Steels Stainless Steels Die & Alloy Steels		Pre-hardened Steels Stainless Steels Die & Alloy Steels		Hardened Steels							
Cutting Speed	110-140 SFM		85 SFM		56 SFM		43 SFM							
Depth of Cut	<table border="1"> <thead> <tr> <th>Dia</th> <th>a_a</th> </tr> </thead> <tbody> <tr> <td>D ≤ 1/2</td> <td>1.0D</td> </tr> <tr> <td>1/2 < D</td> <td>0.5D</td> </tr> </tbody> </table> 				Dia	a _a	D ≤ 1/2	1.0D	1/2 < D	0.5D	$a_a = 0.5D$ 			
Dia	a _a													
D ≤ 1/2	1.0D													
1/2 < D	0.5D													
Mill Dia.	Speed RPM	Feed in/min	Speed RPM	Feed in/min	Speed RPM	Feed in/min	Speed RPM	Feed in/min						
1/4	2,040	7.9	1,360	4.7	900	2.0	680	0.8						
5/16	1,530	7.9	1,020	4.7	680	2.0	510	0.8						
3/8	1,190	9.1	810	4.7	540	2.0	410	0.8						
1/2	1,020	9.8	680	5.1	450	2.0	340	0.8						
5/8	760	10.6	510	5.1	340	2.0	260	0.8						
3/4	620	11.0	410	5.5	270	2.0	200	0.8						
1	500	9.4	320	5.1	210	2.0	160	0.8						