


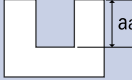


List 455: Multiple Flute - Fine Pitch - Center Hole

Side Milling

Hardness	<145 Brinell		<20 HRC		20-30 HRC		30-40 HRC		<45 HRC							
Work Material	Cast Iron Mild Steel Forgings Brass		Medium Carbon Steels Mild Steel Forgings		High Tensile Steels 4140, 4340 304 Stainless Steels Ti-Alloy		D2 H13 17-4PH		Heat Resistant Alloys Inconel 718 Heat Treated Materials							
Cutting Speed	150 SFM		120 SFM		90 SFM		65 SFM		50 SFM							
Depth of Cut	<table border="1"> <thead> <tr> <th>Dia</th> <th>aa</th> <th>ar</th> </tr> </thead> <tbody> <tr> <td>1/4 ≤ D ≤ 2</td> <td>1.5D</td> <td>0.5D</td> </tr> </tbody> </table> 										Dia	aa	ar	1/4 ≤ D ≤ 2	1.5D	0.5D
Dia	aa	ar														
1/4 ≤ D ≤ 2	1.5D	0.5D														
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	2,300	4.6	1,800	3.4	1,400	2.6	1,000	1.7	750	1.5						
5/16	1,800	5.7	1,500	4.7	1,100	3.4	800	2.5	600	1.6						
3/8	1,500	6.6	1,200	5.4	900	4.0	650	2.8	500	1.7						
1/2	1,150	6.3	950	5.1	700	3.6	500	2.6	400	1.5						
5/8	900	7.9	750	5.9	550	4.3	400	3.1	300	1.7						
3/4	750	8.7	600	6.6	450	5.0	350	3.9	250	1.9						
7/8	650	8.4	525	6.5	400	4.9	300	3.5	210	1.8						
1	575	8.4	450	5.6	350	4.3	250	3.1	190	1.7						
1-1/8	500	8.3	400	6.0	300	4.4	220	3.2	160	1.7						
1-1/4	450	8.3	375	7.1	250	4.6	200	3.5	150	1.9						
1-1/2	375	7.1	300	5.5	200	3.7	160	2.5	120	1.5						
2	285	7.2	230	5.6	170	4.2	125	2.6	95	1.6						

Slotting

Hardness	<145 Brinell		<20 HRC		20-30 HRC		30-40 HRC		<45 HRC					
Work Material	Cast Iron Mild Steel Forgings Brass		Medium Carbon Steels Mild Steel Forgings		High Tensile Steels 4140, 4340 304 Stainless Steels Ti-Alloy		D2 H13 17-4PH		Heat Resistant Alloys Inconel 718 Heat Treated Materials					
Cutting Speed	150 SFM		120 SFM		90 SFM		65 SFM		50 SFM					
Depth of Cut	<table border="1"> <thead> <tr> <th>Dia</th> <th>aa</th> </tr> </thead> <tbody> <tr> <td>1/4 ≤ D ≤ 2</td> <td>0.8D</td> </tr> </tbody> </table> 										Dia	aa	1/4 ≤ D ≤ 2	0.8D
Dia	aa													
1/4 ≤ D ≤ 2	0.8D													
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	2,300	6.1	1,800	4.6	1,400	3.3	1,000	2.4	750	1.6				
5/16	1,800	8.4	1,500	5.9	1,100	3.9	800	2.8	600	1.7				
3/8	1,500	10.5	1,200	5.9	900	4.4	650	3.2	500	1.8				
1/2	1,150	9.6	950	5.5	700	4.1	500	2.9	400	1.7				
5/8	900	12.5	750	7.5	550	4.8	400	3.1	300	2.4				
3/4	750	13.9	600	7.2	450	4.4	350	3.6	250	2.7				
7/8	650	12.8	525	6.9	400	4.7	300	3.5	210	2.5				
1	575	12.0	450	6.6	350	4.4	250	3.3	190	2.1				
1-1/4	450	12.5	375	8.7	250	4.6	200	3.6	150	2.4				
1-1/2	400	10.7	300	7.8	225	4.2	160	3.1	120	1.9				
2	300	8.2	250	7.0	180	3.2	100	1.6	90	1.4				

