



List 4472: Regular Length, Corner Radius, High Feed

Standard Milling

Hardness	-		<40 HRC		40-45 HRC		45-55 HRC		55-60 HRC		60-65 HRC																												
Work Material	Cast Iron		Mild Steels Carbon Steels		Tool Steels Stainless Steel Hardened Steels Prehardened Steels		Hardened Steels																																
Depth of Cut	<table border="1"> <tr><th>CR</th><th>aa</th><th>ar</th></tr> <tr><td>CR≤1/16</td><td>0.2CR</td><td>0.5D</td></tr> <tr><td>1/16<CR</td><td>0.02"</td><td>0.5D</td></tr> </table>		CR	aa	ar	CR≤1/16	0.2CR	0.5D	1/16<CR	0.02"	0.5D			<table border="1"> <tr><th>CR</th><th>aa</th><th>ar</th></tr> <tr><td>CR≤1/16</td><td>0.1CR</td><td>0.5D</td></tr> <tr><td>1/16<CR</td><td>0.008"</td><td>0.5D</td></tr> </table>		CR	aa	ar	CR≤1/16	0.1CR	0.5D	1/16<CR	0.008"	0.5D	<table border="1"> <tr><th>CR</th><th>aa</th><th>ar</th></tr> <tr><td>CR≤1/16</td><td>0.2CR</td><td>0.5D</td></tr> <tr><td>1/16<CR</td><td>0.016"</td><td>0.5D</td></tr> </table>						CR	aa	ar	CR≤1/16	0.2CR	0.5D	1/16<CR	0.016"	0.5D
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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																											
1/8	10,080	255	7,950	175	7,030	150	5,040	100	3,060	40	2,690	28																											
3/16	6,720	265	5,300	190	4,690	165	3,360	110	2,040	42	1,790	30																											
1/4	5,040	275	3,970	200	3,510	175	2,520	115	1,530	45	1,340	32																											
5/16	4,030	275	3,180	200	2,810	175	2,020	115	1,220	45	1,080	32																											
3/8	3,360	275	2,650	200	2,340	175	1,680	115	1,020	45	900	32																											
1/2	2,520	275	1,990	200	1,760	175	1,260	115	760	45	670	32																											

1. Use a rigid and precise machine and holder.
2. These milling conditions are based on milling with circular interpolation at corners; for milling without circular interpolation (such as right angle cornering), reduce the speed to 50-70% and the cutting depth to 50-80% of the above conditions.
3. We recommend using air blow or MQL (mist).
4. Please adjust the speed, feed and cutting depth according to actual cutting conditions.
5. When entering into the part, reduce the feed to 30-60% of the above conditions, with a ramping angle < 2°.
6. These milling conditions are for a tool overhang less than 4xD; for longer overhangs, reduce the speed, feed and cutting depth to prevent chattering.

High Feed Milling

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1/8	19,860	490	19,860	470	14,970	330	14,970	305	10,080	125	9,780	90																											
3/16	13,240	500	13,240	470	9,980	355	13,240	325	6,720	140	6,520	100																											
1/4	9,930	545	9,930	500	7,490	375	9,930	340	5,040	150	4,890	150																											
5/16	7,950	545	7,950	500	5,990	375	7,950	340	4,030	150	3,910	150																											
3/8	6,620	545	6,620	500	4,990	375	6,620	340	3,360	150	3,260	150																											
1/2	4,970	545	4,970	500	3,740	375	4,970	340	2,520	150	2,440	150																											

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DRILLING

THREADING

MILLING

HOLDERS

INDEX

