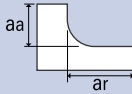
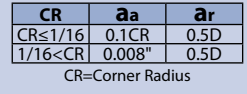




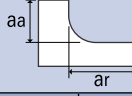
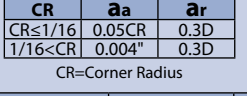
List 4470: Stub Length, Corner Radius, High Feed

Standard Milling

Hardness	<40 HRC			40 to 45 HRC		45-55 HRC		55-60 HRC		60-65 HRC		
Work Material	Mild Steels Carbon Steels Cast Iron			Tool Steels Hardened Steels Pre-hardened Steels		Hardened Steels						
Depth of Cut	CR	aa	ar		CR	aa	ar		CR	aa	ar	
	CR≤1/16 1/16<CR	0.2CR 0.02"	0.5D 0.5D		CR=Corner Radius	CR≤1/16 1/16<CR	0.2CR 0.016"		0.5D 0.5D	CR=Corner Radius	CR≤1/16 1/16<CR	0.1CR 0.008"
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	12,224	252	8,404	158	6,112	103	3,667	41	3,056	34		
3/16	8,149	252	5,603	158	4,075	103	2,445	41	2,037	34		
1/4	6,112	336	4,202	210	3,056	138	1,834	55	1,528	46		
5/16	4,890	336	3,362	210	2,445	138	1,467	55	1,222	46		
3/8	4,075	336	2,801	210	2,037	138	1,222	55	1,019	46		
1/2	3,056	336	2,101	210	1,528	138	917	55	764	46		

1. Use a rigid and precise machine and holder.
2. When chattering occurs, reduce the speed and feed simultaneously.
3. Use a suitable cutting fluid with high smoke retardant.

High Feed Milling

Hardness	<40 HRC			40-45 HRC		45-55 HRC		55-60 HRC		60-65 HRC		
Work Material	Mild Steels Carbon Steels Cast Iron			Tool Steels Hardened Steels Pre-hardened Steels		Hardened Steels						
Depth of Cut	aa=0.1CR ar=0.3D				CR	aa	ar		CR	aa	ar	
	CR=Corner Radius				CR≤1/16 1/16<CR	0.1CR 0.008"	0.3D 0.3D		CR=Corner Radius	CR≤1/16 1/16<CR	0.05CR 0.004"	0.3D 0.3D
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
1/8	23,990	495	18,030	338	16,808	284	11,918	134	9,168	103		
3/16	15,993	495	12,020	338	11,205	284	7,946	134	6,112	103		
1/4	11,995	660	9,015	451	8,404	378	5,959	179	4,584	138		
5/16	9,596	660	7,212	451	6,723	378	4,767	179	3,667	138		
3/8	7,997	660	6,010	451	5,603	378	3,973	179	3,056	138		
1/2	5,997	660	4,508	451	4,202	378	2,980	179	2,292	138		

1. The indicated speeds and feeds are for high speed light milling for use with high speed/high precision machining centers.
2. Do not use flammable fluids because tools with considerable wear can cause sparks.
3. We recommend using air blow. When using cutting fluids, use a high quality fluid with high smoke retardant.

