

ROTATING TOOLS

RECOMMENDED CUTTING CONDITIONS

Work Material	Hardness	Grade	Cutting Speed (m/min)	φ 16 - 17			φ 20 - 22			φ 25 - 28			
				Over- hang (mm)	Axial Depth of Cut (mm)	Feed per Tooth (mm/tooth)	Over- hang (mm)	Axial Depth of Cut (mm)	Feed per Tooth (mm/tooth)	Over- hang (mm)	Axial Depth of Cut (mm)	Feed per Tooth (mm/tooth)	
P	Mild Steel	FH7020	170 (120—220)	140	0.8	0.8	160	1.0	1.0	170	1.0	1.2	
				180	0.8	0.6	210	0.8	0.8	230	0.8	1.0	
				210	0.4	0.4	240	0.6	0.6	290	0.6	0.8	
		MP6120	150 (100—200)	140	0.8	0.8	160	1.0	1.0	170	1.0	1.2	
				180	0.8	0.6	210	0.8	0.8	230	0.8	1.0	
				210	0.4	0.4	240	0.6	0.6	290	0.6	0.8	
		FH6130	130 (80—180)	140	0.8	0.8	160	1.0	1.0	170	1.0	1.2	
				180	0.8	0.6	210	0.8	0.8	230	0.8	1.0	
				210	0.4	0.4	240	0.6	0.6	290	0.6	0.8	
		VP30RT	110 (60—160)	140	0.8	0.8	160	1.0	1.0	170	1.0	1.2	
				180	0.8	0.6	210	0.8	0.8	230	0.8	1.0	
				210	0.4	0.4	240	0.6	0.6	290	0.6	0.8	
	Carbon Steel Alloy Steel	FH7020	150 (100—200)	140	0.8	0.8	160	1.0	1.0	170	1.0	1.2	
				180	0.8	0.6	210	0.8	0.8	230	0.8	1.0	
				210	0.4	0.4	240	0.6	0.6	290	0.6	0.8	
		MP6120	130 (80—180)	140	0.8	0.8	160	1.0	1.0	170	1.0	1.2	
				180	0.8	0.6	210	0.8	0.8	230	0.8	1.0	
				210	0.4	0.4	240	0.6	0.6	290	0.6	0.8	
		FH6130	110 (60—160)	140	0.8	0.8	160	1.0	1.0	170	1.0	1.2	
				180	0.8	0.6	210	0.8	0.8	230	0.8	1.0	
				210	0.4	0.4	240	0.6	0.6	290	0.6	0.8	
		VP30RT	90 (40—140)	140	0.8	0.8	160	1.0	1.0	170	1.0	1.2	
				180	0.8	0.6	210	0.8	0.8	230	0.8	1.0	
				210	0.4	0.4	240	0.6	0.6	290	0.6	0.8	
	Carbon Steel Alloy Steel	FH7020	130 (80—180)	140	0.7	0.8	160	0.8	1.0	170	0.8	1.2	
				180	0.5	0.6	210	0.6	0.8	230	0.6	1.0	
				210	0.3	0.4	240	0.4	0.6	290	0.4	0.8	
		MP6120	100 (50—150)	140	0.7	0.8	160	0.8	1.0	170	0.8	1.2	
				180	0.5	0.6	210	0.6	0.8	230	0.6	1.0	
				210	0.3	0.4	240	0.4	0.6	290	0.4	0.8	
		FH6130	80 (30—130)	140	0.7	0.8	160	0.8	1.0	170	0.8	1.2	
				180	0.5	0.6	210	0.6	0.8	230	0.6	1.0	
				210	0.3	0.4	240	0.4	0.6	290	0.4	0.8	
		VP30RT	60 (20—110)	140	0.7	0.8	160	0.8	1.0	170	0.8	1.2	
				180	0.5	0.6	210	0.6	0.8	230	0.6	1.0	
				210	0.3	0.4	240	0.4	0.6	290	0.4	0.8	
	Alloy Tool Steel	FH7020	130 (80—180)	140	0.7	0.8	160	0.8	1.0	170	0.8	1.2	
				180	0.5	0.6	210	0.6	0.8	230	0.6	1.0	
				210	0.3	0.4	240	0.4	0.6	290	0.4	0.8	
		MP6120	100 (50—150)	140	0.7	0.8	160	0.8	1.0	170	0.8	1.2	
				180	0.5	0.6	210	0.6	0.8	230	0.6	1.0	
				210	0.3	0.4	240	0.4	0.6	290	0.4	0.8	
		FH6130	80 (30—120)	140	0.7	0.8	160	0.8	1.0	170	0.8	1.2	
				180	0.5	0.6	210	0.6	0.8	230	0.6	1.0	
				210	0.3	0.4	240	0.4	0.6	290	0.4	0.8	
		VP30RT	60 (20—90)	140	0.7	0.8	160	0.8	1.0	170	0.8	1.2	
				180	0.5	0.6	210	0.6	0.8	230	0.6	1.0	
				210	0.3	0.4	240	0.4	0.6	290	0.4	0.8	
	Pre-hardened Steel	MP6120	100 (70—130)	140	0.7	0.7	160	0.8	0.8	170	0.8	1.0	
				180	0.5	0.5	210	0.6	0.6	230	0.6	0.8	
				210	0.3	0.3	240	0.4	0.4	290	0.4	0.6	
		FH6130	80 (50—110)	140	0.7	0.7	160	0.8	0.8	170	0.8	1.0	
				180	0.5	0.5	210	0.6	0.6	230	0.6	0.8	
				210	0.3	0.3	240	0.4	0.4	290	0.4	0.6	
		VP30RT	80 (30—90)	140	0.7	0.7	160	0.8	0.8	170	0.8	1.0	
				180	0.5	0.5	210	0.6	0.6	230	0.6	0.8	
				210	0.3	0.3	240	0.4	0.4	290	0.4	0.6	