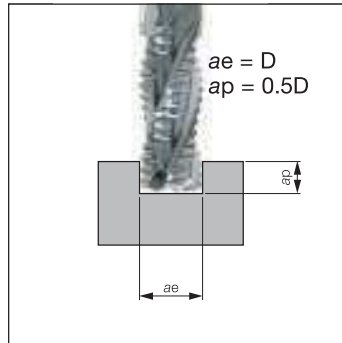


ISO	Material	Condition	Tensile Strength (N/mm ²)	Hardness HB	Cutting speed: Vc (m/min)			
					min	max		
P	Non-alloy steel and cast steel, free cutting steel	< 0.25 %C	Annealed	420	125	260	280	
		≥ 0.25 %C	Annealed	650	190	200	230	
		< 0.55 %C	Quenched and tempered	850	250	160	190	
		≥ 0.55 %C	Annealed	750	220	160	180	
		≥ 0.55 %C	Quenched and tempered	1000	300	140	160	
	Low alloy steel and cast steel (less than 5% all elements)		Annealed	600	200	160	190	
			Quenched and tempered	930	275	120	140	
			Quenched and tempered	1000	300	130	150	
High alloy steel, cast steel, and tool steel		Quenched and tempered	1200	350	140	160		
		Annealed	680	200	130	160		
		Quenched and tempered	1100	325	70	90		
M	Stainless steel and cast steel	Ferritic / martensitic		680	200	110	200	
		Martensitic		820	240	60	180	
		Austenitic		600	180	80	120	
K	Cast iron nodular (GGG)	Ferritic / pearlitic		-	180	80	260	
		Pearlitic		-	260	130	240	
	Grey cast iron (GG)	Ferritic		-	160	150	280	
		Pearlitic		-	250	90	280	
	Malleable cast iron	Ferritic		-	130	150	280	
		Pearlitic		-	230	140	240	
N	Aluminium-wrought alloy	Not cureable		-	60	810	840	
		Cured		-	100	730	830	
	Aluminium-cast, alloyed	≤ 12% Si	Not cureable		-	75	800	840
			Cured		-	90	730	830
	Copper alloys	> 12% Si	High temperature		-	130	320	340
		> 1% Pb	Free cutting		-	110	400	430
	Non-metallic	Brass		-	90	400	430	
		Electrolytic copper		-	100	270	300	
	Duroplastics, fiber plastics		-	-	-	-		
	Hard rubber		-	-	-	-		
S	High temp. alloys	Fe based	Annealed		-	200	20	40
		Fe based	Cured		-	280	20	30
		Ni or Co based	Annealed		-	250	20	30
		Ni or Co based	Cured		-	350	20	30
		Ni or Co based	Cast		-	320	30	70
	Titanium and Ti alloys			RM 400	-	30	70	
	Alpha + beta alloys cured		RM 1050	-	30	70		
H	Hardened steel	Hardened		-	55 HRC	30	50	
		Hardened		-	60 HRC	30	40	
	Chilled cast iron	Cast		-	400	60	80	
	Cast iron	Hardened		-	55 HRC	30	50	

Multi Function

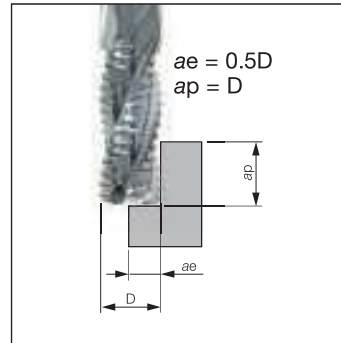
■ Recommended Feeds

Slotting



D (mm)	Min. fz	Max. fz
1	0.006	0.01
1.3	0.006	0.02
1.5	0.006	0.04
1.8	0.01	0.05
2	0.01	0.06
2.3	0.01	0.06
2.5	0.01	0.06
2.8	0.02	0.07
3	0.02	0.08
3.3	0.02	0.08
4	0.03	0.09
4.3	0.03	0.09
5	0.04	0.1
6	0.05	0.12
7	0.06	0.14
8	0.06	0.16
9	0.06	0.16
10	0.06	0.18
12	0.07	0.2
14	0.08	0.22
16	0.1	0.24
18	0.1	0.26
20	0.1	0.3
25	0.12	0.3

Shoulder milling



D (mm)	Min. fz	Max. fz
1	0.006	0.014
1.3	0.006	0.024
1.5	0.006	0.044
1.8	0.01	0.056
2	0.01	0.066
2.3	0.01	0.066
2.5	0.01	0.066
2.8	0.02	0.076
3	0.02	0.088
3.3	0.02	0.088
4	0.03	0.098
4.3	0.03	0.098
5	0.04	0.11
6	0.05	0.132
7	0.06	0.154
8	0.06	0.176
9	0.06	0.176
10	0.06	0.196
12	0.07	0.216
14	0.08	0.238
16	0.1	0.26
18	0.1	0.28
20	0.1	0.34
25	0.12	0.36

