

Recommended Cutting Data Parting & Grooving Tools

Width of insert (mm)	(f=mm/r) Feed				
	(MT) Grooving	(MT) Turning	(FG. OR) Grooving	(FG) Turning	(OR) Profiling
2	0.08 (0.05-0.15)	0.1 (0.05-0.2)			
2.5	0.08 (0.05-0.18)	0.1 (0.05-0.2)			
3	0.08 (0.05-0.18)	0.12 (0.05-0.25)	0.08 (0.05-0.15)	0.08 (0.05-0.15)	0.1 (0.05-0.25)
4	0.1 (0.05-0.2)	0.12 (0.05-0.25)	0.08 (0.05-0.15)	0.08 (0.05-0.2)	0.12 (0.08-0.4)
5	0.12 (0.08-0.2)	0.15 (0.05-0.3)	0.12 (0.05-0.2)	0.12 (0.05-0.25)	0.2 (0.08-0.5)
6	0.15 (0.08-0.25)	0.15 (0.05-0.3)	0.12 (0.05-0.2)	0.12 (0.05-0.25)	0.25 (0.08-0.6)
8	0.15 (0.08-0.25)	0.15 (0.05-0.4)			

Workpiece Material	Material Hardness (HB)	(V=m/min) Speed						
		A4230	A1225	C1115	S3115	S3125	S9125	
P	Low carbon steel	80 – 170	110 (70-180)	120 (80-220)		70 (50-100)	70 (50-100)	
	High Carbon steel	170 –250	110 (70-150)	120 (80-220)				
	Low alloy steel	140– 260	110 (40-150)	110 (60-180)		70 (50-100)	70 (50-100)	
	High alloy steel	180– 300	110 (40-150)	110 (60-180)				
	Cast steel	180– 300	110 (40-150)	110 (60-180)				
M	Ferritic/ Martensitic	150– 270	110 (40-180)			90 (50-150)	90 (30-180)	
	Austenitic	150– 270	110 (40-180)			90 (50-150)	90 (30-180)	
K	Malleable Cast Iron	150– 230	110 (50-180)		130 (50-200)			
	Gray Cast Iron	150– 230	110 (50-180)		130 (50-200)			
	Nodular Cast Iron	160– 260	100 (50-150)		100 (50-150)			
S	Heat-resiatant alloy	130– 400				35 (15-60)	35 (15-70)	
	Titanium Alloys	130– 400				35 (15-60)	35 (15-70)	35 (15-60)