

Aayudh SC Tools Cutting Data Recommendations (with our Optimized Coatings based on Application)

	Drilling			End Milling			Reaming		Remarks
Feed Rates - mm/rev.	Thru Hole	Blind Hole	Inclined Entry/Exit	General Roughing	Slotting	BNE with HSM	Blind Hole	Through Hole	
Feed mm/Rev: L/D</=5 & D < 10mm	0.08-0.2	0.08-0.2	0.06-0.12	0.1-0.2	0.1-0.2	0.4-0.8	0.5-0.9	0.5-0.9	
Feed mm/ Rev: L/D</=5 & D > 10mm	0.2-0.3	0.2-0.3	0.08-0.15	0.2-0.3	0.2-0.3	0.5-1	0.6-1.2	0.6-1.2	
Feedmm/ Rev: L/D</=8 & D < 10mm	0.07-0.16	0.07-0.16	0.06-0.12	0.18-0.25	0.18-0.25	0.25-0.6	0.4-0.6	0.4-0.6	
Feed mm / Rev: L/D</=8 & D > 10mm	0.1-0.2	0.1-0.2	0.08-0.15	0.2-0.28	0.2-0.25	0.35-0.8	0.5-0.9	0.5-0.9	
Work Piece Materials	Cutting Speed : Metres/Min								
Steels									
Low Alloy (150 to 200 BHN)	80-110	80-110	60-80	80-90	80-90	80-90	50-70	50-70	
Steels<1000N/mm2 (200 to 240 BHN)	70 -90	70-90	45-60	60-80	60-80	70-90	40-60	45-70	
Steels > 1000N/mm2 (240 to 280 BHN)	55-75	55-75	40-55	50-75	50-75	70-90	35-50	35-50	
Stainless Steels									
Austenitic	50-80	50-80	35-45	45-65	45-65	60-70	35-55	35-55	
Duplex	40-55	40-55	35-40	40-55	40-55	60-70	30-50	30-50	
Cast Iron- SGI/NCI									
Cast Iron (200-240BHN)	80-110	80-110	50-55	70-90	70-90	80-100	45-70	45-70	
Nodular Cast Iron	70-90	70-90	45-55	60-80	60-80	70-80	45-60	45-60	
Aluminium									

Aluminium Si < 8%	150-250	150-250	70-80	120-150	100-150	180-250	60-90	60-90	
Aluminium Si : 8 to 12%	130-200	130-200	70-80	120-150	100-150	180-250	60-90	60-90	
Aluminium > 12 %									
Titanium & Heat Resistant Super Alloys									
Ti Based	20-35	20-35	15-20	20-30	20-30	30-35	20-25	20-25	
Ni Based	20-35	20-35	15-20	20-30	20-30	30-35	20-25	20-25	