

# Speeds and Feeds



- 1) Select your material in the ISO colored chart.
- 2) Start with the recommended spindle speed, n (rev/min). Adjust the spindle speed based on your cutting conditions.

Material		Recommended Spindle Speed					
Group	Description	Parameter	Tool Diameter				
			3mm / 0.125"	6mm / 0.250"	10mm / 0.375"	12mm / 0.500"	16mm / 0.625"
		MAX RPM	90000	50000	40000	35000	25000
<b>1a</b>	Steel	Operating Range	60000 - 80000	35000 - 45000	22500 - 35000	20500 - 30000	15000 - 20000
<b>1b</b>	Hard Steel		60000 - 80000	30000 - 45000	19000 - 30000	15000 - 22500	12000 - 18000
<b>2</b>	Stainless Steel		60000 - 80000	30000 - 45000	19000 - 30000	15000 - 22500	12000 - 18000
<b>3</b>	Cast Iron		45000 - 80000	22500 - 45000	15000 - 35000	11000 - 30000	9000 - 20000
<b>4</b>	Titanium		60000 - 80000	30000 - 45000	19000 - 30000	15000 - 22500	12000 - 18000
<b>5</b>	Nickel		60000 - 80000	30000 - 45000	19000 - 30000	15000 - 22500	12000 - 18000
<b>8-10</b>	Aluminum & Non-Ferrous (Copper and Copper Alloys, Plastics)		30000 - 80000	15000 - 45000	10000 - 35000	7000 - 30000	6000 - 20000