	Titanium Nitride	Titanium Carbo-Nitride	Chromium Nitride Carbide Carbo-Nitride	Aluminum Titanium Nitride
Coating Material	TiN	TiCN(ML)	CrN,CrC,CrCN	TiAIN
Microhardness HV0.05	2300±200	3500±500	1800±2200	3300±300
Friction Coefficient Against Dry Steel	0,6	0,15	0,2-0,3	0,7
Coating Thickness in Microns (µm)	1-4	1-4	2-<6	1-3
Thermal Threshold	600° C 1100° F	400° C 750° F	700° C 1300° F	800° C 1470° F
Color of the Coating				
Key Characteristics	Good general purpose	High hardness, good wear resistance, enhanced toughness	Good adhesion, good corrosion and oxidation resistance	Excellent oxidation resistance
Primary Applications	• Machining of based material • Metal forming • Plastic molding	• Mechanically stressed cutting edges • Machining difficult to machine steel alloys • High speed cutting where moderate temperatures are generated at the cutting edge	• Machining copper • Metal forming • Plastic molding • Aluminum and magnesium die casting	• Machining of hardened steel workpieces • For use on carbide and mills • High speed operations, semi-dry or dry machining