

		33-612-613-A		
Coating	Titanium Nitride (TiN)	Aluminum Titanium Nitride (AlTiN)	Titanium DiBoride (TiB2)	
Identifying Color	gold	violet-grey	light grey-silver	
Layer Structure	monolayer	nano structure	monolayer	
Thickness	1–4 microns	1–4 microns	1–2 microns	
Hardness (HV)	2200	3300	4000	
Coefficient of Friction (Fetting)	0.4–0.65	0.45	0.45	
Thermal Stability	600°C / 1112°F	800°C / 1472°F	850°C / 1562°F	
General Information	A general purpose coating with good adhesion and abrasion resistant properties. Suitable for a wide variety of materials.	Excellent thermal and chemical resistance allows for dry cutting and improvements in performance of carbide. The coating has a high hardness giving great protection against abrasive wear and erosion.	This coating offers a very smooth surface and a low affinity to cold welding or built up edge, which makes it optimal for Titanium, Aluminum (>10%) and copper applications. It has high toughness and high hardness.	