









Ti-NAMITE® and Di-NAMITE® Tool Coatings are specifically engineered for KSPT solid carbide rotary tools. The coating lineup includes proprietary processes that result in optimized tool life and increased speed and feed rates in a variety of applications.



	Coating	Identifying Color	Layer Structure	Thickness	Hardness (HV)	Coefficient of Friction (Fretting)	Thermal Stability	General Information
	Titanium Nitride (TiN)	gold	Multilayer	1–5 microns	2200	0.40–0.65	600°C / 1112°F	A general purpose coating with good adhesion and abrasion resistant properties. Suitable for a wide variety of materials.
	Aluminum Titanium Nitride (AlTiN)	dark grey	Nano structure	1–5 microns	3700	0.30	1100°C / 2010°F	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.
	Titanium DiBoride (TiB2)	light grey-silver	Monolayer	1–2 microns	4000	0.10–0.20	850°C / 1562°F	This ceramic based coating ensures a smooth surface and a low affinity to cold welding or edge build up, which makes it optimal for aluminum and copper applications. It has high toughness and high hardness.
	Titanium Carbonitride (TiCN)	pink-red	Multilayer	1–5 microns	3000	0.30–0.45	400°C / 752°F	A very wear resistant coating with high toughness and shock resistance. Good in interrupted cuts found in applications like milling.
	Proprietary (TX)	black	Nano Composite	1–5 microns	3600	0.45	1150°C / 2100°F	The structural design of Ti-Namite-X is adapted to meet a diverse range of applications; everything from high- and low-alloy steels to hardened materials (up to 65 HRC core hardness). Ti-Namite-X is suitable for operations which require high cutting speeds, high temperatures at the cutting edge, and high metal removal rates.
	Crystalline Diamond (Diamond)	black	Monolayer	6–20 microns	>8000	0.15–0.20	800°C / 1470°F	This is the hardest coating available with the best abrasion resistance. It is carbon based so it is limited in application capabilities. This coating is suitable for machining highly abrasive, non-ferrous materials such as CFRP and graphite.
	Proprietary (TM)	copper	Nano Composite	1–5 microns	3600	0.45	1150°C / 2100°F	Features include high wear resistance, reduced friction, and excellent prevention of edge build up. This coating provides superior material removal rates and tool life when used in high performance operations with difficult to machine materials like titanium.
	Proprietary (TH)	copper	Nano Composite	1–5 microns	3800	0.30	1100°C / 2010°F	This coating demonstrates a superior combination of hardness and adhesion in hard machining of molds and dies and machining high-alloy stainless steels for high temperature applications such as turbines. The smooth surface ensures optimum surface quality and decreases the temperature in the cutting zone by reducing friction.

Other coatings available upon request.