



TI-COATING, INC.
50500 CORPORATE DRIVE UTICA, MI 48315
PHONE: 586-726-1900 FAX: 586-725-1735

Leonard Jankowski
Director of Sales & Marketing
586-854-4612

Keith Metzinger
Sales Manager
586-484-7517

Pam Porzandek
Sales Rep.
586-292-6983

Ti-Coating Nomenclature	Composition	Nominal Thickness	Coating Characteristics
<i>Chemical Vapor Deposition (CVD)</i>			
TCN-9	TiC/TiCN/TiN	Target 9.0μ	General purpose Titanium Nitride coating specifically designed for tool steel and high speed steel substrates. Excellent for metal forming and stamping.
TC-7	TiC	Target 7.0μ	High wear resistance in low heat applications. Excellent for forming stainless. Excellent for heavy stamping.
TI-4	TiN/TiC/TiCN/TiN	Target 4.0μ	Excellent lubricity, good wear resistance. Works best in milling with very light hone. Excellent in cold heading and heavy extrusion on carbide tools.
TI-8	TiN/TiC/TiCN/TiN	Target 7.0μ	Best for general purpose cutting with .001" min. hone. Works well in all low to medium heat applications and at low to medium speeds and feeds.
Al₂O₃	TiC/AL ₂ O ₃	Target 9.0μ	Excellent thermal protection, also non-conductive. Works best for cutting in high speed and feed applications, .001" min. hone.
TAN-15	TiC/AL ₂ O ₃ /TiN	Target 10.75μ	Good lubricity. Excellent thermal protection with improved chip flow for high feed and speed applications, .001" min. hone.
TCN-2	TiCN	Target 3.0μ	Good wear resistance and good lubricity. Good for tough cutting applications that are well cooled. Excellent for solid carbide cold heading and extrusion tools.
<i>Physical Vapor Deposition (PVD)</i>			
Ti-21 "Superior TiN"	Composite TiN	Target 4.0μ	Excellent lubricity and thermal protection. Will cover an expanded range of applications. Can be used in all applications currently using PVD TiN, TiCN, or TiAlN.
Ti-Rex-4	TiNALOX (TiAlN)	Target 3.0μ	Excellent wear resistance at elevated temperatures. Needs heat to perform properly in cutting and forming applications. Excellent for pierce and trim punches in stampings.
PTN-3	TiN	Target 2.0μ	Excellent wear resistance and lubricity. Wide range of applications including: HSS cutting tools, un-honed carbide inserts, punches and dies for the stamping and cold forming industries.
PCN-1	TiCN	Target 3.0μ	Good wear resistance and good lubricity. Good for tough cutting applications at moderate temperatures. Excellent for HSS and carbide cold heading and extrusion tools.
ALOX SN²	TiAlN	Target 6.0μ	Low residual stress provides best adhesion on thicker PVD coatings Great for Steel, Cast and hardened alloys, Ideal for roughing and High performance applications
TINALOX SN²	TiAlN	Target 3.0μ	Low residual stress provides enhanced adhesion. Excellent for Steel, Stainless steel, Cast Iron and Materials with difficult cutting properties
HYPERLOX	AlTiN	Target 3.0μ	High tenacity and high hardness along with great adhesion and superior oxidation resistance is achieved by the nanocomposite structure. Excellent for ultra hard cutting (>RC55) and stainless steel applications. Ideal for finishing.

There is a critical need to develop environmentally friendly machining techniques. This need is challenging the tooling industry today and will continue to challenge it into the future. Ti-Coating is ready to meet that challenge, today and in the future.

Ti-Coating reserves the right to alter coating thickness specifications without notice.