Key Characteristics

HIGH PERFORMANCE COATINGS	Color	Process	Deposition Temp.	Max. Usage Temp.	Layer Structure	Thickness	Hardness (HV 0.01)	Applications	Advantage
Beta TiN	Gold	PVD-ARC	750-930°F	1112°F	Mono	1-7µm	2500	Machining Iron-based Metals. Forming, Plastic Molding	General Purpose and Cost Effective
Alpha TiCN	Blue/Grey	PVD-ARC	840-930°F	752°F	Mono/ Gradient	1-4µm	3300	Machining Tool Steel over 40 HRc, Interrupted cutting, Forming, Punching.	High Shock Resistance, High Hardness
Gamma Ti_2N	Silver	PVD-ARC	840-930°F	1,112°F	Mono	1-4µm	2700	Machining Inconel and Stainless Steel	High Thermal Resistance to Cracking
Zeta ZrN	White/Gold	PVD-ARC	840-930°F	1022°F	Mono	2-5µm	1850	Machining Aluminum, Brass, Copper. Decorative Applications.	General Non-Ferrous Alloy Machining and Decorative
Delta CrN	Metal-Silver	PVD-ARC	400-930°F	1292°F	Mono	2-8µm	1750	Machining Super Alloys. Molds, Dies, punches	Universal Use for Lower Friction
UnversAL TiAlN	Violet	PVD-ARC	840-930°F	1382°F	Mono/Multi/ Gradient	1-4µm	3000	High Speed Machining Cast Iron, Nickel-Based High Temp. Alloys	High Heat Insulation, Semi-Dry Machining
UniverAL 4x TiAlCN	Light Violet	PVD-ARC	840-930°F	932°F	Multi	1-4µm	3500	High Speed Machining Hard / Soft aerospace alloys	High Heat and Shock Resistance, Semi-Dry Machining
UnimaX AlTiN	Black	PVD-ARC	840-930°F	1652°F	Multi/ Gradient	2-4µm	3600	High-Velocity Dry Machining Nickel-Based High Temp. Alloys	Extreme Heat Insulation, Dry Machining.
UnimaX Pro AlTiSiN	Black	PVD-ARC	840-930°F	2012°F	Multi	2-4µm	3800	Hard Machining, Drilling, Reaming. Cutting of Highly Alloyed Material.	Carbide Tools, Ultimate Heat Insulation for Machining 60 Hrc
UniChrome AlCrN	Dark/grey	PVD-ARC	840-930°F	1652°F	Multi	2-4µm	3200	Milling, Hobbing, Sawing Alloy Metals	Machine Challenging Material with Improved Wear
Sigma DLC	Black	PVD-ARC	400-450°F	842°F	Mono/Multi	1.5-7µm	1200	Machining Non-Ferrous Alloys. Aerospace, Auto Wear Components. Decorative	Reduces Break-In Period, Prevents wear Due to Tribological Properties