

# IONBOND standard coatings

# CVD Forming & Molding

Coating	Material System	Application	Application details	Typical Thickness ( $\mu$ )	Max. Service Temp. ( $^{\circ}$ C)	Deposition Temp. ( $^{\circ}$ C)	Color
A/ Bernex TiCN	TiN / Ti(C,N) / TiN	Extrusion, ceramic	High abrasion resistance	12	400	720-900	Blue-Gray
AR/ Bernex TiCN	TiC	General stamping and forming	General stamping and forming, incl. cold deep drawing of alloy steels, cold forming of iron alloys	5-8	350	900-1050	Silver
B/ Bernex TiN	TiN	Wear, general purpose	Diffusion barrier, protects against aluminum and low fusion metals	5	500	900-1050	Gold
C/ Bernex CrC	Cr <sub>x</sub> Cy	Plastics industry	Corrosion resistant coating for use in the plastic industry	8-12	Excellent	900-1050	Silver
Bernex Extrude	Ti(B,C,N)	Extrusion, heavy duty	Heavy duty aluminum extrusion	8-12	Excellent	900-1050	Yellowish
HSE/ Bernex SpeedExtrude	Al <sub>2</sub> O <sub>3</sub> variant kappa	High speed aluminum extrusion, forming	Hot forming, high speed aluminum extrusion, cold and hot forming of steel	6	No Oxidation	900-1050	Dark Brown
U2/ Bernex ColdForm	Ti(C,N)	Forming	Cold forming tools for austentic steels (corrosion resistant, alloy steels)	5-8	400	900-1050	Blue-Gray