



### PVD Coatings

Coating	Composition	Thickness $\mu\text{m}$ Range	Microhardness HV 50	Coefficient of Friction (Dry over steel)	Service Temp. Max $^{\circ}\text{C}$	Deposition Temp. $^{\circ}\text{C}$	Color	Function
<b>PERFORMANCE COATINGS</b>		<i>“Coating Thickness capability from 0.5 to 25 <math>\mu\text{m}</math> available upon request”</i>						
TIN	TiN	2-5	2,200	0.3	400	400	Gold	Release, Surface Protection
CRN	CrN	2-5	2,000	0.3	800	400	Silver	Release Surface Protection
<b>ADVANCE HIGH-PERFORMANCE COATINGS</b>		<i>“Coating Thickness capability from 0.5 to 25 <math>\mu\text{m}</math> available upon request”</i>						
OXY-CHROME	CrN Based	2-5	3,000	0.2	900	400	Rainbow	Abrasive wear Protection, Plastic Flow, Surface Protection, Release
D-ARC	DLC, ta-C	1-3	4,000	0.1	500	200	Gunmetal	Release, Surface Protection
D-ARC NANO	DLC, ta-C	2-5	3,500	0.1	500	200	Gunmetal	Abrasive Wear Protection, Release, Surface Protection
WC/DLC	WC/ $\alpha$ -C:H	2-5	2,000	0.1	350	200	Gunmetal	Sliding Metal Parts



***Applications:***

- Injection Molding Dies & Inserts
- Hot Runner Components
- Blow Molding Cores & Cavities
- Ejector Pins & Sleeves
- Gate Inserts & Sprue Bushings



***Features:***

- High Hardness & Wear Resistance
- Chemical Resistance
- Low Friction & Anti-Sticking
- Thermal Stability
- Precision & Thin Coating Layer



***Benefits:***

- Extended Tool Life
- Improved Release Properties
- Reduced Lubrication Needs
- Enhanced Part Quality
- Lower Maintenance & Downtime

