Plastic Processing

Coating Portfolio





Tools Inserts | Moulds | Cavities | Pins

Coating	Composition	Microhardness HV50	Coating Thickness, µm	Deposition T °C	Coefficient of Friction (dry over steel)	Colour	Functions
OXY-CHROME	CrN-CRxOy	3000	6-10w	< 300	0.15	Rainbow	Plastic Flow, Surface Protection, Release, Abrasive Wear Protection
D-ARC	DLC, ta-C	4000	2-4	< 200	0.1	Grey/Black	Release, Surface Protection
D-ARC NANO	DLC, Cr/ta-C	3500	3-10	< 200	0.1	Grey	Abrasive Wear Protection, Release, Surface Protection
WC/DLC	WC/a C:H	2000	2-5	< 200	0.1	Grey/Black	Sliding Metal Parts
TiN	TiN	2200	2-5	400	0.3	Gold	Release, Surface Protection
CRN	CRN	2000	3-12	< 300	0.3	Silver	Release, Surface Protection

Optimum Solutions for Plastic Processing **Duttek**





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Coating	Composition	Advantages	Colour	Functions
OXY-CHROME	CrN-CRxOy	 Used when polymers contain abrasive fillers Improving material flow Improving anti-sticking properties	Rainbow	Plastic Flow, Surface Protection, Release, Abrasive Wear Protection
D-ARC	DLC, ta-C	Optimum coating when surface release is a concern	Grey/Black	Release, Surface Protection
D-ARC NANO	DLC, Cr/ta-C	 Used when polymers contain abrasive fillers Superior material flow properties Improving anti-sticking properties	Grey	Abrasive Wear Protection, Release, Surface Protection
WC/DLC	WC/a C:H	 Ideal solution when dealing with friction between metal parts, gears, ejector pins, etc. Improves life of sliding parts by providing a layer of extra lubrication 	Grey/Black	Sliding metal parts

NOTE Optimum performance is achieved when combining above coatings with adequate pre and post polishing of the critical coating surface.

