

# InnerArmor Abrasive Wear Control Coating

Duralar's InnerArmor brand of Abrasive Wear Control coatings provide additional thickness for applications requiring maximum abrasion resistance, including protection against wear from particles in slurry flow.

Application environments: Per ASTM G65

<b>Thickness - <math>\mu\text{m}</math></b>	50 - 80
<b>Hardness - GPa</b>	20 (adjustable to the application)
Comparison Hardnesses - GPa	Stainless 304: Typ <1,      Stainless 17-4: Typ <5, Inconel 718: Typ <3,      Chrome on Steel: Typ <10
<b>Wear Rate - <math>\text{mm}^3/\text{nm}</math></b>	Typical 5.1E-07 (dry)
Comparison Wear Rates - $\text{mm}^3/\text{nm}$	Stainless 304: 1.00E-03,      Stainless 17-4: 4.00E-03, Inconel 718: 6.00E-04,      Chrome on Steel: 3.00E-04
<b>Coefficient of Friction</b>	<0.1 (dry)
<b>Deposition Method</b>	PECVD
<b>Deposition Temperature</b>	120-200°C (substrate dependent)
<b>Deposition System</b>	Duralar CS-10
<b>Applicable Substrates</b>	Carbon Steel, Stainless Steel, Al, Inconel, Ti Alloys, Ni/Ni Alloys, SiC
<b>Deposition Rate</b>	Typical >0.4 $\mu\text{m}$ / minute