

InnerArmor Abrasive Wear Coating Specifications

InnerArmor®

InnerArmor Abrasive Wear is a thick coating for applications requiring maximum abrasion resistance, including protection against wear from particles in slurry flow.

Abrasion Resistance: ASTM G65	Passed
Hardness	2000 HV / 20 GPa (1800–2200 HV, to suit application)
Young's Modulus (E-Modulus)	170 GPa (150–200 GPa)
Sliding Wear Rate (25N load with WC sphere surface)	Typical 5.1E-07 mm ³ /Nm (Dry)
Coefficient of Friction (25N load with WC sphere surface)	< 0.05 (Dry)
Adhesion to Steel	Excellent
Coating Thickness	50–80 microns (to suit application)
Color	Grey-Black
Applicable Substrates	Carbon Steel, Stainless Steel, Inconel® 718, Ti/Ti Alloys, Ni/Ni Alloys
Max Environment Temperature	Up to 752°F (400°C)
Deposition Rate	Typical > 0.4 micron/minute
Deposition Temperature	248°F–392°F (120°C–200°C) (substrate dependent)