InnerArmor Flex Wear Coating Specifications

InnerArmor®

InnerArmor Flex Wear Coating combines flexibility and hardness for applications requiring significant substrate bending. Foils can be used as liner inside pipes for corrosion, erosion and wear protection.

Flexibility	Bendable to 120 degrees depending upon substrate thickness
Hardness	2000 HV / 20 GPa (1000–2500 HV, to suit application)
Young's Modulus (E-Modulus)	109 GPa (85–140 GPa)
Sliding Wear Rate (25N load with WC sphere surface)	Typical 3.9E-07 mm^3/Nm (Dry)
Coefficient of Friction (25N load with WC sphere surface)	< 0.01 (Dry)
Adhesion to Steel Foil (0.01 inch thick)	15 Newton-scratch test
Coating Thickness	12 microns
Color	Black
Applicable Substrates	Stainless Steel, Aluminum, other conductive foils
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)

sub|one

Sub-One Technology