

InnerArmor Sliding Wear Control Coating

Duralar's InnerArmor brand of Sliding Wear Control coatings are specifically designed for use in applications that are subject to adhesive wear from the sliding motion of parts such as in reciprocating pistons and pumps. Many of these applications are found in the oil and gas and automotive industries.

Application environments: Wet, dry, oil, drilling mud

Thickness - μm	1 - 60
Hardness - GPa Comparison Hardnesses - GPa	12 (adjustable to the application) Stainless 304: Typ <1, Stainless 17-4: Typ <5, Inconel 718: Typ <3, Chrome on Steel: Typ <10
Wear Rate - mm^3/nm Comparison Wear Rates - mm^3/nm	Typical 5.0E-07 (dry) Stainless 304: 1.00E-03, Stainless 17-4: 4.00E-03, Inconel 718: 6.00E-04, Chrome on Steel: 3.00E-04
Coefficient of Friction	<0.1 (dry)
Deposition Method	PECVD
Deposition Temperature	120-200°C (substrate dependent)
Deposition System	Duralar CS-10
Applicable Substrates	Carbon Steel, Stainless Steel, Al, Inconel, Ti Alloys, Ni/Ni Alloys, SiC
Deposition Rate	Typical >0.7 μm / minute