

CoreGard™ | Inner Diameter Coating

Now Available for Smaller ID's and Longer Lengths

Tungsten Carbide Coating Offers Lasting Protection

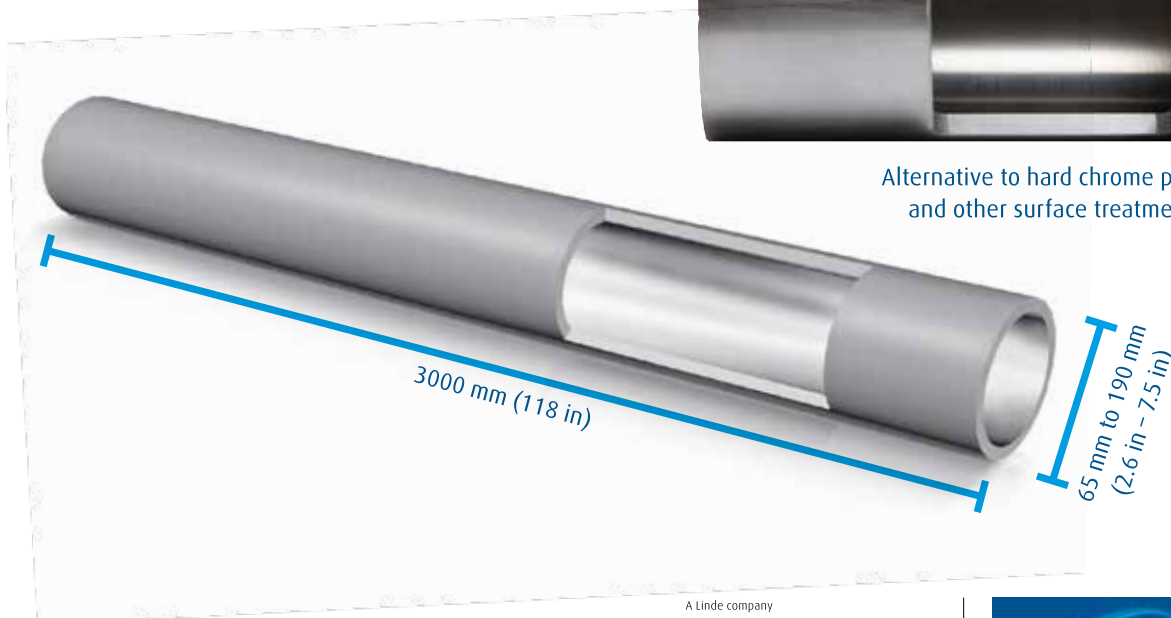
- Alternative to ceramic linings, chrome plating, heat treatments, and overlays
- Prevents abrasion and erosion
- Resists corrosive fluids when combined with our sealant
- REACH compliant
- Can be applied inside a wide range of sizes, down to 65 mm (2.6 in) Inner: 65 mm to 190 mm (2.6 in to 7.5 in) Length: up to 3000 mm (118 in)
- Extends part life for: Cylinders, Pipes, Sleeves, Tubes, Barrels



Dense, sealed coating provides excellent wear and corrosion resistance



Alternative to hard chrome plating and other surface treatments



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Coating Characteristics

Physical Characteristics	Value	Test Method
Microhardness (typical)	1100 kg/mm ²	Vickers HV ₃
Apparent porosity	< 1.0%	Metallographic
Thickness	0.02-0.40 mm / 0.5-10.0 mils	Target range
Operating temperature	540°C maximum in air	
Roughness	50-90 µin Ra / 1.2-2.2 µm Ra	As coated
Sand erosion	20 µm/g at 30° / 100 µm/g at 90°	ASTM G76
Sand abrasion	0.8 mm ³ / 1000 rev	ASTM G65

Proven Results

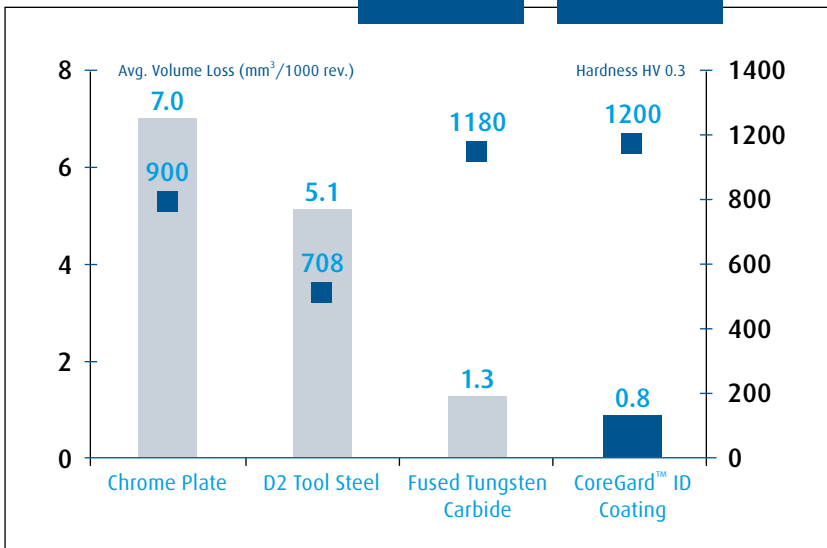
Q: Do CoreGard ID Coatings really last that much longer than hard chrome plating and nitriding?

A: Yes. Field testing verifies the performance. A CoreGard-coated downhole tool in use by a leading oil exploration company showed no signs of production loss after more than 1,000 hours. A Houston-based energy company, which typically expects about 100 hours from a component with hard chrome plating, reported continued functionality after 600 hours for parts coated with CoreGard ID Coatings.

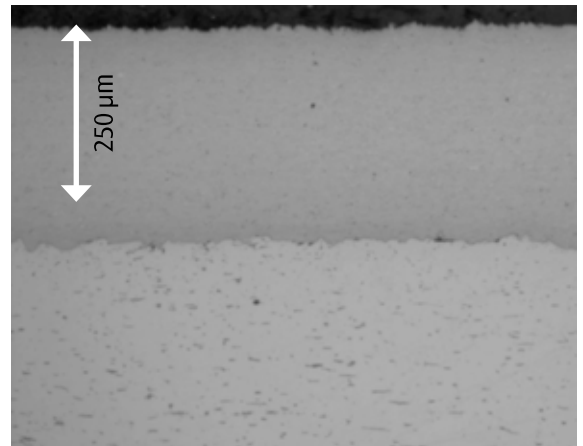
Sand Abrasion Test ASTM G65-81

More than
25% harder
(than chrome plate)

>8.5 times
lower
volume loss
(than chrome plate)



Coating Microstructure



Making our world
more productive

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