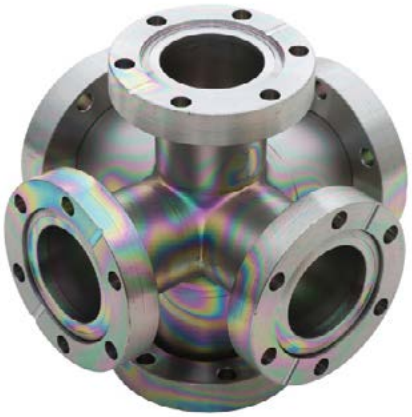
Coating Specification Sheet

Providing versatile coatings ideal for corrosion and durability, chemical inertness, and anti-stick properties.

Overview

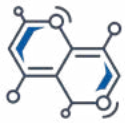
The Dursan® process deposits a chemically protective barrier of amorphous silicon, oxygen and carbon that is further functionalized to resist adsorption of corrosive, reactive, and otherwise unwanted molecules (patent info at www.silcotek.com/IP). Applied via chemical vapor deposition (CVD), the Dursan® process is required when both a robust and chemically inert surface are critical.



Key Applications and Benefits

- Achieve corrosive performance similar to exotic materials at a fraction of the price
- Increase system durability
- Improve instrument accuracy and response time
- Easy release and cleaning

Corrosion



Chemical Process

Oil & Gas/Refining

Hydrophobicity

Lab Analysis

Dursan® Specifications

Coating Structure:	Functionalized silica-like coating (a-SiO_X:CH_Y)	
Deposition Process:	Thermal chemical vapor deposition (not plasma-enhanced)	
Maximum Temperature:*	500° C (inert atmosphere) 450° C (oxidative)	
Substrate:	Compatibility: Size: Geometry:	Stainless steel, exotic alloys, ceramics Up to 78” (198 cm) Any shape, including complex geometrics
Typical Thickness:	400 - 1600 nm	
Hydrophobicity (contact angle):	≥81°	
Allowable pH Exposure:	0 - 14	

*Contact technical service