

SilcoKlean[®] 1000

Reduces carbon buildup on combustion-related components.

Overview

The SilcoKlean[®] coating process results in a protective barrier of amorphous silicon that is further functionalized to specifically prevent the buildup of carbon deposits on high temperature stainless steel and ceramic components (patent info at www.silcotek.com/IP). Applied via chemical vapor deposition (CVD), the SilcoKlean[®] process is the best solution for carbon coking due to its robust and inert properties.



Key Applications and Benefits

- Non-line-of-sight process; all holes and complex geometries will be coated
- Cut downtime and costs
- Suitable for high temperature use
- Reduce unwanted build-up



Automotive



Aerospace



Stack/Flare



Refining

SilcoKlean[®] Specifications

Coating Structure:	Functionalized hydrogenated amorphous silicon
Deposition Process:	Thermal chemical vapor deposition (not plasma-enhanced)
Maximum Temperature:	450° C (maximum for functionalization) 1410° C* (melting)
Substrate:	Compatibility: Stainless steel, exotic alloys, ceramics Size: Up to 78" (198 cm) Geometry: Any shape, including complex geometrics
Typical Thickness:	100 - 500 nm
Hydrophobicity (contact angle):	≥ 65°
Allowable pH Exposure:	0 - 8