

A high purity coating developed to minimize outgassing and enhance [®] ultra-high-vacuum productivity.

Overview

SilcoGuard® (patent info at www.silcotek.com/IP) is a multi-layered barrier of amorphous silicon designed specifically for low out gassing characteristics. The coating repels moisture while not interfering with knife-edge or seal integrity due to its thin profile. System contamination is quickly removed with SilcoGuard® treated vacuum components.



Key Applications and Benefits

- Reduce vacuum pump-down times
- Improve yields by preventing wall reactivity and ion contamination
- Eliminate burn-in or stabilization







SilcoGuard® Specifications

Coating Structure:	Hydrogenated amorphous silicon (a-Si:H)	
Deposition Process:	Thermal chemical vapor deposition (not plasma-enhanced)	
Maximum Temperature:	1410° C*	
Substrate:	Compatability: Size: Geometry:	Stainless steel, exotic alloys, ceramics Up to 78" (198 cm) Any shape, including complex geometrics
Typical Thickness:	180 - 600 nm	
Hydrophobicity (contact angle):	≥20°	
Allowable pH Exposure:	0 - 8	