

SilcoGuard®

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



Overview

SilcoGuard® (US Patent 7,070,833) is a multi-layered barrier of amorphous silicon designed specifically for low outgassing characteristics. The coating repels moisture while not interfering with knife-edge or seal integrity due to its thin (sub-micron) profile. System contamination is quickly removed with SilcoGuard-treated vacuum components.

Features & Benefits

- Reduce vacuum pump-down times by 2.5x
- Improve yields by preventing wall reactivity and ion contamination
- Eliminate burn-in or stabilization

Specifications

Substrate compatibility*:	SS alloys, ceramics, glass, titanium, most exotic metals, TIG/MIG welds, vacuum-nickel brazed areas
Allowable temp. range*:	-210°C to +1410°C
Typical thickness:	180-600 nm
Allowable pH exposure:	0-8
Lubricity (coefficient of friction):	0.7
Hydrophobicity (contact angle):	60°
Wear resistance:	14.00 (304 stainless steel: 13.81)