

Providing corrosion resistant silicon barrier coatings, ideal for acidic, oxidative, and high purity environments.

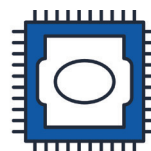
### Overview

The Silcolloy® coating process results in a chemically protective, corrosion resistant, multi-layered barrier of amorphous silicon (patent info at [www.silcotek.com/IP](http://www.silcotek.com/IP)). Applied by a chemical vapor deposition (CVD) process, the Silcolloy® process is the ideal choice for protecting stainless steels, exotic metals, glass, ceramics and other alloys from corrosive attack or for preventing unwanted compounds from entering the process stream.



### Key Applications and Benefits

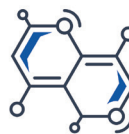
- 3D non-line-of sight process coats all complex geometries including designs with high aspect ratios and small orifices.
- Achieve exotic material performance at a fraction of the price.
- Fight corrosion with a non-reactive, pure barrier.



Semiconductor



Stack & Flare



Chemical Process



Oil & Gas/Refining

### Silcolloy® Specifications

<b>Coating Structure:</b>	Hydrogenated amorphous silicon (a-Si:H)	
<b>Deposition Process:</b>	Thermal chemical vapor deposition (not plasma-enhanced)	
<b>Maximum Temperature:</b>	1410° C*	
<b>Substrate:</b>	Compatibility:	Stainless steel, exotic alloys, ceramics
	Size:	Up to 78" (198 cm)
	Geometry:	Any shape, including complex geometrics
<b>Typical Thickness:</b>	180 - 800 nm	
<b>Hydrophobicity (contact angle):</b>	≥40°	
<b>Allowable pH Exposure:</b>	0 - 8	