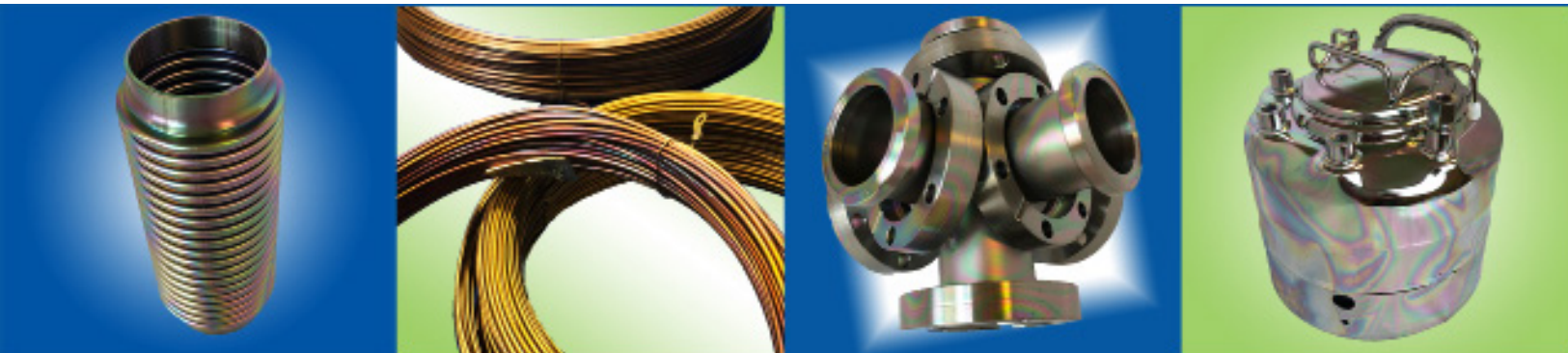




CVD Coatings Required for Success in the Semiconductor Industry

SilcoTek® has been an integral step in the semiconductor manufacturing process for over a decade. Our chemical vapor deposition coatings have helped customers solve surface issues like corrosion, contamination, durability, and more.



Overview

SilcoTek has been engaged in actively solving corrosion contamination issues for some of the world's leading Semiconductor OEMs and Fabs beginning around the 22nm node. As semiconductor technology has progressed, SilcoTek has continued to prove to our customers that we are more than just a coatings provider. We have developed partnerships with customers and work closely with them to develop customized solutions to address their unique challenges.

As the semiconductor industry continues to push physical limits, contamination has become more detrimental than ever. System corrosion and contamination limits productivity and lowers yields.

Due to increasing requirements on purity, SilcoTek coating technologies have helped eliminate metal ion contamination from the process of state-of-the-art semiconductor device fabrication. Utilizing SilcoTek's proprietary CVD process, a barrier coating is deposited onto customer supplied parts which stabilizes gas purity and reduces metal contamination sources in the process. SilcoTek's coating technologies help reduce the cost of equipment ownership for some of the largest semiconductor Fabs in the world.

Benefits of SilcoTek Coatings in Device Fabrication

- **Solve corrosion contamination** issues for semiconductor OEMs and Fabs beginning around the 22nm node.
- **Remove metal ion contamination** in semiconductor device fabrication.
- **Reduce the cost of equipment ownership** for the largest semiconductor Fabs in the world.

Customizing CVD Coatings for Semiconductor Manufacturing

Depending on our customers specific needs we can tailor the coating to achieve the properties that they are looking for. Coatings consist of a Base Layer and a Surface Layer. Amorphous, hydrogenated silicon can be used as a barrier coating for gas delivery in both etch and deposition environments

Base Layer Options	Functionalization Options		
	None	-C _x H _y	-C _x F _y
a-Si:H	Silcolloy®	SilcoNert®	Experimental
a-SiO _x :CH _y	Dursox®	Dursan®	Experimental
Bare			Notak®