

SilcoNert® 1000

The original inert coating.
Also known as SilcoSteel®.

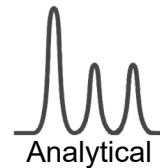
Overview

SilcoNert® 1000 (patent info at www.silcotek.com/IP) is a chemically protective barrier of amorphous silicon that is excellent for general purpose barrier applications. Applied via chemical vapor deposition (CVD), SilcoNert® 1000 is ideal for any flow path or other application where preventing a reaction between substrate and process gas, fluids, or other media is necessary.



Key Applications and Benefits

- Non-line-of-sight process; all holes and complex geometries will be coated
- Eliminate adsorption and retesting
- Obtain faster calibrations
- Improve inertness at high temperatures



Chemical Processing



Stack & Flare



Oil & Gas/
Refining

SilcoNert® 1000 Specifications

Coating Structure:	Hydrogenated amorphous silicon (a-Si:H)	
Deposition Process:	Thermal chemical vapor deposition (not plasma-enhanced)	
Maximum Temperature*:	1410° C	
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):	≥40°	
Allowable pH Exposure:	0 - 8	