



Tube and Process Directional Guide

Thermon, Globally known as “The Heat Tracing Specialists” takes pride in the products and services offered. We are not only a manufacturer, but a partner and a total solutions provider. As a total solution, Thermon offers and manufactures Pre-Insulated and/or Heat Traced Tubing Bundles, to fit our customers and the markets ever changing demands. Thermon manufactures the heat trace and accessories used in our electric heat traced bundles and offers many different types of tubing as well as custom processes.

As an industry leading manufacturer, consistency and quality are not only a prerequisite in our manufacturing processes, it is also a requirement in the materials we use and the suppliers we partner with. It is important to be aware that not all tubing or passivation processes are the same. Improper design, tubing and/or passivation selection could lead to reduced sample response time, false or inaccurate sample results, restricted flows or even premature system failure. Thermon understands this and supplies tubing and passivation processes that are manufactured and processed under approved ASTM standards. All of the tubing and passivation processes we offer are available with mill certifications and/or process conformance certifications, for both imperial and metric tubing.



Some Of The Industries We Serve:

- Oil & Gas production
- Refineries
- Chemical plants
- Analytical / Environmental
- Pharmaceutical
- Power generation
- Pulp & paper
- Food processing
- Waste water
- And many other industries

Some Of The Types & Processes Available:

- Imperial and Metric sizes
- SilcoNert1000
- SilcoNert2000
- Electropolished
- Cleaned for Oxygen Service
- Semi-Conductor Grade

Some Of The Reasons & Benefits:

- Provides a chemical passivation layer
- Reduces absorption effects
- Increased response time
- Improved results reliability
- Reduction of corrosion and erosion

PRODUCT / APPLICATION INFORMATION



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Item	Common Uses	General Characteristics
Commercial Grade TP 316/316L Stainless Steel Welded	Oil, gas & chemical transport Instrument tubing Small diameter process tubing Steam supply/return/tracer	Low - medium pressure & temperature Corrosion resistance Ease of fabrication Available in long coils or straight lengths Inexpensive Readily available No special handling
Commercial Grade TP 316/316L Stainless Steel Seamless	Oil, gas & chemical transport Instrument tubing Small diameter process tubing Steam supply/return/tracer	Low - high pressure & temperature Corrosion resistance Ease of fabrication Available in long coils or straight lengths Inexpensive Readily available No special handling
*SN1 SilcoTek SilcoNert1000 (SilcoSteel) **See Note	Oil, gas & chemical transport Liquid propane gas Natural gas NOx monitoring Stack gas monitoring Process analyzers	General purpose passivation layer Maximum operating temperature 600C Available in long coils **NOTE: **With the offering of SilcoNert2000, SilcoTek recommends SilcoNert1000 for use in the semiconductor industry only.
*SN2 SilcoTek SilcoNert2000 (Sulfinert)	Oil, gas & chemical transport Liquid propane gas Natural gas NOx / SOx monitoring Stack gas monitoring Sulfurs Process analyzers Refinery Flare Testing (sub Part Ja) Tier III Gas/Diesel Sulfur content	Elevated superior passivation layer Maximum operating temperature 450C Available in long coils Reduces absorption effects Improves analytical reliability Increases cycle / accuracy time
SCI Semiconductor Grade	Oil, gas & chemical transport Liquid natural gas Critical analytical sampling High purity systems Semiconductor industry	Internally clean from all impurities Reduced peak to valley surface Improves sample measurement Improves response time Available in long coils Mill direct tube, no secondary process needed Internal surface roughness 15-20Ra Max Hydrophobic
EP10 EP30 Electropolished Tubing	Oil, gas & chemical transport Liquid natural gas Critical analytical sampling High purity systems Semiconductor industry	Process polishes, passivates & deburrs Levels micro peaks & valleys Improves response time Improves sample measurement efficiency Reduces corrosion and erosion Available in long coils or straight lengths Internal surface roughness 30Ra or 10Ra Max Hydrophobic EP30 = Factory approved base tube + EP EP10 = Semi-Conductor base tube + EP
OBWLD Orbit Weld	Oil, gas & chemical transport Analytical High purity systems Semiconductor industry	Typically used on straight lengths to provide a long coil. Smooth, crevice free weld Maintains uniformity and consistency

Additional options/ combinations available:

EP30 / SN2 = Factory approved base tube + Electropolish + SilcoNert2000

EP10 / SN2 = Semiconductor grade base tube + Electropolish + SilcoNert2000

**The combination of a smooth substrate (EP) along with SilcoNert2000 (SN2) provides the ultimate surface to assure quantitative transfer of ppb level sulfur containing streams.

SilcoNert1000 and SilcoNert2000 are trade names of SilcoTek.