



Concept Group LLC

Insulon Vacuum Jacketed Hose for Semiconductor Fabrication

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Concept Group LLC

Proprietary manufacturer of Insulon Vacuum Jacketed Hose

- 1970** Concept Group was founded as a precision CNC machine shop
- 1980s** Developed expertise manufacturing hermetic glass-to-metal seals
- 1990s** Expanded into vacuum insulation technology
- 2000s** Developed and patented Insulon Technology
- 2021** Launched standardized Insulon Vacuum Jacketed Hose product line

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Management Team



Aarne Reid
Founder & CEO

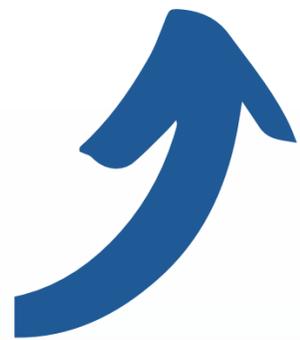


Ram Radhakrishnan
President



Dan Prall
COO

Engineering & Manufacturing Expertise



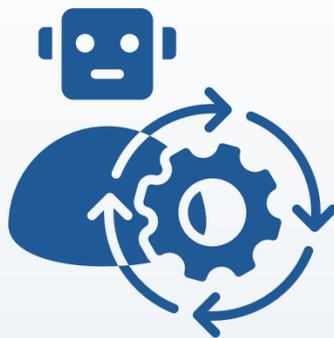
High volume manufacturing

Producing millions of parts every year



High precision manufacturing

Each part receives high attention to detail



Automated cells

Cells may be fully or semi-automated



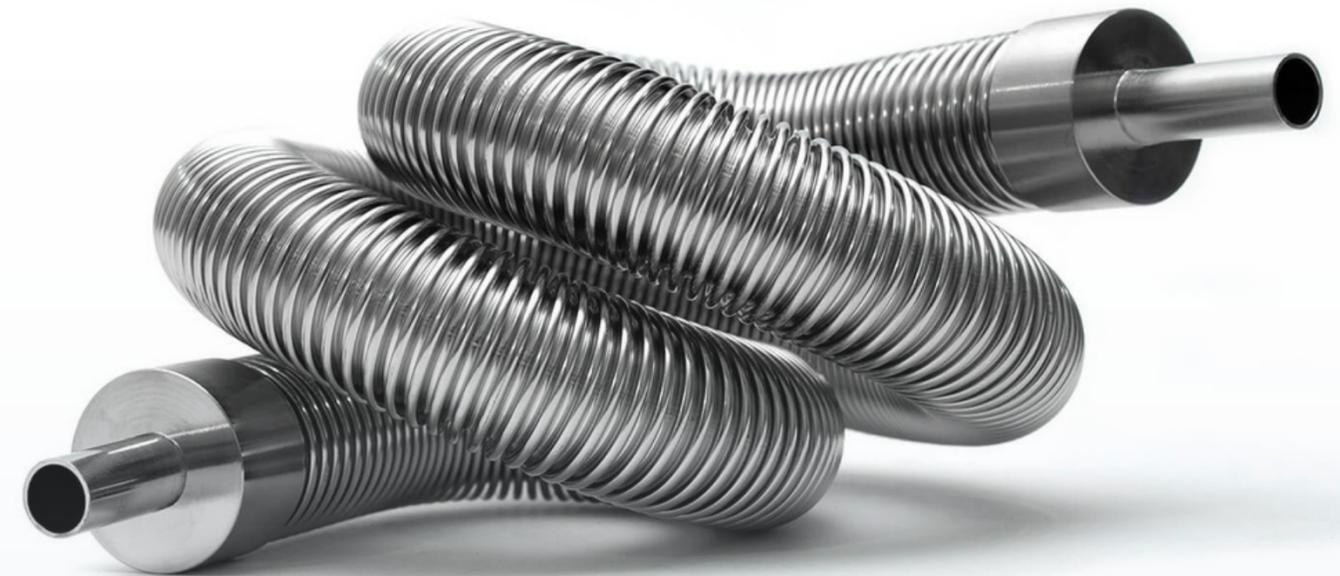
Expert quality control

Every part is double-checked by our quality control team

Insulon Vacuum Jacketed Hose

Benefits for Semiconductor Fabrication

- Maximize productivity with faster time-to-temperature
- Chillers and cyro-chillers benefit from increasing thermal efficiency and minimizing condensation
- Deposition lines, exhaust lines, and scrubbers benefit from advanced high temperature vacuum insulation
- 316 stainless steel external and wetted (internal) surfaces; Compatible with cleanroom manufacturing material requirements
- Reduce environmental impact by improving energy efficiency



Insulon Vacuum Jacketed Hose

Product Overview

- Vacuum jacketed hoses engineered with Insulon Technology for fluid transfer applications from -270 to 815°C (-454 to 1500°F).
- Proprietary, advanced vacuum insulation technology
- Benefits compared to most other vacuum jacketed hose:
 - Zero pump-down maintenance
 - More compact, sleeker profile
 - Hyper deep Insulon vacuum space
 - Resistance to thermal cycling, even at high temperatures
- Option to include proprietary, high-density multi-layer insulation (MLI).





Thank You

To learn more, please visit us online at

conceptgroupllc.com