

KOOL-X™

Ultra High Purity Tube-and-Shell Heat Exchanger

For applications where temperature stability, high purity, corrosion resistance, and reliability are of critical importance.



APPLIED INTEGRATED SYSTEMS

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Ultra High Purity Tube-and-Shell Heat Exchanger

Introducing *Kool-X™*, Applied Integrated Systems' ultra high purity, tube-and-shell heat exchanger system for single pass or re-circulation applications where temperature stability, high purity, corrosion resistance, and reliability are of critical importance.

The *Kool-X™* series has an all Teflon flow path that is ideal for virtually all chemicals and can be used for heating, cooling, and condensing applications. AIS's unique Spiral-Core™ technology allows for ultimate heat transfer efficiency and provides a continuous, smooth, flow path, without any sharp corners or crevices where contaminants can accumulate.

Features and Benefits

- **ULTRA HIGH PURITY**
All Teflon *Plug-Flow™* flow path with no o-rings, no pipe threads, and no metal exposure eliminates any potential for contamination and assures the highest purity level is maintained.
- **BUILT IN INTELLIGENCE**
Optional proportionally operated flow control valve can be integrated into the cooling or heating fluid circuit assuring tight temperature accuracy is achieved.
- **SPIRAL-CORE™ TECHNOLOGY**
AIS's proprietary Spiral-Core™ technology provides high heat transfer efficiency and a continuous, smooth, process flow path, without any sharp corners or crevices where contaminants can accumulate.
- **HIGHLY EFFICIENT**
Innovative Spiral-Core™ technology allows for highly efficient heat transfer area that can be sized to meet virtually any requirement.
- **100% FLUID STREAM SEPARATION**
Unique design assures both fluid streams are completely separated eliminating any potential for cross contamination.
- **FLEXIBLE DESIGN**
Modular design approach allows for a wide range of heat transfer surface area, physical shapes, plumbing connections, mounting styles... all configured around your preference.
- **HIGH RELIABILITY**
The *Kool-X™* product series has been engineered and manufactured with the highest quality components in the market resulting in years of maintenance free operation.
- **USER FRIENDLY**
Intuitive design makes it simple to install and operate.
- **SAFETY**
Optional process thermocouple and shell overpressure relief valve. CE, SEMI compliance.

Specifications

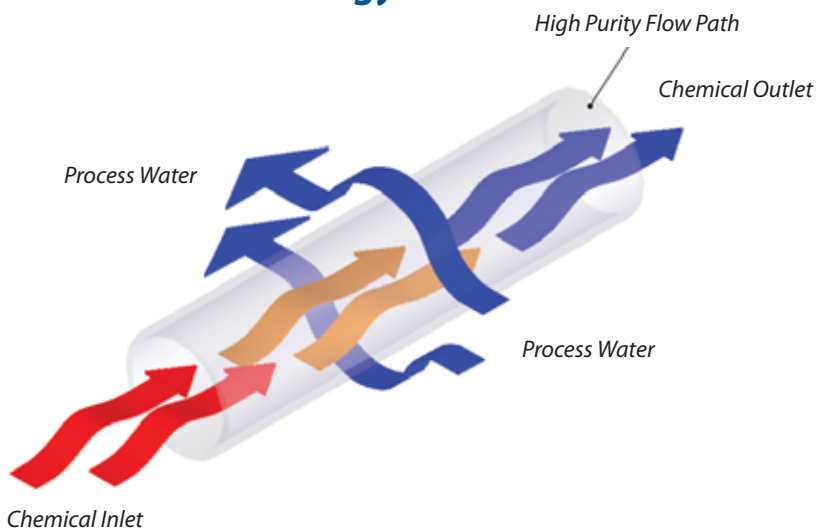
Tube Material	Teflon (PFA)
Shell Material	Polypropylene (other materials available)
Heat Transfer Area	Up to 100 m2 (1,076 ft2)
Max. Tube Pressure	Up to 689 Kpa (100 psig)*
Max. Shell Pressure	Up to 689 Kpa (100 psig)*
Fluid Connections	¼" to 2.0", Flare, Pillar, NPT, Tri-Clamp
Enclosure Material	Polypropylene, CPVC, others
Temperature Accuracy	±0.5°C (with integrated flow valve)
Compliance	SEMI, CE
Warranty	12 months

* Pressure rating will vary with temperature. Consult factory for additional information.

** Integrated flow control valve option requires a separate control module which can be provided by AIS.

Applied Integrated Systems reserves the right to change specifications without notice.

Flow Path Technology



Options

- Size of heat transfer area
- Shell material
- Process water filtration
- Process chemical filtration: 5", 10", or 20"
- Physical shape and mounting configuration
- Enclosure with integrated flow control valve
- Process thermocouple
- Extended warranty
- Additional options upon request

For more information, contact AIS at: sales@appliedintegratedsystems.com





KOOL-X™

ORDERING INFORMATION

Please contact one of our product specialists with your application requirements.

You may also e-mail us at sales@appliedintegratedsystems.com



CONTACT US

www.appliedintegratedsystems.com

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