

## ENVIREX™ TUBE-IN-TUBE HEAT EXCHANGER

The Envirex™ Tube-in-Tube Heat Exchanger is designed for optimal performance and versatility. The proven grooved piping system provides efficient heating or cooling of sludge with large return elbows to prevent clogging and sediment build-up. The modular design allows for flexibility and expansion in meeting changing requirements over time.

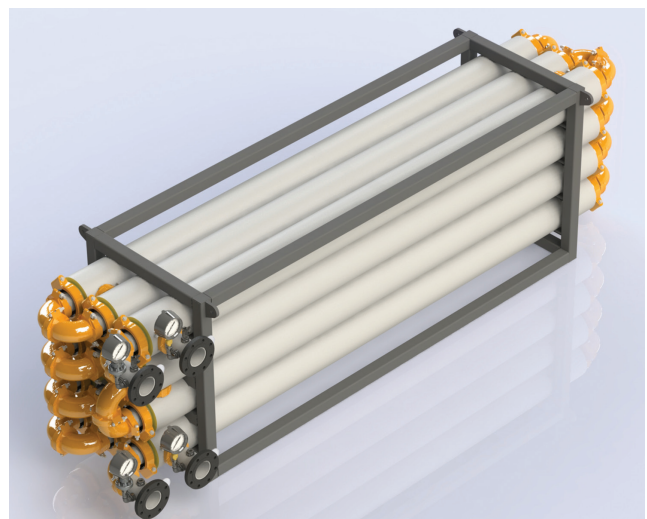
The Envirex tube-in-tube heat exchanger features a concentric tube design that consists of a smaller (4 or 6 inch) tube placed within a larger (6 or 8 inch) tube. The tubes are connected with grooved pipe fittings to prevent the leakage of sludge into the water or vice versa. Sludge is pumped through the smaller inner tube and water is pumped through the annular space between the two tubes, transferring heat between the fluids.

Units are sized based on the required temperature differential and can be custom designed to optimize footprint based on required heat transfer, tube configuration and unit length. Connections for sludge and water are provided with standard ANSI flange dimensions and orientation is customizable, making for a seamless retrofit solution. Sludge tubes are easily accessible for cleaning or replacement without draining system water.

Several options are available to optimize performance. Water tubes can be supplied with fiberglass insulation to increase thermal efficiency. A control panel can be provided for remote monitoring and integration into the

plant SCADA system. Units can also be combined with an Evoqua stand-alone boiler to provide a complete sludge heating solution.

Envirex tube-in-tube heat exchangers are factory assembled and tested. The grooved piping design is lighter weight than cast designs and provides for easier installation and handling. Field-erected systems are also available for areas with restricted access. Evoqua product engineers and service team can provide on-site inspections, engineering support, and process expertise for complete turnkey installation and repairs.



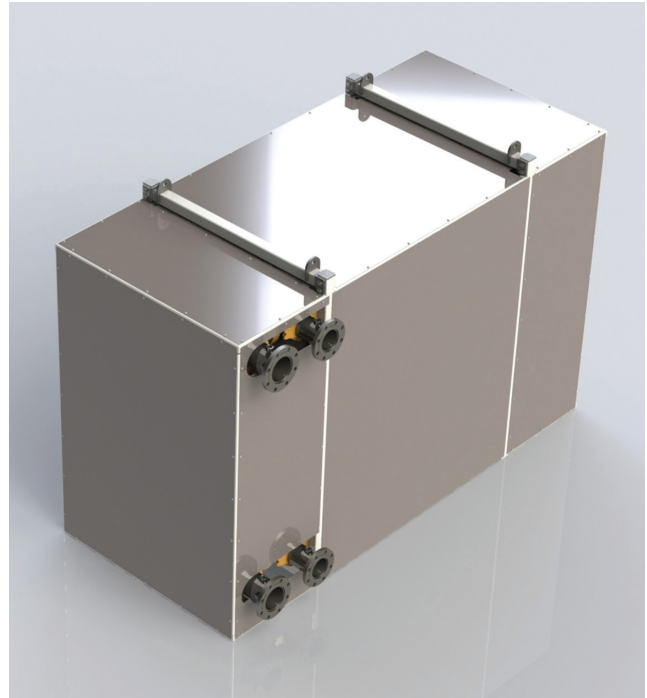
Envirex™ tube-in-tube heat exchangers are efficient and versatile.

### Envirex™ Tube-in-Tube Heat Exchanger Advantages

- Grooved piping system with proven performance
- Prevents clogging and sediment build up
- Low maintenance requirements
- Seamless retrofit solution
- Modular design for versatility
- Standard and custom units available

### Options

- Fiberglass insulation to increase thermal efficiency
- Control panel for remote monitoring and integration into SCADA system
- Combine with an Evoqua stand-alone boiler for a complete sludge heating solution



Envirex tube-in-tube heat exchanger with optional sheet steel enclosure

### Evoqua Services

Evoqua offers on-site inspection services to evaluate options for new equipment and rehabilitation or expansion of existing equipment. Our technical experts can assist you in selecting the best solution for your application. Evoqua also provides custom design, manufacturing, installation and rehabilitation services to meet your needs.



2607 N. Grandview Blvd., Suite 130, Waukesha, WI 53188

+1 (800) 345-3982 (toll-free) +1 (262) 547-0141 (toll) [www.evoqua.com](http://www.evoqua.com)

Envirex is a trademark of Evoqua, its subsidiaries or affiliates in some countries.

All information presented herein is believed reliable and in accordance with accepted engineering practices. Evoqua makes no warranties as to the completeness of this information. Users are responsible for evaluating individual product suitability for specific applications. Evoqua assumes no liability whatsoever for any special, indirect or consequential damages arising from the sale, resale or misuse of its products.

© 2017 Evoqua Water Technologies LLC Subject to change without notice MU-TUBE-HE-DS-0317