ControHeat® Electric Jackets

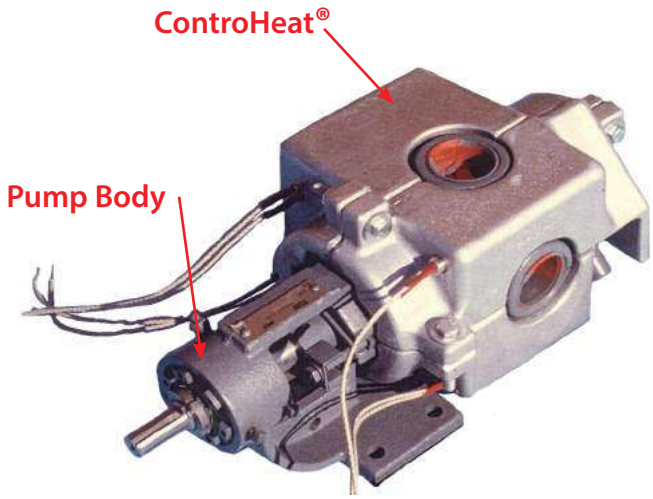
Engineered Thermal Solutions

Since its introduction over 40 years ago, CSI's ControHeat® jacket has been the preferred solution for heating valves, pumps, meters, fittings, flanges, and many other components. For environments without steam or hot oil resources, ControHeat® electric jackets ensure uniform heat transfer to process components for the purposes of heat-up, thermal maintenance, and melt-out.

Benefits

- **Complete Coverage:** ControHeat® jackets provide complete component coverage delivering superior evenly-distributed heating versus conventional alternatives that often leave critical process areas and heat sinks - such as flanges - exposed.
- **Advanced Performance:** Testing shows that the conductive benefits of ControHeat® electric jackets cannot be matched by multiple wraps of convective electric tracing.
- **Critical Dependability:** For applications where high maintenance temperature and heat-up rates are crucial to plant performance, ControHeat® electric jackets offer superior performance over conventional electric tracing.
- **Precise Control:** ControHeat® electric jackets can be manufactured for and equipped with RTD and thermocouple sensors to provide live feedback of process and/or jacket temperature.
- **Maintenance Friendly:** ControHeat® electric jacket design allows easy access to process component for maintenance and jackets can be removed and reused if the process component requires repair or replacement.

Inside view of UL-rated ControHeat® electric jacket highlighting intricate design that ensures uniform component heating.



ControHeat® electric jackets can be provided for pumps, meters, valves, strainers, and other process equipment. An inventory of 8000+ unique component patterns minimizes cost and fabrication lead-times.

Features

- Each ControHeat® electric jacket body is cast from copper-free aluminum (ASTM B179 Grade A 356).
- Each ControHeat® electric jacket are cast to "Fit Like a Glove" for the associated process component.
- ControHeat® electric jackets offer a range of heating methods including tubular heating elements, cartridge heaters, and UL-approved explosion-proof cartridge housings.

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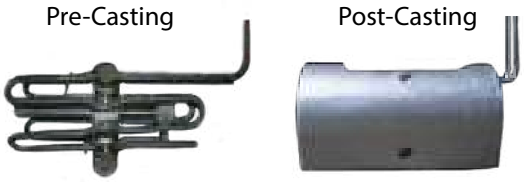
Design Options

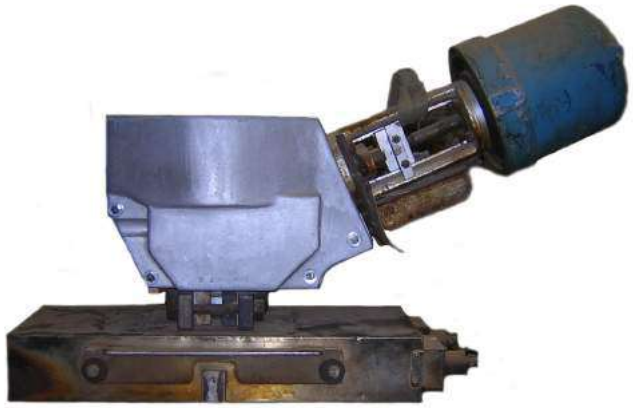
Removable Cartridge Heater With Optional UL-Approved Housing

Integrally-Cast Tubular Heating Elements



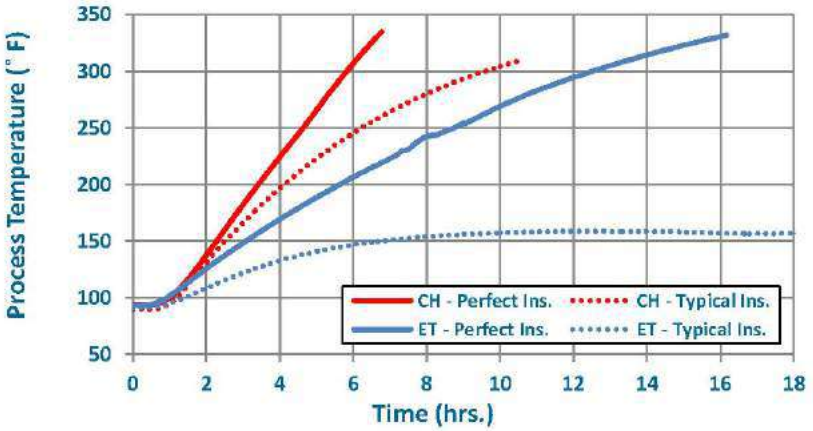
- **Heating Element:** ControHeat® electric heaters are engineered to meet specific process temperature requirements.
- **Design Range:** ControHeat® jackets can be utilized for applications with a maximum continuous temperature of 750°F.

Even challenging components such as Autoclaves (shown here) can be uniformly heated via CSI's electric ControHeat® jackets.



Heating Characteristics

- **Rapid Heat-Up:** Precise fit allows quick, uniform heating of component from ambient.
- **Temperature Maintenance:** Jackets are engineered for process heat-up and melt-out – as well as temperature maintenance during normal process operations.
- **Distributed Coverage:** Unlike conventional electric tracing, heat is more evenly distributed in CSI's ControHeat® electric jackets, minimizing the possibility of stress- and shock-related issues affecting heated equipment in high temperature (400°F+) applications.



Both perfect and typical insulation scenarios tested. ControHeat® jackets not only provide faster heat-up than conventional electric tracing, they also continue to perform well even when critical components such as insulation are compromised.