# ControHeat® Steam/Fluid Jackets

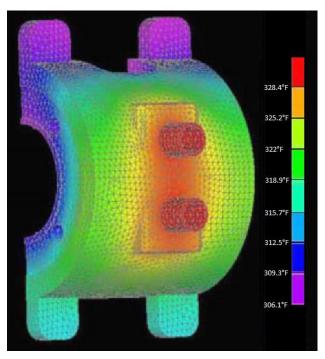
#### **Engineered Thermal Solutions**

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. Mounting directly to off-the-shelf line-size equipment, ControHeat® jackets ensure uniform heat transfer to process components for the purposes of thermal maintenance, heat-up/melt-out, or cooling.

#### **Benefits**

- Reduces Long Lead Times: Eliminates long lead time for fabricated jackets and field guess work when using tube tracing.
- Cost Effective: Most economical option when considering total installed lifetime costs and higher cost alternatives.
- Complete Heating: Provides evenly distributed heating across entire component.
- Easy to Install and Maintain: Eliminates need for special flanges and potential component damage from welding. Quick and easy removal for access to process component compared to alternatives.
- Reduced Operational Risk: Removes possibility of cross contamination (process ← heating media)





# **Standard Features**

- ControHeat® jacket body is cast from copper-free aluminum (ASTM B179 Grade A 356).
- Pressure containing insert fabricated from carbon steel (ASME rated SA-178 Grade A Boiler Tube). S/S optional.
- ControHeat® jackets are cast to "Fit Like a Glove" for specific process components.
- Pressure and temperature ratings up to 600psig @ 750°F.
- Thousands of ControHeat® patterns already in CSI inventory.
- Digital component scanning available to simplify logistics of creating ControHeat® pattern, when required.
- Optional Accessories Include ControCover Insulation Blankets and Flexible Pre-Insulated Jump-Over Hoses.



# ControHeat® Steam/Fluid Jackets

#### **Engineered Thermal Solutions**

## **Standard Design**

- Aluminum Heating Body
- Steel Pressure Insert
- **3** Heating Medium Inlet/Outlet
- Heat Transfer Compound (HTC not shown)
- **5** Adjacent Flange Heating (optional)

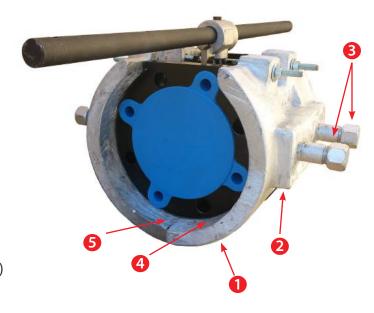
### **Design Application**

- Pumps (Diaphragm, Centrifugal Gear, Piston, and others)
- Valves (Ball, Gate, Check, Plug, Globe, Safety, Butterfly)
- Meters (Mass, Coriolis, Venturi, Vortex, Turbine, and others)
- **Joints** (Ball, Swivel, Expansion, and others)
- Other (Nozzles, Vents, Fittings, Flanges)



# **Ordering Considerations**

- Component size and flange rating (when applicable)
- Component manufacturer & model number
- Heating medium (steam, hot oil, water glycol, etc.)
- Heating medium connection (threaded, flanged, etc.)
- Service (sulfur, asphalt, polymer, food, pharm, etc.)
- Pressure / Temperature rating for jacket



### **Performance Comparison**

ControHeat vs. Tube Tracing

300
250
250
250
150
ControHeat
50
ControHeat
50
Steam Tracing
0
0
3
6
9
12
15
Time (Hours)

Heat up test of 8" gate valve with heavy weight oil.

