Controls Southeast, Inc

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Dear Customers & Friends:

Controls Southeast, Inc. (CSI) is pleased to bring you this application report regarding our jacketing technology for High Alloy Valves.

ControHeat Bolt-On jackets for valves, pumps, instruments, and pressure relief equipment continue to replace fabricated weld-on jackets as the preferred method for heating process equipment. More and more of our customers see the technical and commercial benefits across a broad range of processes and applications:

- ControHeat is so versatile, practically any piping component can be effectively heated
- With ControHeat, standard off-the-shelf components can be used
- The lead time for a ControHeat jacket is usually less than a weld-on jacket. The standard lead time for jacketing components for which a pattern exists is 15 working days and receipt of the component is not necessary.
- The cost of ownership for ControHeat is lower
- ControHeat is available for electrical service

Please call me or one of our Application Specialists if you have any questions or we can help with a particular application. We would be happy to serve you and make sure you are provided the best technical, most economical solution available.

Best Regards,
CONTROLS SOUTHEAST, INC.

Jackson Roper
Marketing Manager

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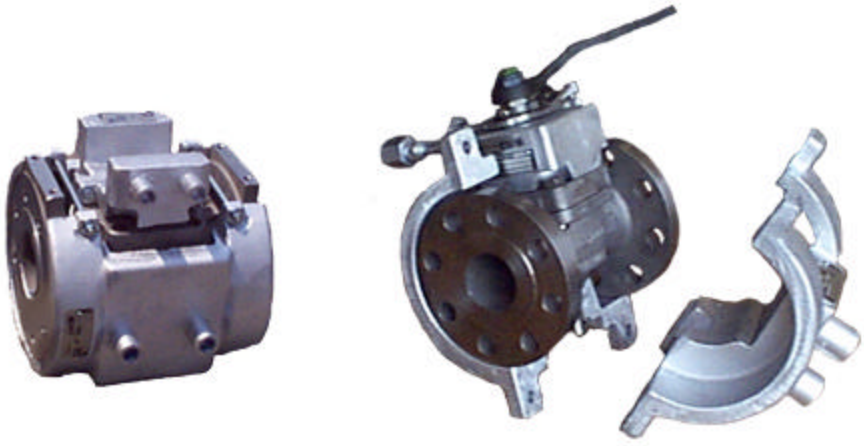
APPLICATION REPORT

CONTROHEAT BOLT-ON JACKET PREFERRED FOR HIGH ALLOY VALVES



ControHeat bolt-on jackets specified to maintain temperature of these expensive titanium McCanna Top Entry ball valves used in TMA (trimellitic anhydride) service.

ControHeat cast aluminum bolt-on jackets are the preferred jacket technology for use on expensive, high alloy process equipment. The ControHeat bolt-on jacket provides superior thermal performance versus a fabricated weld-on jacket in most applications without requiring modification of the original equipment and without the risk of cross-contamination between the process fluid and heating medium. Weld-on fabricated jackets typically employ oversize flanges making the valve very difficult to replace without long lead times and significant costs. Further, the heat input from welding the jacket to the valve can compromise the integrity of the seating surface often requiring it to be repaired and potentially impacting the life cycle of the valve. As pictured on the 4" McCanna S301 titanium ball valve, the ControHeat jacket design enables the bonnet area of the valve to be completely heated with a removable jacket. This allows for maintenance to be performed while the replacement valve is still installed in the process line. And, if the valve ever does needs to be replaced, you simply unbolt the jacket, install the new valve, and re-bolt the jacket.

ControHeat jackets are available for all types of process equipment including valves pumps, instruments and pressure relief equipment. This bolt-on jacketing technology has proven industry experience in process service including: acrylic acid, asphalt, bisphenol A (BPA), cyanuric chloride, dimethyl terephthalate (DMT), dinitro- toluene (DNT), hot melt-adhesives, phosphorus, phthalic anhydride (PA), polymers, sodium hydroxide (caustic), trimellitic anhydride (TMA), sulphur, and various food stuffs.

For more information on ControHeat bolt-on jackets, call Controls Southeast Inc. at 704-588-3030, or visit our web site at www.csiheat.com.