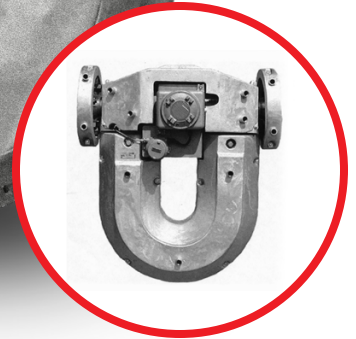
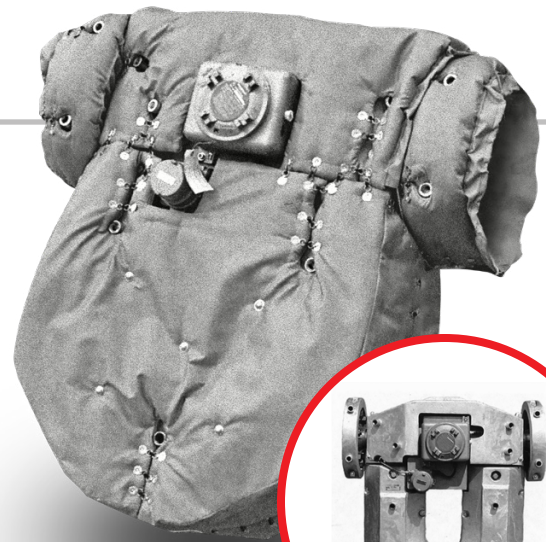




CSI CONTROCOVER REMOVABLE INSULATION

Now it's easy to insulate jacketed components with removable ControCover Insulation Jackets.

They'll save you money.



Ask a 10-year insulation craftsman in any processing plant, "What's your toughest insulation job?" Chances are, he'll tell you quickly, "Steam-jacketed valves, pumps, meters, and instruments." And he's talking about a very old insulation problem... for sulfur processing, chocolate processing, and asphalt processing, and many other products that must be maintained in a molten state.

The reason is, steam, or any fluid heating medium, goes into a jacketed component through one connector and it comes out another. These connectors normally are very close together. For the insulation craftsman they create laborious, time-consuming, custom-fit problems. Consider, for example, a jacketed control valve station with a jacketed block valve in front and one in back. The assembly may have six to 12 heating medium connections in a face-to-face span of only three feet. Insulators, working to standard time scales, quickly realize that doing the job right on a jacketed component takes three or four times longer than normal. Unfortunately, when these conditions exist, time and money end up on opposing sides, often resulting in shortcuts to level the playing field.

CSI ControCover Insulating Jackets address this problem head-on. The results are surprisingly positive:

- ControCover Jackets can be installed on jacketed components in a fraction of time required by conventional insulation techniques.
- The rugged construction of the jackets allows them to be installed, removed, and reused many times to facilitate quick turnarounds and unscheduled outages.
- Each ControCover Jacket is custom designed and manufactured for a particular jacketed component. All heating medium connections on the component are incorporated into the construction of a snug, flexible package of insulation.

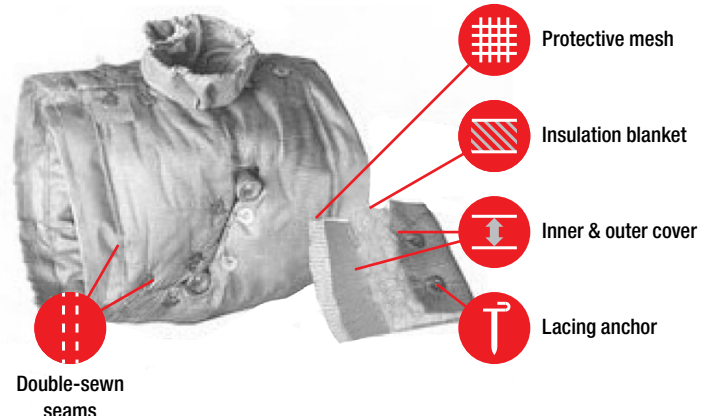
DESCRIPTION

ControCover Insulating Jackets are offered in many constructions to satisfy particular process requirements. The basic design of all the jackets, however, is very similar. The core material is a needed blanket of e-type fiberglass, or fiber-glass blended with other oxide fibers such as aluminum, calcium, and magnesium. The

blanket, usually 1-inch thick for most chemical plant applications, is sandwiched between an inner and outer layer of silicone-impregnated fiberglass cloth. Critical seams in the jacket are double sewn. Lacing anchors cinched together by nylon tie-wraps or soft, stainless steel wire provide jacket closure. A wire mesh of stainless steel may be fixed to the jacket to provide additional abrasion resistance to internal and/or external surfaces.

Many options

In the photo below, jacket components identified by callouts are available in an array of materials. For example, the thread used for the double-sewn seams usually is Teflon® coated fiberglass. If the service temperatures warrant the use, Teflon® coated stainless steel or quartz threads may be recommended. Several different inner and outer jacket materials in various weights are available, including Teflon® coated fiberglass for maximum chemical resistance. The thickness of the insulation inside the jacket can be varied to satisfy heat loss or personnel protection criteria. All of these materials of construction are supported with manufacturer's data that CSI can make available to customers requesting the information. CSI application engineers are also available to assist customers in choosing the optimum combination of jacket materials for their application.



SERVICE CONDITIONS

Although there are virtually no “standard” ControCover designs, the minimum continuous hot-side service temperature of a typical ControCover Jacket is 500 °F (260 °C). Higher service temperatures, to 1200 °F (649 °C), can be designed into the jacket.

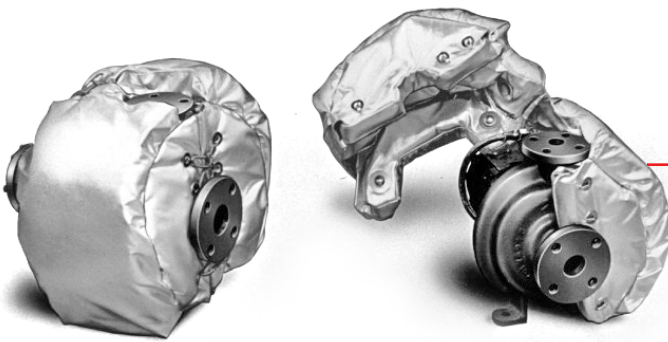
CONSIDERATIONS FOR USING CONTROCOVER INSULATING JACKETS

Solving customers' process heating problems is the primary business of Controls Southeast, Inc. We take great pride in our ability to marshal innovative engineering, design, and fabrication skills to meet difficult challenges of time and performance.

Our developed expertise resides in two technologies:

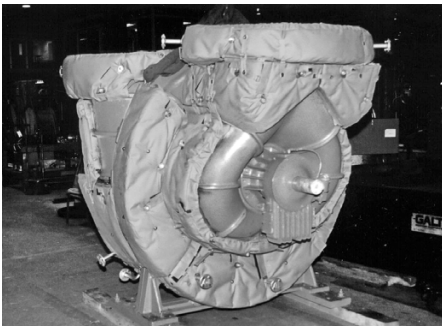
1. Metal fabrication to the highest standards of jacketed process piping and components, and
2. Bolt-on thermal maintenance products for various processing components manufactured throughout the world.

Each of these technologies focuses on making heat available to the process on demand. Naturally, we were aware that controlling heat loss from a process with insulation directly affects our efforts to put heat into the process. We also recognized another nagging problem with jacketed systems: effective insulation on jacketed components diminishes with each maintenance cycle. We developed removable ControCover Insulation Jackets to improve this regression. The basic concept of the ControCover Jacket is to offer our customers an insulation product that can be installed quickly and removed many times from process heating products that we manufacture. Each ControCover Jacket is custom made to accommodate the heating medium connections on the jacketed component to which it is fitted. On jacketed components that require frequent checks, inspections, or maintenance, ControCover Jackets offer substantial savings in labor and energy.



ControCover Jackets are an excellent insulation choice for rotating equipment subject to frequent maintenance checks.

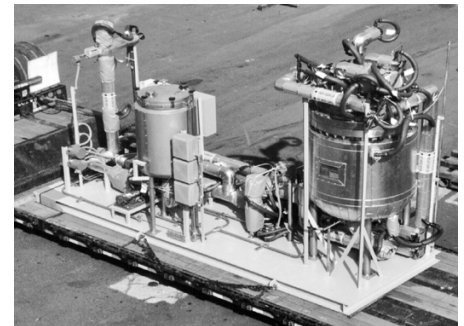
APPLICATIONS



This large blower fitted with special heating elements fabricated by CSI provides sweeping gas for sulfur storage pits. The ControCover Jackets help prevent sulfur condensation on the blower walls.



ControCover Jackets on flow meter at asphalt distribution station allows quick access to unit for calibration.



Manufactured by CSI, this modular unit uses ControCover Insulation on several jacketed components requiring frequent inspection.