Cast-In Heaters for Transfer/Feed Pipes

Tempco offers the perfect solution to heat Complex Transfer/Feed Pipes

Transfer pipes used in large-scale extrusion lines are difficult to heat because of their irregular geometry. They are not machined cylinders so proper contact and heat transfer are difficult to achieve.

Consequently, a special Cast-In Heater must be engineered for each pipe to accommodate its individual characteristics. Typically, this entails the customer sending the pipe to Tempco and our Engineering staff designing a Cast-In Heater System that will optimally fit the pipe. The quality of the process will be improved because hot spots and/or unevenly heated surfaces can be eliminated. In some cases, we cast the heater directly onto the pipe.

In the event that a cast-in heater cannot be made the conventional way for assembly into a machine part, Tempco has the expertise to directly attach a tubular heating element or a tube for cooling purposes to a customer supplied part.

By making a wood pattern with the required shape we can create a sand mold to encapsulate the entire assembly and pour the molten aluminum or bronze over the part.

Let Tempco’s Creative Team of Professionals Tackle Your Next Cast-In Thermal Component Project.

We Have the Technology, Infrastructure & Commitment to Exceed Our Customers’ Expectations.

Special Cast-In Process for Unusual and Complex Applications

The sample depicted in this picture represents the typical process. In this case, a tubular heating element is attached to a steel roller and is then placed in a sand mold prior to casting. After casting, the roller OD is machined per customer specifications — in addition, the aluminum roller will be vulcanized with rubber. The finished heated roller will be used in a laminating web press.