

## HAVE YOU HEARD?

## TTEC HAS BOILER TUBE THERMOCOUPLES FOR THE POWER INDUSTRY



Water and steam flow through boiler tubes is very important so that the system performs properly. A blockage inside a tube will cause many expensive problems, including overheating, tube rupture and forced shutdown of the unit. A blockage will be indicated by an elevated surface temperature. The tube surfaces need to be monitored at many locations so that blockages can be quickly detected. **The need:** A quick response, accurate, reliable & heavy duty thermocouple that can function over long periods within the boiler environment.

The TTEC Style 1050 Boiler Tube Thermocouple has been specifically designed for these conditions. It features a sealed MgO sheath for the entire length that is temperature & moisture resistant. The stainless steel sheath is rugged and mechanically tough but is also highly annealed so that it can be bent and formed during installation. The TTEC Style 1050 utilizes a V shaped double pad for high reliability and fast response. Unlike most competing brands where the measuring junction sits on top of the pad and can be affected by air currents external to the boiler tube surface, the **TTEC** style 1050 measuring junction is underneath the pad. This yields several important advantages. *First*, the measuring junction is in direct contact with the boiler tube surface and will indicate tube surface temperature changes must faster than other designs. Second, since the V shaped pad is located over the measuring junction, it will act as a radiation shield so that a more accurate indication of the boiler tube surface temperature will be provided by the thermocouple to the control room. The continuous sheath will traverse the entire boiler area and will exit through tapped openings in the boiler seal plate. This is possible since the Style 1050 features a same size potting sleeve and heavy duty transition at the cold end to insulated thermocouple wire. The thermocouples are connected to common junction boxes for each group of thermocouples.

The drum metal temperatures are also measured using the **TTEC style 1050**. Using a quantity of thermocouples to monitor drum temperatures will prevent distortion of its shape and protect the drum due to stresses from overheating.

Custom versions of the TTEC Style 1050 are also available.



## The big squeeze: Outage season rush orders!

Many customers decide to purchase these thermocouples while they are in the midst of an outage, when they can more easily take the length measurements needed. Meeting this need requires fast delivery of a usually sizable quantity of thermocouples within a very critical time window. These thermocouples can only be installed during an outage...so the pressure is on! **TTEC** excels at providing rush boiler tube orders for outages, scheduled or unscheduled, ensuring that the product arrives in time for installation.

We can also supply the entire package if needed. This includes the Thermocouples, Junction Boxes and all related mounting hardware and accessories...

Please contact us if we can help you in any way with your boiler tube thermocouple needs.

Check out our other Power Industry Products at our website: www.tteconline.com

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