

Newly Designed Electric Heat Trace System Eliminates Hazardous Chemical

Product Features:

- Real time data for temperature, heater current and ground leakage current.
- Stored data for highest and lowest temperature encountered.
- Alarm indication for low and high temperature, low and high heater current, ground leakage current and damaged RTD.

Problem: A large mid-Michigan chemical manufacturer had a couple of old, outdated heat trace systems in need of replacement. These two heat trace systems were both located in critical areas of the plant and any unscheduled shut downs or interruptions could not be tolerated.

The problems associated with the old systems was that they were hydronic and used tube tracing with SR1 as the heat transfer media. Over time the systems had become less reliable, harder to maintain and it was difficult to control the temperature. The heat exchanger tubes were fouled and leaked; the circulating pumps required frequent maintenance, seals failed, control valves failed and tube fittings leaked. The SR1 heat

transfer fluid is considered a hazardous substance, every time they had a leak a hazmat clean-up crew had to be called in to clean up and dispose of the mess. This cost the company additional time and money.

Solution: Kennedy Industries was contacted along with Thermon Manufacturing to design and supply two new electric heat trace systems. Thermon's engineers developed the heat trace system design and supplied the heat trace materials and controls. The customer's electrical contractor installed the heat trace cable and controller. Kennedy Industries provided contractor training, site inspections, start-up, commissioning, controller programming, owner training, follow up visits, troubleshooting and support.

The owner now has a reliable controllable system that doesn't use a hazardous liquid. The new electric heat trace systems control and monitoring capabilities provide accurate temperature control, individual circuit monitoring, flexibility for either ambient sensing control, line sensing control or a combination of both.

