

STEAM TURBINE POWER GENERATION CONDENSATION PREVENTION

Prevent instrumentation failures and frozen pipes during the cold season

Application

A steam turbine power generation plant must remain operational in the cold winter months because every day, thousands of customers depend on the electricity produced. Freezing conditions during the cold winter season can cause instrumentation to operate intermittently and eventually fail due to condensation of steam and impulse air. One example of this can be found at an El Paso Electric Company steam turbine power-generation plant where keeping systems operational during the cold season is critical. This can be challenging because often these types of systems include complex configurations of pipes, valves, pressure regulators, control valves, flow meters, etc. that are difficult to heat. Using traditional self-regulating heating cable is often very challenging to install due to the somewhat stiff and cumbersome nature of the semi-flexible heating cable. Coupled with the complex shapes of these systems and instrumentation devices, it can be very difficult to ensure an adequate amount of heat is transferred to the parts that need protected.

Solution

BriskHeat's XtremeFLEX® RKP silicone heating tapes are the perfect solution for these challenging applications. The RKP tapes have an ultra-thin profile with a super-flexible 1/4 in (6 mm) bend radius. No additional temperature controller is required because a built-in, preset thermostat continuously monitors and controls the temperature output of the heater. The complete unit is fully encapsulated in silicone rubber to provide an extremely flexible, durable, and moisture-resistant heater. The unique flexibility provides exceptional surface contact for maximum heat transfer and effectiveness around objects that have complex curves, bends, and contours. The heater is also preterminated with a power cord and electrical plug to provide quick and easy power connection. RKP silicone heating tapes are a true plug-and-play heater that is both easy to install and easy to maintain. This design makes the RKP an extremely versatile heater for a wide variety of indoor/outdoor installations.

It is always recommended to insulate any heating device to provide a safe and energy efficiency system. BriskHeat offers Silver Series 2 configurable and removable cloth insulators that are perfect for use with RKP heating tapes. Custom cloth heating jackets are designed to provide freeze protection by combining heater and insulation in an easy to install and remove design. BriskHeat's XtremeFLEX® HSAT heats up to 425°F to prevent condensation of steam lines. A thermostat is included for easy plug and play installation.

Note: Standard preset thermostat control options include a choice of 70°F (21°C) or 120°F (49°C). Standard lengths are available up to 200 ft (61 m). Standard watt density is 6 W/ft (17 W/m). Custom configurations are available upon request.



RKP



HSTAT

Industries

Chemical Processing/Extractions	Gas Handling
Energy/Power Generation	Heavy Industry/Mining
Gas & Oil	Water/Wastewater Treatment

Types of Users

Facilities Maintenance Personnel	Process Engineers
	Production Managers