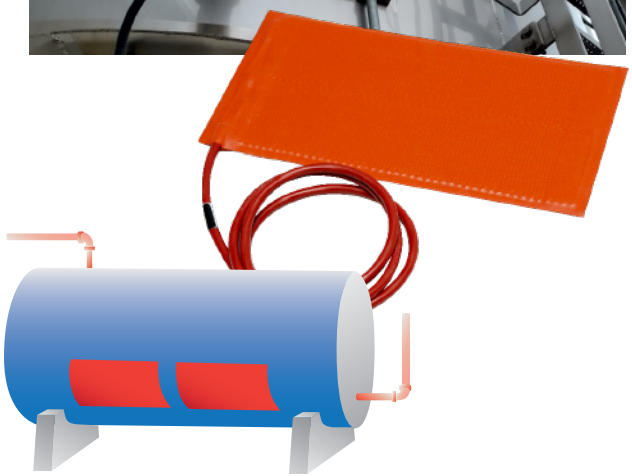
TANKS AND VESSELS FREEZE PROTECTION

A simple and efficient way to ensure the contents of tanks don't freeze in cold weather

Application

Tanks and vessels are often exposed to cold weather. Some are kept outdoors and exposed to the elements, while others may be indoors but in an unheated area of a building. If the conditions are cold enough, the contents of the tanks may freeze, solidify, or become too thick to flow properly, causing production stoppages or even damage equipment. Additionally, some liquids may suffer irreversible physical changes which could cause them to become useless or ruined. Downtime and replacement costs can be extremely costly.



Installation example

Solutions

SRL/SRP and SRW silicone heating blankets are the ideal solution to protect most tank contents from freezing. Once the appropriate required wattage is determined, several heating blankets can be symmetrically placed around a tank. The heaters are easily attached and held in place using built-in, pressure-sensitive adhesive. They are flexible to ensure good fit around curved surfaces, grounded for safety, and made with extra-thick water-resistant silicone rubber for extreme durability and long life. SRL/SRP are preferable in more rugged environments.

To increase efficiency and lower cost, a single BriskHeat TD101N temperature controller can be used to control the temperature of many heaters simultaneously. The TD101N is a preset automatic on/off thermostat temperature controller that turns the system on in cold conditions and off when it's warm. For freeze protection applications, the controller can be installed to monitor ambient temperature and only turn on when the temperature drops below the predetermined setpoint. For process control applications requiring an elevated temperature above ambient conditions, the controller can be installed to monitor tank temperature keeping its contents heated above a predetermined setpoint.

TD101N

Optional Accessories

Optional Insul-EZ™ foam sheet insulation provides increased thermal efficiency by reducing the amount of heat lost into the air. The insulation is easily cut to size and installs simply over SRL/SRP and SRW heating blankets using a peel-and-stick adhesive backing. The foam material is a closed-cell foam that repels most liquids and resists mold and mildew growth. An abrasion resistant outer layer provides excellent mechanical and environmental protection.

Types of Users

- Facilities Maintenance Personnel
- Process Engineers
- Production Managers

Industries

- Agriculture
- Asphalt/Concrete
- Chemical Processing/ Extractions
- Food & Beverage Processing
- Gas & Oil
- Manufacturing
- Paper & Pulp
- Water/Wastewater Treatment