

FOOD SHORTENING MELTING

An easy way to maintain liquid shortening as it is transported through pipes

Application

Food shortening is a solid fat made of hydrogenated vegetable oils. It is widely used in many bakeries and food production facilities as a cooking ingredient. It is commonly used for making breads, cookies, cakes, pies, pastries, and much more. It is often provided to high production commercial bakeries in a solid bulk form contained in bag-in-box containers. At room temperature, the shortening is a solid and difficult to process through pipe and tube systems on production lines. At an elevated temperature, the shortening softens, which reduces its viscosity and allows it to flow efficiently and pass through production lines. Keeping the shortening warm through the production process is a critical step to ensure the shortening doesn't solidify and cause blockages and costly downtime.

Solution

Install BriskHeat BS0 silicone rubber heating tapes onto pipe and tubing systems that transfer food shortenings. These tapes provide the necessary heat to maintain a reliable temperature needed to prevent the shortening from solidifying. They are extremely flexible to easily wrap around small diameter pipes and tubes. The heating element is encapsulated within a highly flexible silicone rubber, which increases its durability and makes it suitable for use in food-service environments. The tapes are connected to a temperature controller used to program and monitor heat output. BS0 tapes are an ideal solution for keeping the shortening liquefied and production lines operational.

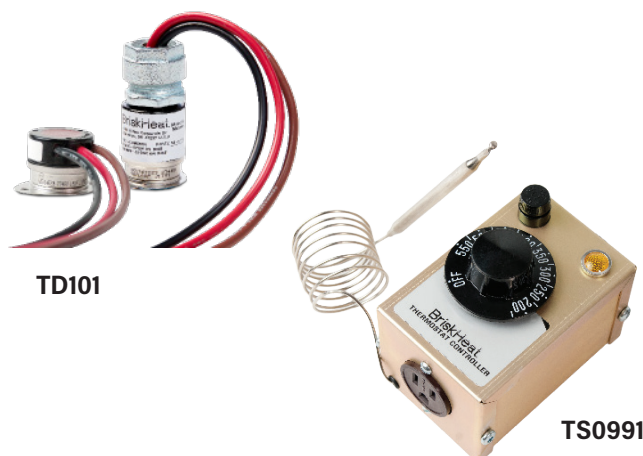
Viscosity control applications, such as melting shortening do not require tight temperature control. TD101 thermostats and TS0991 Bulb and Capillary controllers are low cost options for use with heating tapes and silicone heaters. TC4X Digital temperature controllers can be used in outdoor as well as indoor applications.



Note: The storage vessel/tank that attaches to the transfer pipe system may also need to be heated to initially melt the shortening. SRL silicone heaters are perfect for this application. One heater or a series of heaters can be attached to the outside of the tank to provide the necessary heat. Silicone heaters are thin, flexible, and durable heaters that are easily applied using an adhesive backing.

Alternate Solution

Some melting operations, such as blending chocolates, may be more temperature sensitive than others. Cloth heating jackets used with BriskHeat's LYNX® modules couple superior temperature uniformity with easy-to-use accurate PID control technology. Modules can be used to control other heaters such as BS0 tapes.



Industries

Food & Beverage
Processing

Types of Users

Production Managers
Maintenance Managers
Design Engineers