

IMPROVED FLOW DURING COSMETICS FILLING

Uniform heat makes for uniform filling speeds

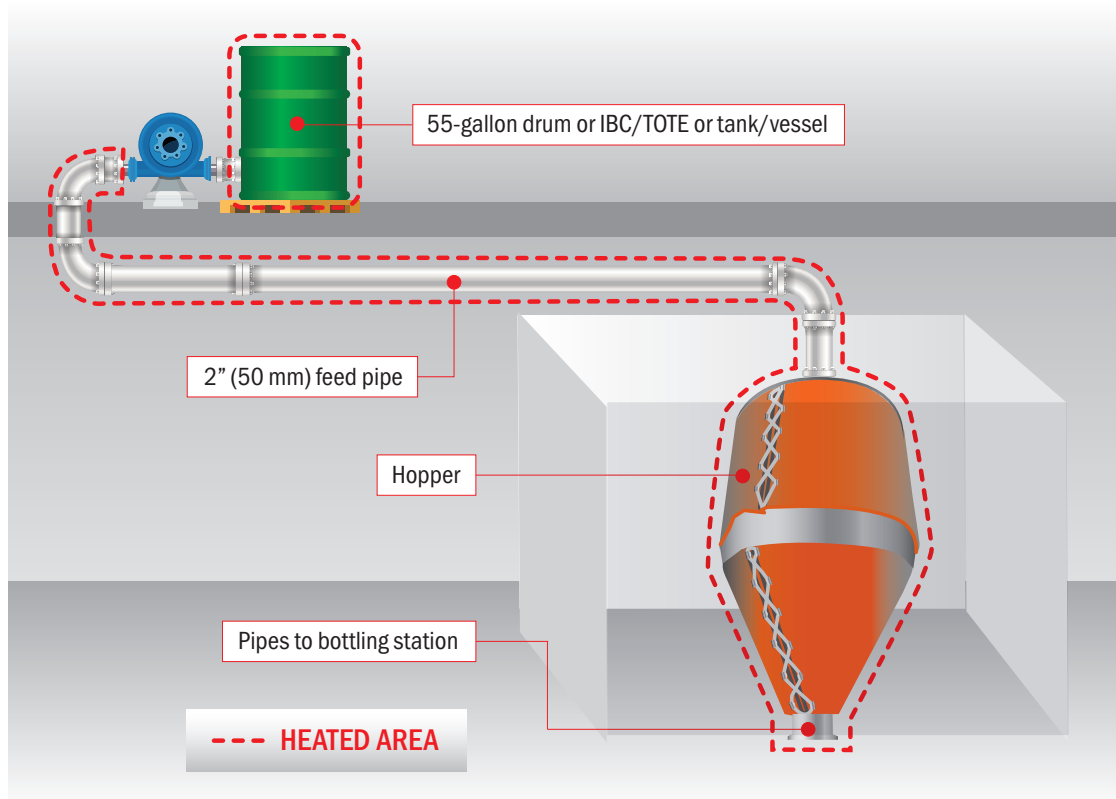
Application

Heat is important in cosmetic manufacturing as it helps make the creams and lotions more homogeneous. Heat is also required to reduce the viscosity of the liquids so bottles can be quickly filled to the proper levels. During the filling of cosmetic creams and lotions, temperatures need to be maintained between 86°F and 104°F (30°C to 40°C) to maximize flow. At the beginning of the filling process, there is often a system of drums/IBCs, transfer pipelines, and hoppers as illustrated below. Heat is needed throughout to maintain consistent flow. The application criteria from the customer indicated there needs to be an option for insulators to make the equipment safe-to-touch, heaters need to be moisture resistant with an IP rating of at least IP54, and heaters must be aesthetically pleasing.



Heaters need to be moisture resistant with an IP rating of at least IP54, and heaters must be aesthetically pleasing.

EXAMPLE OF SYSTEM CONFIGURATION AND WHERE HEAT IS APPLIED:



Solution

BriskHeat was able to offer the customer a choice of two total solutions, one insulated and one uninsulated. Both options provide the heat necessary to decrease filling time and prevent buildup of liquids in the system that could potentially stop production. The solutions are moisture resistant and easy to install. Heaters can be removed for maintenance and then reapplied when the system returns to production. Insulated jackets have the added benefit of reducing energy use. BriskHeat's heating solutions are durable and will provide years of trouble-free operation.

Drum Heaters

Silicone rubber drum heaters include an adjustable temperature controller and have a spring closure of easy on/off installation. Multiple heaters can fit around the drum to add additional heat if drums are more filled. Full coverage drum heaters are available for dry or wet-area installations. Insulated drum heaters are available with single or dual heating zones.

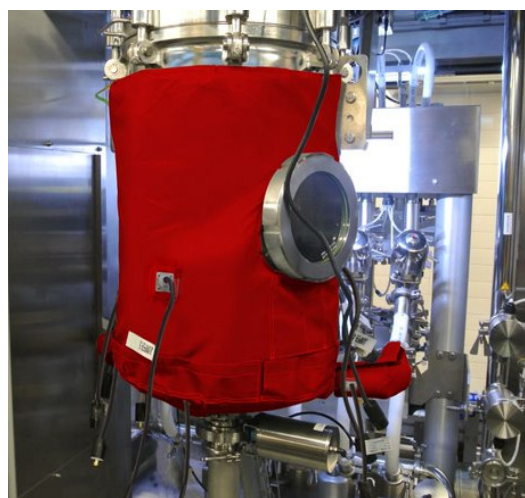
Hopper Heaters

Hoppers can be heated with multiple SRL standard silicone rubber heating pads. These are available with pressure-sensitive adhesive (PSA) to secure them to the surface being heated. For more complete coverage, custom silicone heaters can be designed to fit a contoured shape such as a cone. These can include holes or cutouts for pipes or ports. Likewise, custom cloth heaters with insulation can accommodate most hopper features. Transfer Pipelines need to be heated to prevent clogging.

XtremeFLEX® Silicone Rubber heating tapes can be wrapped around tubes and pipes as small as 1/2 inch. These are available in widths of 1/2, 1, and 2 inches, and some models include thermostats. Custom cloth heaters are available for pipelines; however, Silver-Series 2 insulators are designed to cover pipes and fittings.

Temperature Sensors

Heaters in these solutions need to be controlled. Sometimes this is achieved with built-in thermostats, however, single or multiple zone temperature controllers such as the TC4000 or MPC2 can be added. Custom cloth jackets are often provided with a docking station to add a LYNX® controller.



Industries

Cosmetics/Personal Care	Manufacturing
Life Science/Medical/	
Pharmaceutical	