COSMETICS AND OTHER LIQUID PROCESS HEATING

The Total Heating Solution for the cosmetics’ manufacturing process

Application
Manufacturing cosmetic creams and lotions involves an emulsion process in which an oil, wax, and/or fat component is combined with a water component and an emulsifying agent. The combination is heated to an elevated temperature of 150 to 160°F (66 to 71°C). During the progression from development to dispensing, the lotion passes through a series of storage and transportation devices. These may include the mixing/holding tank, transport lines, a pump, a valve, a hopper, and the dispenser. Throughout the process it is critical that the elevated temperature be accurately maintained. Even distribution and precise temperature control is critical to this application to prevent hardening or scorching and is necessary for the formula to be consistent from one batch to the next.

Solution
BriskHeat manufactures surface heating products, insulators, and a precise modular control system that will meet all these requirements. Surface heating products and insulators for this application include:
- Silicone Rubber Blankets – Attach to the sides of tanks and hoppers
- Silicone Rubber Tapes – Run along transport lines or around pumps and valves
- Cloth Heaters – Wrap around pumps and valves
- Cloth Insulators – Installed over blankets and tapes
To ensure that the heating products maintain the required temperatures, BriskHeat’s PID temperature control system is used. It features individual modules that control each component of the process. The performance of each heater can be independently monitored through a large full-color touchscreen, the modules’ highly visible displays and indicator lights, remote monitoring, or email alerts. Additional features of the system include:
- Accuracy up to 0.25°C (0.45°F) for maximum precision
- Low and high temperature alarms for safety
- Self-diagnostics of heaters and sensors for peace of mind
- USB port for easy data downloads
- Zone-locator for easy performance identification
- Idle mode setting for energy savings and improved safety

Additional Uses:
Many other industries have multiple-step processes that need temperature-controlled solutions. BriskHeat can design almost any flexible heater, insulator, and temperature controller system to meet those application requirements.

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