

Cooking and Pasteurization for Food & Beverage Applications Optimization for your process heating system

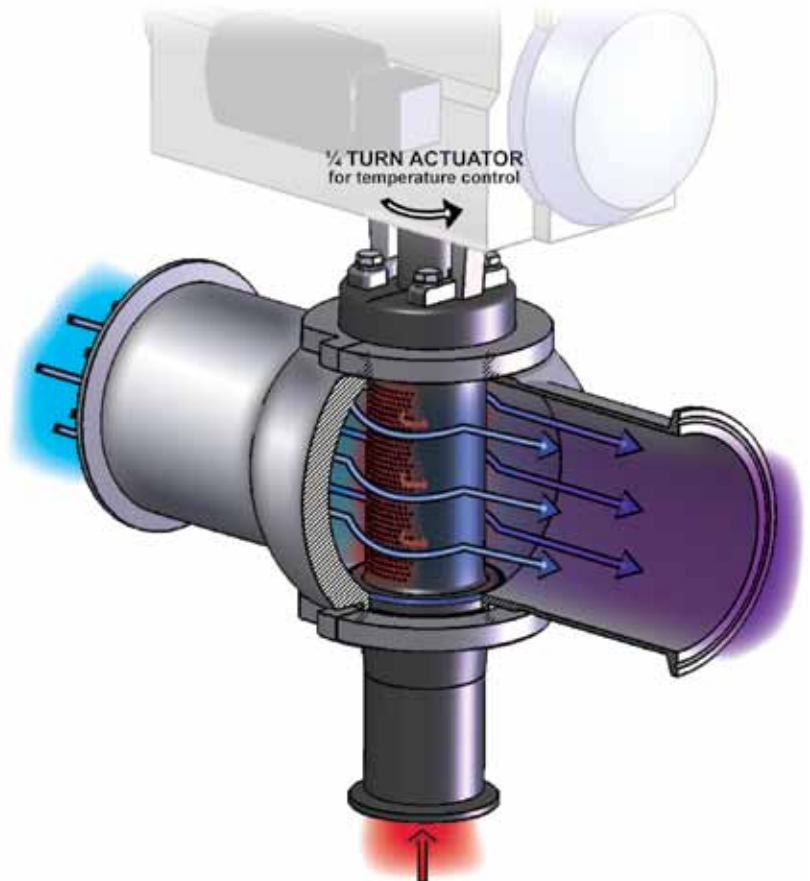
The Sanitary Solaris® is the newest generation of process heating equipment. Using Mach® trim steam injection technology, the Sanitary Solaris provides instantaneous, uniform, and gentle, but effective heating of your food products. In a continuous or batch system, from lab scale flows of .5t/hr to high capacity 25t/hr, this heater is hygienically designed to clean-in-place standards and is easily disassembled for quick changeover of recipes.

With this workhorse product, the temperature dispersion is homogeneous for viscosities typically up-to 20,000 cps (Newtonian) and 200,000 cps (Non-Newtonian) and will improve processes for: tomato/pasta/pizza/cheese sauces, starch slurries, dressings, mayonnaise, dairy products, baby food, protein slurries, jellies/jams, and ready/pasteurized soups.



Fully Optimized Design

- » Hygienic design
- » Simple control mechanism for exact temperature output
- » Standardized design with engineered trim customizes the heater to your specific requirements
- » No wearing parts in the product zone
- » Superior CIP capability
- » All wetted parts polished to 32Ra finish



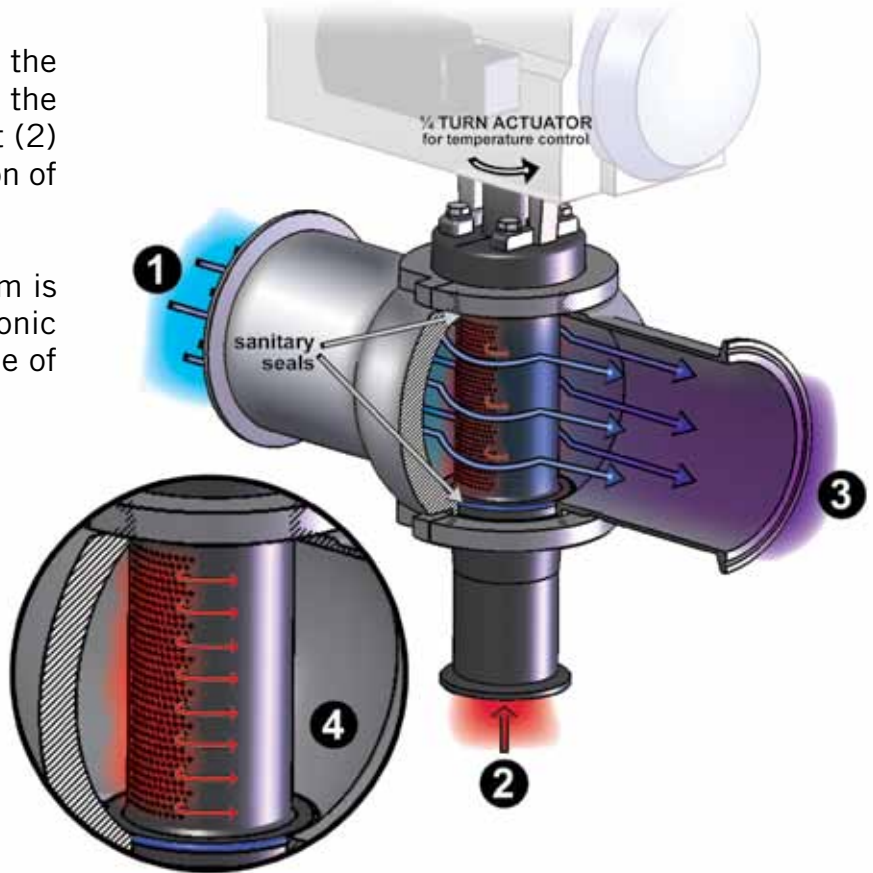
How the Sanitary Solaris® Works

Product enters the heater (1), flows past the MACH® diffuser (4) and is discharged at the outlet (3). Full pressure steam enters at inlet (2) and travels up through the stem plug. Rotation of the stem plug controls steam flow.

To achieve precise temperature control, steam is uniformly metered (4) into the product at sonic or near-sonic velocity by exposing a multitude of small diffuser holes.

- » Evenly exposes product to steam for homogenous temperature variation
- » Maintains integrity and minimal damage to ingredients
- » Improves color and taste
- » Minimizes product burn-on and extended run times

Solaris® patents found at:
<http://www.hydro-thermal.com/patent>



Standard Product Specifications

- » **Size Range:** 1½", 2", 3", 4", 6"
- » **Pressure/Temperature Rating:**
150 psig @ 400°F [10 barg at 204°C]
- » **Body Material & Wetted Parts:**
Stainless 316L or AL6XN
- » **Process Connections:**
Tri-Clamp or I-Line
- » **Steam Connections:**
Tri-clamp, ANSI Flange or I-Line
- » **Actuator:**
Pneumatic actuator with integrated positioner

Compliances and Certifications

- » Designed to ASME Sec VIII, Div. 1
- » CE/PED and CRN compliant
- » FDA and 3A approved seal material
- » Designed for:
3A (#61-01)
USDA-AMS
USDA-Dairy
EHEDG