

When shear or process flexibility is critical in a sanitary system, the Hydron™ Sanitary Hydroheater is your food-grade processing solution.

Featuring on-the-fly adjustability for your process conditions, the Hydron Sanitary Hydroheater is your solution to guaranteed results. Utilizing design and controls for both your mixing and shear applications, the Hydron is what you need for a sanitary process.

#### **BENEFITS**



**Reduce** energy costs through operational efficiency



Adjustable controls for mixing and/or shear



**Certified** sanitary design



**Precise** temperature control



Scalable design & components

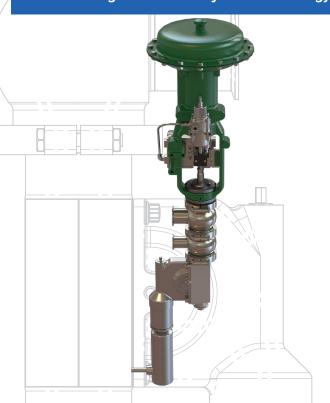
### PERFORMANCE GUARANTEE



#### Confidence

100% performance guarantee gives you peace of mind that our products will perform as specified for your application.

The Hydron Sanitary Hydroheater is the optimal heating technology for your sanitary environment. It is the only solution with adjustable shear rates available using direct steam injection technology.



HYDRO-THERMAL

The Perfect Temperature. Every Time.

## PROCESS FLEXIBILITY TO THE HIGHEST DEGREE

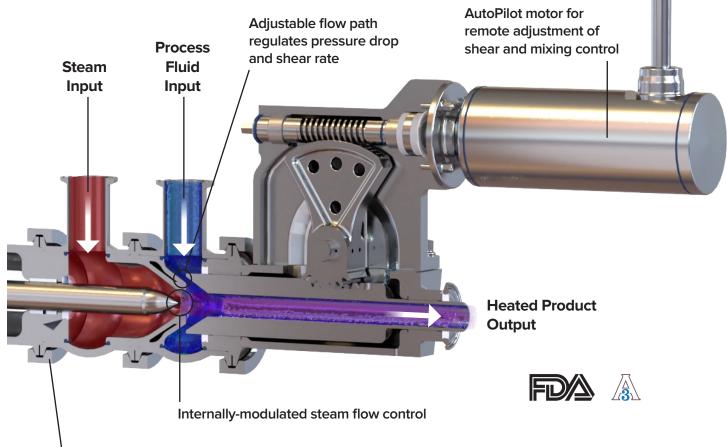
Precise heating and temperature control are essential characteristics in crafting a quality product. Having sanitary practices in place is mission critical to your brand and your brand experience. The Hydron is a revolutionary direct steam injection solution with a certification that keeps your processes clean and sanitary.

The Hydron Sanitary Hydroheater's advanced direct steam technology utilizes precise temperature control and our AutoPilot motor allows for an adjustable flow path to optimize your mixing and/or shear control. With sanitary design standards and FDA approved seals for Clean-in-Place capabilities, this proven, cast body technology is built for food-grade processing and stable performance.

#### **FEATURES**

- Operating stability across a full range of process conditions
- Precise temperature control within
  +/- 1 degree
- Scalable design to allow for future adjustments
- Self-cleaning design eliminates scale build-up and product fouling
- Automatic, Manual, and Fixed combining tube designs to help optimize process conditions





Modular tri-clamped design allows for easy disassembly and maintenance

# PECIFICATIONS

## **Sanitary Hydroheater**



#### **Applications**

Baby Formula **Dairy Products** Whey Permeate Ingredient Water Inline Cooking (Meat Slurries, Soup-Base) Product/Ingredient Sterilization Starch Cooking (Gravy, Cream Corn) Adjunct Mashes (Corn, Rice, Unmalted Barley, etc.) Standard Brewers Malt Mashes (Up to 25% dry solids)

#### **Industries Served**

Food Processing Dairy Pet Food Fermentation Brewing Cosmetics Pharmaceuticals

#### **Technical Information**

#### **Actuation** Pneumatic steam control

actuator with fail close Electric drive for shear/stability control

Manual Combining Tube Adjustment option included (Upgrades available)

#### **Materials Of Construction**

316L - Standard AL-6XN - Corrosive applications

### **Connection Types**

ASME BPE Tri-Clamp

Other custom sanitary connections available

#### **Pressure & Temperature**

195 psig @ 400°F 13.4 Barg @ 204°C

Sizing & Process Parameters	A410	A415	A420	A425	A430	A440
Steam Inlet (in./mm.)	1.0 / 25.4	1.5 / 38.1	2.0 / 50.8	2.5 / 63.5	3.0 / 76.2	4.0 / 101.6
Process Inlet (in./mm.)	1.0 / 25.4	1.5 / 38.1	1.5 / 38.1	2.5 / 63.5	2.5 / 63.5	4.0 / 101.6
Outlet (in./mm.)	1.0 / 25.4	1.5 / 38.1	1.5 / 38.1	2.5 / 63.5	2.5 / 63.5	4.0 / 101.6
Min. Flow (GPM/m³/hr)	1.0 / 0.2	9.0 / 2.0	30.0 / 6.8	40.0 / 9.1	60.0 / 13.6	90.0 / 20.4
Max. Flow (GPM / m³/hr)	27.0 / 6.1	60.0 / 13.6	60.0 / 13.6	200.0 / 45.4	200.0 / 45.4	460.0 / 104.5
Weight (lbs./kg)	60 / 27	69 / 31	69 / 31	96 / 44	96 / 44	130 / 59

#### THE GLOBAL REACH OF HYDRO THERMAL

From the original Hydroheater® developed in 1934 to our latest designed and engineered solutions today, we harness the power of steam. We design, engineer, and deliver ultra-precise and dependable heating solutions that optimize temperature control, increase energy efficiency, and minimize maintenance requirements.

With more than 20,000 installations in 90+ countries - all backed by our 100% performance guarantee - we help you achieve The Perfect Temperature. Every Time.











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