

Bantam-Series

MicroThermics® research systems match production thermal processes, so your product can go from the lab to production in one step. By rapidly producing accurate iterations of products, and substantially reducing your time to market, our systems make your research more cost effective than any other method. Our Bantam-Series are very low flow, electrically heated, UHT/HTST (Ultra High Temperature & High Temperature Short Time) processors. They are attractive to researchers looking to create very small batches of products ranging from juices & milk, to yogurts. In addition to HTST and UHT processing, they can perform hot filling and other continuous cooking processes. These processors are simple to operate, extremely flexible, and have an extensive upgrade path to support your R&D as it expands. By accurately simulating the whole production process, we eliminate the major cause of wasted time and money: failed plant trials.

In short, an investment in a MicroThermics' system saves valuable time and money.

Capabilities: Flow 0.3-2.5 liters/min.

Process Ranges

Model	Preheater	Final Heater	Viscosity Range	Hold Times (sec.)*
HTST-E1S	to 250° F (121°C)	NA	Low to medium	12, 18, & 30
UHT/HTST-EDH	to 250° F (121°C)	170°-305°F (76°-152°C)	Low to medium	12, 18, & 30

**Custom Times Available*

Processes- Batches as small as 1 liter

- UHT Processing:
 - Aseptic Processing
 - Extended Shelf Life (ESL)
- Ultra Pasteurization
- HTST Pasteurization
- Continuous Cooking
- Hot Filling
- Hot Filling with hold
- and More

Products- Model Dependent

- Milk and Flavored Milks
- Nutritional Supplements
- Fruit Concentrates
- Enteral Feeds
- Juices, Teas and Coffee
- Juices with pulp
- Broths
- Fruit Concentrates
- Apple Sauce, Yogurts
- Puddings and More!

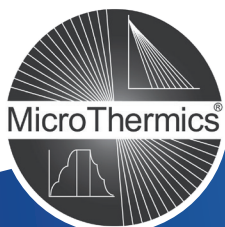
Physical Requirements

Utilities

- City Water
- Cooling Water
- Electrical: 3Ø, 220, 440, 380 Volt
- Electrical: 1Ø, 110/220 Volt
- Drainage: standard 1.5-2" drain

Dimensions

- Bench Top Height: 38" (.97 M)
- Bench Top Depth: 32" (.85 M)
- Length: 40.5" (1.02 M)
- Height: 68" (1.74 M)



EASY, AFFORDABLE, PROCESS ACCURACY!

Overall Flow Diagrams (Electric Water Heaters)

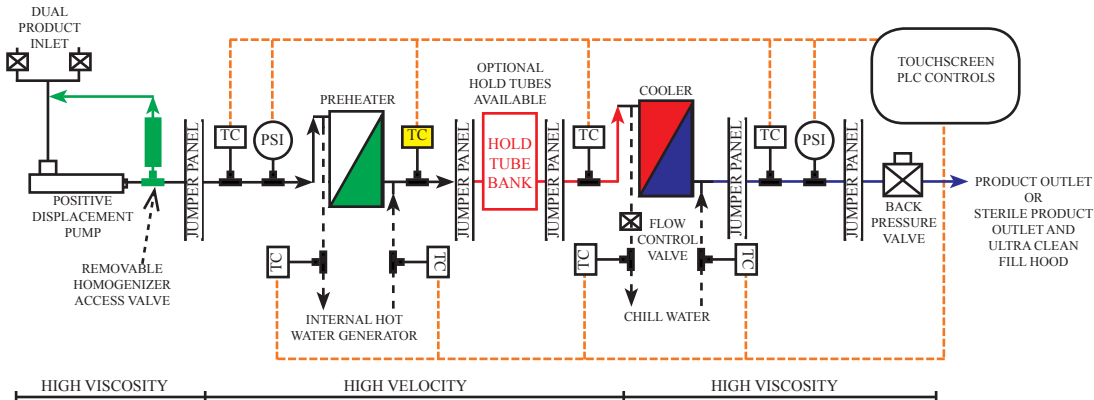
Features and Options

Features

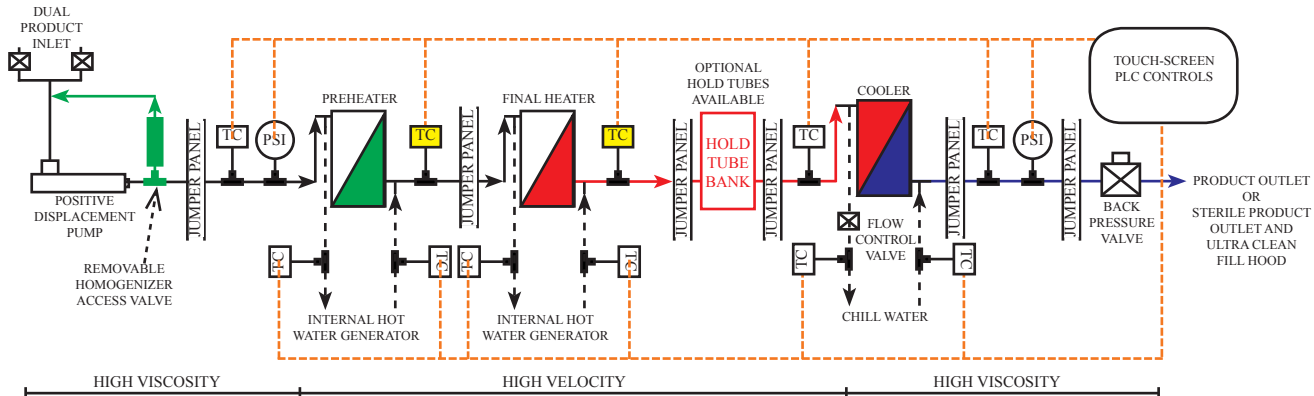
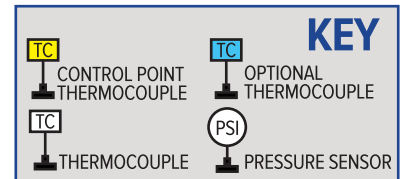
- PLC Control & Data Acquisition
- Sanitary Design
- Simple Operation
- Dual Product Inlet
- Vari-Speed Product
 - Adjustable flow rate & hold times
- Three Hold Tubes
- Product Cooler
- Back Pressure Valve
- Jumper Panel
- Laboratory Bench Enclosure w/sink

Options

- Added Hold Tubes & Coolers
- Added Temperature/Pressure Sensors
- Alternate Heat Exchangers (i.e. plates)
- Automatic Filling Control
- CE marking, NRTL Stamp
- Clean-Fill Hood/Sterile Product Outlet
- Enhanced PLC Control/Data Logging
- In-Line Homogenization
- Run Dry Protection & Mix Tanks
- Steam Injection Process Module
- Steam Generators, Water Chillers
- Spare Parts & Tool Kit, & More!

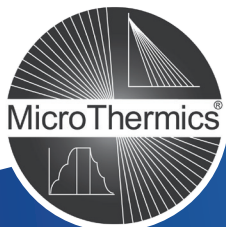


**-UHT/HTSTLab-25 Bantam EDH
HTST Process (Single Heater)**



**-UHT/HTSTLab-25 Bantam EDH
UHT or HTST Process
(Two Heater)**

CE



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