MicroThermics[®] UHT & HTST Processing Equipment

Lab, Pilot, & Small Scale Production Processors Speed Development & Decrease Costs





E-Development or S-Development UHT/HTST Processor with -in-line homogenizer -AseptilabTM Ultra Clean-Fill Hood -Sterile Product Outlet -Automatic Fill Control -Full Technical Support

Electra, Flex, Bantam or Mini UHT/HTST Processor -in-line homogenizer -AseptilabTM Ultra Clean-Fill Hood -Sterile Product Outlet -Automatic Fill Control -Full Technical Support





VEROS UHT/HTST Processor -in-line homogenizer Available with -Aseptilab™ Ultra Clean-Fill Hood -Sterile Product Outlet -Automatic Fill Control





Simulate the whole process, not just the hold tube with equipment designed for researchers by researchers.

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MicroThermics[®] Laboratory Processing Equipment

E-Development Series

These UHT/HTST processors are ideal for researchers and labs that do not have steam, but need maximum flexibility for product and process capabilities. They can process products including juices, drinks, milk, milk drinks, soy milk, ice cream, yogurts, puddings, cheese sauces, custard and more (model dependent).

These are <u>electric</u> UHT/HTST Processors with PLC controls, data acquisition, tubular and/or plate heat exchangers, and <u>5 internal</u> <u>hold tubes</u> in a <u>1.8 meter wide cabinet</u> that rolls through standard doors. They have a standard flow rate of <u>1 L/min</u>, with operational flow rates of up to 3 L/min. (and higher for CIP cleaning). These processors can be connected to wide range of our options including in-line homogenizers, AseptilabTM Ultra Clean-Fill Hoods, sample port coolers, steam injection modules, & more.

S-Development Series

These UHT/HTST processors are ideal for researchers and labs that have steam, and need maximum flexibility for product and process capabilities. They can process products including juices, drinks, milk, milk drinks, soy milk, ice cream, yogurts, puddings, cheese sauces, custard and more (model dependent).

These are <u>steam</u> heated UHT/HTST Processors with PLC controls, data acquisition, tubular and/or plate heat exchangers, and <u>5 internal hold tubes</u> in a <u>1.8 meter wide cabinet</u> that rolls through standard doors. They have a standard flow rate of <u>1 L/min</u>, with operational flow rates of up to 3 L/min. (and higher for CIP cleaning). These processors can be connected to many of our options including in-line homogenizers, AseptilabTM Ultra Clean-Fill Hoods, sample port coolers, steam injection modules, & more.

Electra Series (all electric) and Flex Series (Steam Heated)

These UHT/HTST processors are ideal for researchers and labs that have limited floor space, but need maximum flexibility for product and process capabilities. They can process products including juices, drinks, milk/drinks, soy milk, ice cream, yogurts, cheese sauces, custard and more (model dependent).

These UHT/HTST Processors can be purchased with tubular or plate heat exchangers, and have PLC controls, data acquisition, <u>2 internal hold</u> tubes (combine for 3 times) in a <u>1 meter wide cabinet</u> that rolls through standard doors. They have a standard flow rate of <u>1 L/min</u>, with operational flow rates of up to 3 L/min. (and higher for CIP cleaning). These processors can be connected to wide range of our options including in-line homogenizers, AseptilabTM Ultra Clean-Fill Hoods, sample port coolers, steam injection modules, & more.

Bantam (All Electric) and Mini (Steam Heated) Series

These UHT/HTST processors are ideal for researchers and labs that have limited floor space, but need flexibility for product and process capabilities. They can process products including juices, drinks, milk/drinks, soy milk, ice cream, yogurts, and more (model dependent).

These UHT/HTST Processors utilize PLC controls, data acquisition, tubular or plate heat exchangers, and <u>2 internal hold tubes (combine for 3 times)</u> in a <u>1 meter wide cabinet</u> that rolls through standard doors. They have a standard flow rate of <u>.5 L/min</u> with operational flow rates between .3 to .8 L/min. (higher for CIP cleaning). These processors can be connected to many of our options including inline homogenizers, AseptilabTM Ultra Clean-Fill Hoods, sample port coolers, steam injection modules & more.

Steam Injection Series

These processors are ideal for labs that require unequaled process flexibility in a single piece of equipment. They have HTST & UHT capabilities with <u>indirect as well as direct steam injection heating</u>, vacuum cooling and <u>2 internal hold tubes (combine for 3 times</u>). At just <u>1.8 meters long</u>, these processors operate a standard flow rate of <u>1 L/min</u>, with operational flow rates between .3 to 3 L/min. (model dependant). They can process products including juices, drinks, milk, soy milk, ice cream, yogurts, puddings, cheese sauces, custard and more.

These processors can be connected to wide range of our options including in-line homogenizers, Aseptilab[™] Ultra Clean-Fill Hoods, sample port coolers, steam injection modules, data acquisition, & more.

VEROS Series

These steam heated UHT/HTST processors are ideal for researchers and labs that have limited floor space and are willing to trade some flexibility for a lower capital cost. They can process products including juices, drinks, milk/drinks, soy milk, ice cream, yogurts, and more (model dependent).

These UHT/HTST Processors have PLC controls, tubular heat exchangers, and <u>2 internal hold tubes</u> in a <u>1 meter wide cabinet</u> that rolls through standard doors. They have a standard flow rate of <u>.5 L/min</u>, with operational flow rates between .3 to .8 L/min. (higher for CIP cleaning). These processors are available with water or steam final heat, in-line homogenizers, and our AseptilabTM Ultra Clean-Fill Hoods,.

Microwave Series

These UHT/HTST Processors utilize focused microwave technology to heat the product to process temperatures. Product then follows traditional processing steps including hold tubes and coolers. The microwave heating enables the product to be heated through the most damaging temperatures instantly, thus reducing loss of quality due to heat exposure. This is a new technology and is currently being used to produce aseptic sweet potatoes as well as for botanical extractions. These processors can be used with most of our other options.



This technology enables many new products that cannot be processed with traditional heating methods to now be produced.