

HT220 Laboratory Heat Treatment System

# Inline Pasteurization and Sterilization

The most complete lab HTST/ UHT system



Tubular Heat Exchanger

Plate Heat Exchanger

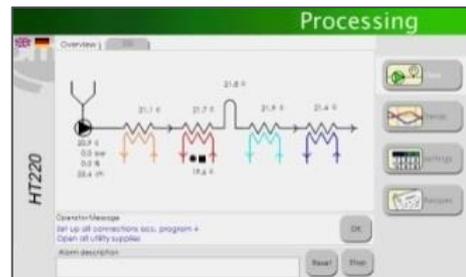
Direct Steam Injection

Scraped Surface Heat Exchanger

The compact HT220 system enables you to run a trial with less than 3 liters of product. This reduces the required amount of ingredients, preparation time, start-up time and processing time. Moreover, the HT220 allows you to conduct more trials in a day, improving your R&D productivity.

Due to the easy accessibility to the heat exchangers, modifying the process configuration is simple to carry out within a minimum of time. All manual controls are easy to access from the front.

A clear dynamic overview of the process (temperature, flow, pressure) is given on the 10" TFT touch screen with a high resolution. During startup, processing, cleaning and sterilization the operator is guided by the PLC.



## Unique Features

- Very user friendly
- Low in Maintenance costs
- Full Sanitary & Aseptic design
- Easy accessible for maintenance
- Full CIP / SIP
- High Level of automation
- Highest safety level

## Applications

- Baby food
- Confectionery
- Coffee & tea
- Desserts and puddings
- Fruit and vegetable juices & purees
- Health and nutritional product
- Dairy products
- Pharmaceuticals
- Sauces and soups

## Standard accessories

- Mixer in feed hopper
- Flow control / meter
- External data logging
- Variable holding tubes

- Additional Heating Boiler
- Temperature control cooling
- Aseptic execution
- Remote assistance

*More accessories available.*

Heat Treatment

HT



Product code	HT220-20	HT220-50
Product vessel	5 or 10liter	10liter
Max. Pressure product pump	10 bar [145psi]	10 bar [145psi]
Nominal / Process flow rate	20l/hr / 10 – 50l/hr	50l/hr / 30 – 90l/hr
CIP flow rate product pump	Up to 160l/hr	Up to 160l/hr
CIP pump (optional)	Up to 600l/hr	Up to 600l/hr
Max. Temperature boiler (medium side)	160°C [320°F]	160°C [320°F]
Hot Water (electrical heated)	6kW or 2x6kW	6kw + 8kW
<b>Tube in tube Heat Exchanger</b>		
Internal diameter	8mm or 10mm [0,3" /0,4"]	8mm or 10mm [0,3" /0,4"]
Max particle size	3mm [0,12"]	3mm [0,12"]
Viscosity	2500cPs	2000cPs
<b>Bolted Plate Heat exchanger</b>		
Max particle size	0,5mm [0,02"]	0,5mm [0,02"]
Viscosity	500cPs	500cPs
<b>Scraped surface Heat Exchanger</b>		
Internal diameter Cylinder	50,75mm [2"]	50,75mm [2"]
Max particle size	Up to 4mm [0,16"]	Up to 4mm [0,16"]
Variable rotating speed	0-500rpm	0-500rpm
Dead volume per barrel	<500ml (standard)	<800ml (standard)
Viscosity	>2500cPs	.2500cPs
<b>Materials</b>		
Product side	SS316	SS316
<b>Dimensions</b>		
HT220 Tubes	1074x900x1750mm	1600x900x1750mm
<b>Required Utilities</b>		
Electrical (heated by 1 electrical boiler)	370-400Vac /3ph+N+E /50Hz/ 16A or 200-240Vac /3ph+E /60Hz/ 32A	
Electrical (heated by 2 electrical boiler)	370-400Vac /3ph+N+E /50Hz/ 32A or 200-240Vac /3ph+E /60Hz/ 32A	
Water	2,5bar(g) 0°C – 20°C [36psi 32°F - 68°F]	
Steam low pressure (optional)	3bar(g) [43,5psi] for sterilization	
Steam for DSI (optional)	8bar(g) [116psi]	
Compressed air	6 bar(g) [87psi]	



The HT220 can be seamlessly integrated with other OMVE equipment.

## Why OMVE

- ✓ Since 1993, we have **specialized** in supplying manufacturing R&D and pilot-plant equipment.
- ✓ OMVE is a **preferred supplier** to leading multinationals worldwide.
- ✓ OMVE systems are designed and manufactured according to the **highest industry standards**.
- ✓ OMVE systems come with a **two-year** warranty.
- ✓ OMVE systems carry **CE certification**.
- ✓ OMVE offers the **most comprehensive service** available on the market.