

HT220: HTST/ UHT Systems

Inline Pasteurisation and Sterilisation

With the highest flexibility

Introduction OMVE HT220 Inline Pasteurisation and Sterilisation

With the OMVE HT220 Heat Treatment Systems you have a reliable and robust system that enables you to execute a trial with even less than 1 litre. Moreover, the HT220 allows you to conduct more trials on a day, improving your R&D productivity.

Different heat treatment methods are available. Tube in tube, plate heat exchangers steam injection and scraped surface heat exchangers can be installed on a same frame together with a wide range of standard optional accessories.

The HT220 is very easy and safe in use and maintenance. The touch screen gives a clear overview of the process that is selected, with all the required parameters such as temperature, pressure and flow rate. The selected process data for a specific product (e.g. heat exchanger configuration, holding times, temperatures, flow rate and the percentage of maximum rpm of the product pump) can locally be stored under a customised name.



The HT220 HTST/ UHT system is designed to give you maximum flexibility for a very broad range of products.

Optional Accessories*

Service unit

- Mixer in feed hopper
- Additional feed hopper
- Flow meter
- External data logging
- Variable holding tubes
- External heated holding tubes up to 10 minutes
- Sterilisation link
- Additional Pre-Heat Boiler
- Temperature control 1st stage cooling
- Aseptic execution

Plate Heat Exchanger

- Homogenisation plates
- Additional plates
- Two stage cooling

Tubular Heat Exchanger

- Static mixers
- Additional cooling tubes

Direct Steam injection

- Flash cooler suitable as deaerator
- Complete automatic control
- Aroma condenser
- Aseptic execution

Scraped Surface Heat Exchanger

- Heated Feed hopper
- Additional Heat Exchangers
- Air incorporation
- Pin worker
- Resting tube
- Special blades

**Additional accessories are available on request.*



Specifications

| | | | |
|-------------------------------|---------------------------|-----------------------------|------------------|
| Service unit | | | |
| Product vessel | 5 litre | | 20 litre * |
| Product / CIP pump | Helical rotor | | |
| Types | HT220-10 | HT220-20 | |
| Nominal flow rate | 10l/hr @150°C | 20l/hr @ 150°C | |
| Process flow rate | 10 - 30 l/hr | 15-50 l/hr | |
| CIP Flow rate | Up to 120 l/hr | Up to 120 l/hr | |
| Electric Hot Water Boiler | 4 kW | 6 kW | 2x 4kW (Option) |
| Max Temperature | 165°C | 165°C | |
| | | | |
| Tube in tube HE | | | |
| Internal diameter | 8mm | | |
| Max particle size | 4mm | | |
| Max Pressure | 20 bar | | |
| Dead Volume | HT220-10 | < 400ml (standard) | |
| | HT220-20 | < 600ml (standard) | |
| Bolted Plate HE | | | |
| Internal gap | 4mm | | |
| Max particle size | 1mm | | |
| Max Pressure | 10 bar | Max Temperature | 165°C |
| Dead Volume | < 300ml (standard) | | |
| Direct Steam Injection | | | |
| Internal diameter tubes | 8mm | Internal gap plates | 4mm |
| Max particle size | 1mm | | |
| Max Pressure | 10 bar | | |
| Min vacuum pressure | 0,3 bar | | |
| Dead Volume flash cooler | < 750ml (standard) | | |
| Scraped Surface HE | | | |
| Internal diameter Cylinder | 50.75mm | Diameter Inlet / Outlet | 9,5mm |
| Max particle size | 5mm** | **Depending on the blades | |
| Max Pressure | 25 bar | Max Temperature | 165°C |
| Variable rotating speed | 0 - 1400 rpm | | |
| Dead Volume per barrel | < 500ml (standard) | Blade Material | Peek |
| | | | |
| Materials | | | |
| Product side | SS316 | | |
| Dimensions | W x D x H | | |
| HT220-PT | 900 x 900 x 1600*** | *** based on the tubular HE | |
| HT220-DSI | 1100 x 900 x 1600 | | |
| HT220-SSHE | 1200 x 900 x 1400 | | |
| | | | |
| Utilities | Electrical | 3ph/400V/50 Hz | Other on request |
| | Compressed Air (optional) | 7 bar | |
| | Water (optional) | 0°C - 20 °C | |
| | Steam (optional) | 8 bar | |