

HT220DSI Integrated Direct & Indirect System

Inline Pasteurization and Sterilization



Automated Steam Injection Technology

Tubular Heat Exchanger
Indirect

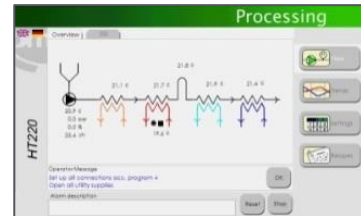
Steam Injection
Direct

Smart

The HT220DSI system integrates both Indirect & Direct processes, with or without Homogenizer in 1 system. The automation technology facilitates the operation to control 3 pumps (product pump, homogenizer and DSI outlet-pump) with 1 click using the touch screen.

Flexible

The HT220 DSI gives complete flexibility. Operators can switch from direct to indirect heat treatment using 5 operating programs installed on the HMI (10" Touch screen). Having 2 independent heat sources for pre heater and final heater, makes the system extremely versatile, but also accurate. The smallest ΔT (delta temperature) can be reached between the medium and the product.



Small

OMVE design guarantees the smallest dead volume (*please ask for the internal volume*), requiring little amount of product to run a test, but also minimizes the space required to install the equipment in the application lab.

Applications



Dairy and soy



Smoothies



Baby food



Whey based products



Vegetable Drinks



Other applications

Unique Features

- User friendly
- Low maintenance cost
- Sanitary & Aseptic design
- Easy access for maintenance
- Automatic CIP / SIP
- High level of automation
- Software in 1 or 2 languages

Modules

- Mixer in feed hopper
- Flow control
- Variable holding tubes
- CIP Pump with high speed flow
- Data logging & Remote assistance from Europe
- Automatic vacuum pump & backpressure valve
- Sterilization link

Heat Treatment

HT



Specifications

Product code	HT220DSI-20	HT220DSI-50
Product vessel	5 or 10L	10L
Nominal / Process flow rate	20L/h / 10 – 50L/h	50L/h / 30 – 90L/h
CIP flow rate product pump	Up to 160L/h	
CIP pump	Up to 600L/h	Up to 600L/h
Max. Temperature boiler (medium side)	160°C [320°F]	160°C [320°F]
Hot Water (electrical heated)	1x 6kW or 2x 6kW	6kw + 8kW
Tube in tube Heat Exchanger		
Internal diameter	8mm or 10mm [0,3" /0,4"]	8mm or 10mm [0,3" /0,4"]
Viscosity	2500cPs	2000cPs
Direct Steam Injection		
Max particle size (<i>soft particles</i>)	1mm [0,04"]	1mm [0,04"]
Min pressure flash tank	0,3bar(a) ~70°C [4psi~158°F]	0,3bar(a) ~70°C [4psi~158°F]
Pressure Outlet pump flash tank	10bar(g) [145psi]	10bar(g) [145psi]
Max. Viscosity (in flash tank)	500cPs	500cPs
Homogenizer		
Adjustable flow rate	12-30L/h	20-55L/h
Homogenization pressure	600 bar [8700psi]	400 bar [5800psi]
Dimensions		
HT220DSI	205x95x167cm [80.7x37.4x65.7"]	205x95x185cm [80.7x37.4x72.9"]
Required Utilities		
Electrical	370-400Vac /3ph+N+E /50Hz/ 32A 200-240Vac /3ph+E /60Hz/ 32A	370-400Vac /3ph+N+E /50Hz/ 32A 200-240Vac /3ph+E /60Hz/ 63A
Water	2,5bar(g) 0°C – 20°C [36psi 32°F - 68°F]	
Steam low pressure	2.5 bar(g) [43,5psi] for sterilization	
Steam for DSI	8bar(g) [116psi]	
Compressed air	6 bar(g) [87psi]	

Complete Integrated Plant at 20L/h

Direct & Indirect processing, fully automated



FS211 Filling System

HT220DS HTST/UHT System +
HP202 inline HomogenizerSG18
Steam generator

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.