

HT320 range: continuous flow Pilot HTST / UHT System

Pilot Pasteurisation and Sterilisation

with great accuracy and flexibility

Tubular Heat Exchanger

Plate Heat Exchanger

Direct Steam Injection

Scraped Surface Heat Exchanger



Introduction to the OMVE HT320 HTST/UHT range

OMVE HT320 continuous flow HTST/UHT pilot processing equipment give Research & Development, Quality Assurance and Pilot departments access to a unique formula of continuous flow heat treatment processes for a very broad range of products. The pilot systems can be equipped with different heat exchangers and have a very low hold-up volume. The entire system is operated by a central PLC for easy operation. HTST/UHT systems cater for different capacities (20 l/h [4.4 gph] up to 200 l/h [44gph] at 150°C [302°F] are available).

Unlike other systems, the OMVE 320 HTST/UHT pilot systems are based on modules that can be configured to customer specifications. The configuration of the HTST/UHT system depends on product and process specifications. All processes can be performed aseptically.

Features

- Industrial components
- Modular build
- Manual and/or automatic operation
- Supports different kinds of heat exchangers
- Fully automatic CIP facility
- In-line operation with other equipment
- Low product hold up
- Spray/splash-proof
- Open frame
- Full automation with Scada system (optional)
- Broad range of optional accessories

Benefits

- Reliable & accurate
- Proven technology with full flexibility
- Optimal flexibility and convenience
- Processing a broad range of products
- Quick and easy cleaning
- Simulates complete industrial lines
- Saves costs and time
- Suitable for use in wet areas
- Easy to inspect and to service
- Easy to use, even for less experienced operators
- Simulates your plant, **no concessions!**



Different Capacities

Types	HTST (High Temperature Short Time)	UHT (Ultra High Temperature)
HT320-20	20 l/h @ 100°C (variable 10 – 60 l/h) [4.4 gph @ 212°F (variable 2.2 – 13.2 gph)]	20 l/h @ 150°C (variable 10 – 60 l/h) [4.4gph @ 302°F (variable 2.2 – 13.2 gph)]
HT320-50	50 l/h @ 100°C (variable 20 – 100 l/h) [11 gph @ 212°F (variable 4.4 – 22 gph)]	50l/h @ 150°C (variable 20 – 100 l/h) [11 gph @ 302°F (variable 4.4 – 22 gph)]
HT320-100	100 l/h @ 100°C (variable 50 – 150 l/h) [22 gph @ 212°F (variable 11 – 33 gph)]	100 l/h @ 150°C (variable 50 - 150l/h) [22 gph @ 302°F (variable 11 – 33 gph)]
HT320-200	200 l/h @ 100°C (variable 100 – 300 l/h) [44 gph @ 212°F (variable 22 – 66 gph)]	200 l/h @ 150°C (variable 100 – 300 l/h) [44 gph @ 302°F (variable 22 – 66 gph)]

Heating systems

The OMVE 320 HTST/UHT heat exchangers can be heated with the following heating systems:

1. Pressurized Hot water circuit heated electrically (1 or more boilers)
2. Pressurized Hot water circuit heated with steam (1 or more boilers)
3. Indirect heated by steam, (with or without boiler for the preheat)
4. Direct steam injection (optional)

Optional accessories

The system can be supplied with various accessories:

- Additional cooling plates / tubes
- Different kind of feed tanks
- Different kind holding cells
- Mixer in feed tank
- Flow meter
- Static mixers
- Additional heating circuit
- Data logging facilities

Integration with other equipment

The HT320 pilot systems are easily extended or integrated with other process equipment

The OMVE HTST/UHT pilot systems are compatible with different processing equipment, providing a unique possibility to simulate an industrial line on laboratory or pilot scale. All equipment is controlled by a central operation system.

Equipment that can be integrated with the HTST/UHT pilot system:

- Multi-purpose vessels (e.g. feed tank, buffer tank, fermentation tank)
- Homogeniser (aseptic)
- De-aerator
- Carbonisation
- Filling station (aseptic or hygienic)
- CIP units

Utilities

Electrical requirements	Depending on configuration 400V/3ph/50Hz/16A or 400V/3ph/60Hz/32A (both 3ph + N + E)
	Other electrical requirements available on request