

HT320 range: HTST / UHT Pilot System

Inline Pasteurisation and Sterilisation

with great accuracy and flexibility



Introduction

OMVE UHT pilot systems give Research & Development, Quality Assurance and Pilot departments access to a unique formula of continuous heat treatment processes for a very broad range of products. The systems can be carried out with different heat treatment methods and have a very low hold-up volume. The entire system is operated by a central PLC for easy operation. UHT systems that cater for different capacities from 30 l/hr up to 200-l/hr at 145°C are available.

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

The OMVE UHT pilot system consists of the following main modules:

- Buffer tanks
- Heat exchangers (heating and cooling)
- Controls and automation
- Additional integrated equipment



Features	Benefits
<ul style="list-style-type: none">Accurate reproduction of industrial process	<ul style="list-style-type: none">The possibility to develop and test new products or ingredients with a small but representative batch
<ul style="list-style-type: none">Modular build	<ul style="list-style-type: none">Allows for upgrading a system when requirements change over a period of time. You only buy what you need.
<ul style="list-style-type: none">Manual and/or automatic operation	<ul style="list-style-type: none">Optimal flexibility and convenience
<ul style="list-style-type: none">Supports different kinds of heat exchangers	<ul style="list-style-type: none">Single machine caters for processing a broad range of products.
<ul style="list-style-type: none">Fully automatic CIP facility	<ul style="list-style-type: none">Quick and easy cleaning
<ul style="list-style-type: none">In-line operation with other equipment such as a homogeniser or an aseptic filler possible	<ul style="list-style-type: none">Simulates complete industrial production lines
<ul style="list-style-type: none">Low product hold up	<ul style="list-style-type: none">Low product volumes required for processing
<ul style="list-style-type: none">Spray/splash-proof.	<ul style="list-style-type: none">Suitable for use in wet areas and easy to clean
<ul style="list-style-type: none">Open frame	<ul style="list-style-type: none">Good overview of the process and easy to do maintain.
<ul style="list-style-type: none">Scada system	<ul style="list-style-type: none">Easy to use, even for less experienced operators.

Types of heat exchangers

- Indirect heat treatment using a straight tube in a tube heat exchanger
- Indirect heat treatment using a conical tube in a tube heat exchanger
- Indirect heat treatment using a plate heat exchanger
- Direct steam injection heat treatment
- Scraped surface heat exchangers
- Microwave heat treatment

Optional Accessories

- Extra cooling plates / tubes
- Variable holding tubes
- Data logging facilities
- Flow meter
- Static mixers

Integration with other equipment

The OMVE 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 UHT pilot system:

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