

HT326 HTST/UHT Pilot Plant

Pilot Pasteurizer/Sterilizer

High viscosities, large particles



Scraped Surface Heat Exchangers at small-scale

OMVE HT326 Pilot Plant is a HTST/UHT System designed to process products with high viscosities and/or large particles in continuous flow. The HT326 provides R & D Departments a flexible and reliable unit to mimic the operation of Production Plants, facilitating scale-up process, formulation, product optimization, shelf life studies, organoleptic analysis, among others.

Applications



Confectionery



Fruit and vegetable juices & purees



Dairy products



Desserts & puddings



Baby food



Sauces and soups



Scraped Surface Heat Exchangers

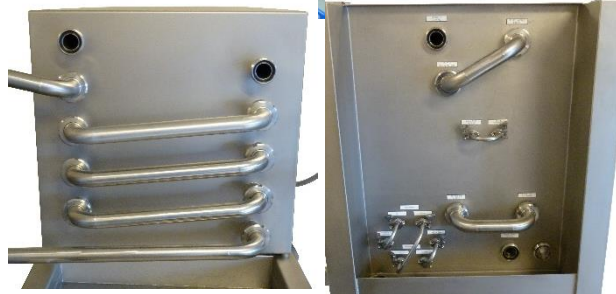
The HT326 system is standard supplied with Scraped Surface Heat Exchangers (SSHE) for heating and cooling, with a very low dead volume, dramatically reducing the waste of ingredients per test.

Modular build

The Heat Exchanger is built for Pasteurization (HTST) and/or Sterilization (UHT) temperatures, simulating a required temperature profile according to specifications.

Holding tubes

With a flexible arrangement of holding tubes, experimentations to maintain the heating temperature at specific time increases the possibilities.



Heat Treatment



Standard Modules

- Balance tank or connection for external mixing tank
- Different kind of holding times
- Mixer in balance (feed) tank
- Flow meter / control
 - Electromagnetic
 - Mass
- Additional SHHE Module
- Aseptic upgrade
- Data logging facilities
- Remote connection (Internet)
- Software in other languages

Unique features

- Industrial A-brand components
- Modular build
- Fully automatic CIP & SIP
- Continuous process
- Low product hold-up
- Wide range of different SSHE
- High level of automation

Specifications

Product code service unit	HT320-20	HT320-50	HT320-100	HT320-200
Adjustable flow rate	10-50L/h	20-80L/h	60-150L/h	100-300L/h
Pressure Product pump	10 bar /20bar*	10bar /20 bar*	10bar /20 bar*	20 bar
CIP pump flow rate	400L/h	600L/h	600L/h	600L/h
Cleaning temp. @ 30 min.	70°C / 85°C*			
Sterilization temp. @ 30 min.	140°C			
Max viscosity SSH	>2500cPs	>2500cPs	>2500cPs	>2500cPs
Max particles SSHE	7mm	7mm	15mm	15mm
Heating hot water (<i>indirect steam</i>)	Yes	Yes	Yes	Yes
Heating direct with steam	Yes	Yes	Yes	Yes
Overall dimensions				
L x W x H	175 x100x180cm	200x100x180cm	250x100x180cm	250x120x180cm
Materials				
product side	SS316			
Required utilities				
Electrical supply	370-400Vac /3ph+N+E /50H or 200-240Vac /3ph+E /60Hz			
Compressed air	6 bar(g)			
Water supply	2,5bar(g)	Chilled water supply	3,5bar(g)	
High pressure steam	6-8bar(g)	Low pressure steam	3,5bar(g)	

*optional

Integration with other equipment

Compatible with other OMVE modules, provides a unique possibility to simulate an industrial.

- HTST/UHT System with 2 heat treatment methods
 - THE Tubular HE for low viscous products
 - SSHE Scraped Surface HE for high viscous products with 15mm particle size.
- Multiple holding tubes
- Deaerator
- Homogenizer upstream/downstream
- Filler

