

Homogenizes and Emulsifies



HP202 Bench-Top 2-Piston In-Line Homogenizer

For Accurate Simulation of Your Production

The OMVE HP202 Bench-Top 2-Piston in-line, high-pressure homogenizer is designed to be installed with OMVE HTST/UHT systems or with other small-scale continuous flow heat treatment systems to enable you to simulate a production process accurately. High-pressure homogenization gives better properties to liquid products, such as improved stability, shelf life, taste, mouth feeling and can reduce the number of additives required.

The HP202 homogenizer is very easy to use in-line with the OMVE HTST/UHT system without pulsation dampers that can create unwanted dead-ends. The homogenizer can be fully integrated in the production line with automatic pressure and flow control. This will result in fewer operation errors, lower maintenance costs and higher yield while processing.

Features & Benefits

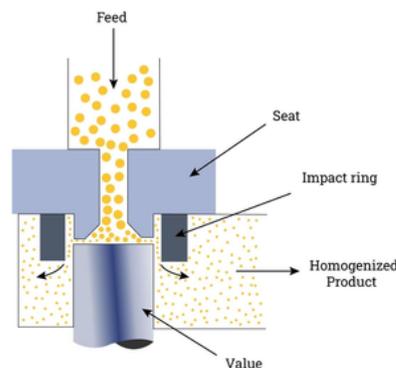
- Hygienic design or aseptic design with sterile filter
- Two-stage homogenization valves
- Minimum pulsation due to the two plungers
- No pulsation dampers required
- High level of automation
- No steam required
- Suitable for CIP and SIP
- Minimum dead volumes
- Easy operation with HT220

Applications

- Dairy
- Plant-based beverages
- (Vegetable) creams
- Juices
- Nutraceuticals

Working Principle

The homogenizer operates by forcing the liquid through a narrow, high-pressure gap between a stationary and a rotating component. This process subjects the liquid to intense shear and pressure, breaking down particles and droplets into smaller, uniform sizes (of 0.2 to 2 microns). The turbulence and mechanical forces generated during this process lead to thorough mixing and stabilization of the product.



Optional Accessories

- Aseptic execution
- Data logger
- By-pass for higher flow-rate during CIP
- Automation upgrade
- Mobile trolley
- Feed hopper for stand-alone functionality

Specifications

Product Code	HP202-20	HP202-30
Adjustable flow rate	10-30L/hr	15-55L/hr
Homogenization pressure	600bar [8700psi]	400bar [5800psi]
Homogenization stages	2	2
Number of plungers	2	2
Max. viscosity (in-line)	Approx. 2000cPs	
Max. particle size	0,5mm	
Operating temperature	< 90°C [194°F]	
Pressure reading	Digital	
Minimum feed pressure	0	
Cleaning temp. @ 30 min.	90°C [194°F]	
Sterilization temp. @ 30 min.	140°C [284°F]	
Lubrication	Grease	
Materials		
Product side	SS316	
Weights & Dimensions		
Weight	200kg [441lbs]	
L x W x H (complete unit)	880 x 880 x 600mm [34,6 x 34,6 x 23,6"]	
Required utilities		
Electrical supply	370-400Vac/ 3ph+N+E/ 50Hz/ 16A or 200-240Vac/ 3ph+E/ 60Hz/ 16A	
Water supply	2,5bar(g) [36psi]	
Steam (only aseptic)	3,5bar(g) [51psi]	



Integrated homogenizer, controlled by the HMI of the UHT system