

HP202 & HP303 Inline homogenizers

# Homogenizes and Emulsifies

For accurate simulation of your production



The OMVE Inline high pressure homogenizers are designed to be installed with the OMVE HTST/UHT systems or with other small scale continuous flow heat treatment systems to enable to simulate your production process even more accurate. The high pressure homogeniser will give better properties to the product, like improved stability, shelf life, taste mouth feeling and can also reduce the amount of additives required.

The homogenizers are very easy to use inline with the OMVE HTST/UHT system, even without pulsation dampers. The homogeniser can be fully integrated with automatic pressure or flow control of the homogenizer is the right option to select. This will result in less operation errors, less maintenance costs and more productivity in processing.

## Unique Features

- No pulsation dampers required
- Minimum pulsation due to the 2 or 3 plungers
- Aseptic design upgrade
- Easy operation with HTST/UHT systems
- Standard with two stage homogenization valves
- Minimum dead volumes
- Suitable for CIP and SIP
- High level of automation

## Working Principle

The food product is pumped through a small gap at the homogenizing valves. This creates very high turbulence and shear. The created forces reduces the particles or droplets to a uniform size of typically from 0.2 to 2 micron, depending on the set pressures of the homogeniser valves. In general you can say; the higher the homogenisation pressure, the smaller the particles.

## Standard accessories

- Aseptic execution
- Additional Pressure gauge per homogenization valve
- Automation upgrade
- Data logging

More accessories available.

Homogenization

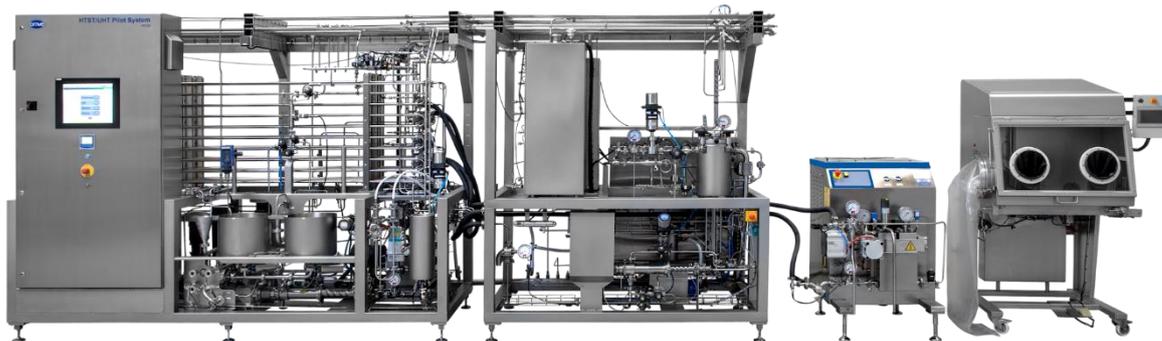
HP



## Specifications

Product code	Laboratory		Pilot			
	HP202-30	HP202-50	HP303-30	HP303-50	HP303-100	HP303-200
Adjustable flow rate	12-30 l/h	20-55 l/hr	20-60l/hr	40-80 l/h	60-120l/hr	150-220l/hr
Homogenization pressure	600 bar [8700psi]	400 bar [5800psi]	600 bar* [8700psi]	400 bar* [5800psi]	400 bar* [5800psi]	350 bar* [5000psi]
Homogenization stages	2	2	2	2	2	2
Number of plungers	2	2	3	3	3	3
	<i>*Higher pressures on request</i>					
Max viscosity (inline)	Appr. 2000cPs		Appr. 2000cPs			
Max particle size	0,5mm		0,5mm			
Operating temperature	< 90°C [194°F]		< 90°C[194°F]			
Pressure reading	Digital		Digital (analogue on request)			
Minimum feed pressure	1 bar(g) [14,5psi]		1 bar(g) [14,5psi]			
Cleaning temp. @ 30 min.	90°C [194°F]		90°C [194°F]			
Sterilization temp. @ 30 min.	140°C [284°F]		140°C [284°F]			
Lubrication	Grease		Water (continuous)			
<b>Materials</b>						
Product side	Stainless Steel 316		Stainless Steel 316			
<b>Overall dimensions</b>						
Complete unit LxWxH	90x74x140cm		90x90x120cm			
Weight	200kg		200kg			
<b>Required Utilities</b>						
Electrical supply	370-400Vac /3ph+N+E /50Hz/ 16A		370-400Vac /3ph+N+E /50Hz			
	200-240Vac /3ph+E /60Hz/ 16A		200-240Vac /3ph+E /60Hz			
Water supply	2,5 bar(g) / 5l/min [36psi]		2,5 bar(g) / 10l/min [36psi]			
Steam (only Aseptic)	3,5bar(g) [51psi]		3,5bar(g) [51psi]			

Integrated homogenizer, controlled by the HMI of the UHT system.



## 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.