

## HP102 Inline homogenizers

# Homogenizes and Emulsifies



For accurate simulation of your production

The OMVE HP102 Inline high pressure homogenizers are designed to run continuously with the OMVE HTST/UHT systems to accurately simulate your production processes. The high pressure homogenizer gives better properties to liquid products, such as improved stability, shelf life, taste mouth feeling and can also reduce the amount of additives required.

Unlike other homogenizers available on the market, OMVE HP102 have a cost-effective build, designed to hygienically operate inline without pulsation dampers (dead-ends), while maintaining a sufficient automation level to operate without deviations. The homogenizer can seamlessly be connected to the HT122 or HT220 (Basic) or be used stand alone. Thus the HP102 offers customers many possibilities to economically equip the lab with a low investment.

## Unique Features

- No pulsation dampers required
- Minimum pulsation due to the 2 plungers
- Hygienic design or sterile design with Sterile filter
- No steam required
- Easy operation with HT122 and HT220 Basic systems
- 2 stage homogenization valves
- Minimum dead volumes
- Suitable for CIP and SIP

## 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 homogenization pressure, the smaller the particles.



## Specifications

	Laboratory	
Product code	HP102-20	HP102-30
Adjustable flow rate	10-30 L/h	15-55 L/h
Homogenization pressure	600 bar [8700psi]	400 bar [5800psi]
Homogenization stages	2	2
Number of plungers	2	2
Max viscosity (inline)	Apr. 2000cPs	
Max particle size	0,5mm	
Operating temperature	< 90°C [194°F]	
Pressure reading	Digital	
Minimum feed pressure	1 bar(g) [14,5psi]	
Cleaning temp. @ 30 min.	90°C [194°F]	
Sterilization temp. @ 30 min.	140°C [284°F]	
Lubrication	Grease	
<b>Materials</b>		
Product side	Stainless Steel 316	
<b>Overall dimensions</b>		
Complete unit LxWxH (height when supplied with HT220)	880x880x1260mm (880x880x1400mm)	
Weight	200kg	
<b>Required Utilities</b>		
Electrical supply	370-400Vac /3ph+N+E /50Hz/ 16A or 200-240Vac /3ph+E /60Hz/ 16A	
Water supply (optional for aseptic version)	2,5 bar(g) / 5l/min [36psi]	

Integrated homogenizer in miniature UHT line



## 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.