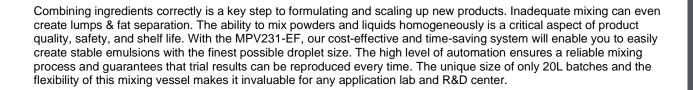
# Design Emulsions in small batches

## Flexible, efficient & accurate



## **Unique Features**

- · Dosing, heating/cooling and mixing is HMI controlled
- Automatic & precise dosing of powders & ingredients under vacuum
- Cleaning-in-Place / CIP-program built-in
- Stainless-steel industrial design
- Easy integration into the production line
- Highly flexible configuration
- Optional pH control and fermentation program

## **Applications**

- Recombined milk
- Plant-based drinks
- Ice cream pre-mix
- Yogurt-based applications
- Sauces
- Personal care products

## Working principle

The OMVE MPV231EF is a very compact blending tank & emulsifier with 2 tanks, a powder funnel and an ingredients funnel. The main pressurized tank has a high shear bottom mixer and a low speed agitator with scrapers. The atmospheric double jacketed oil tank has a high-speed propeller mixer. By vacuum, the oil is inserted at the right temperature into the main tank, directly at the bottom of the high shear bottom mixer to obtain the finest possible droplet size. Powder can also be inserted under vacuum close to the high shear mixer. The on-board heating system enables both tanks to be set at a specific temperature.

Based on your recipe you can insert powders, oil or ingredients under vacuum into the emulsifying vessel at the high shear mixer. The low speed agitator prevents burn-on at the wall and ensures homogeneous mixing of the product.

#### Standard accessories

Product tank - with

- Double jacket
- 2 Ingredients funnels
- Vacuum system
- High-shear mixer
- Anchor mixer with scrapers

#### Second (oil) tank

- Double jacket
- Automatic feeding of the product tank



Oil tank

Blending tank





## **Specifications**

#### Capacity

Blending tank size(s) 30 liter (product 20 liter net)

Oil tank size 10 liter

Heating temp. tank (optional) Up to 160°C [320°F] Heating temp. oil tank Up to 95°C [203°F]

optional up to 160°C [320°F]

#### **Overall dimensions**

Dimensions LxDxH\* 1590 x 1180 x 2070 mm [62.60 x 46.46 x 81.50"]

Weight\* 485kg [1069.3lbs]

\*depending on final configuration

#### **Required Utilities**

Electrical supply 400Vac /3ph+N+E /50Hz/ 16A or 200-240Vac /3ph+E /60Hz/ 32A

Soft water 2-4 bar [29-58psi] , 800L/h
Water supply 2-4 bar [29-58psi] , max. 240L/h

Air supply 7-9 bar [102-130psi]
Coolant (glycol / water) 2-4 bar [29-58psi] , 300L/h

Drains Required

## **Equipment family**

OMVE's Multi-Purpose Vessels are used in a very broad range of applications. Each application has its own specific requirements, but these can also be combined in one vessel. For more detailed information, our staff will be happy to help you. There are 4 main groups of equipment:



Blending & Mixing Vessels



Batch Cooking
Batch Processing



MPV-AB / HB Aseptic Buffer Vessels Hygienic Buffer Vessels



Fermentation Vessel

## 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.

