

ShearMaster

ABOUT THE SHEARMASTER

The ShearMaster is the most efficient and flexible mixer on the market:

- Low energy consumption/high efficiency
- High shear rate
- High mixing rate
- Fast and easy installation
- Low service cost - few wear parts
- Hygienic design in compliance with EHEDG
- Step-file available on inquiry



Specifications

The ShearMaster is developed for products with low to medium viscosities.

The mixer unit is designed to be welded into existing or new tanks, where better and more efficient mixing is needed. The ShearMaster is welded into the bottom or tank side. It is also possible to install more units into the silo tanks. Powder and liquid can be added manually through the manway or automatically, by for example a screw conveyor through the tank top, and the powder is instantly incorporated into the liquid. The mixer generates a controlled vortex in the tank, which contributes to separating air from the liquid and generates a perfect homogenous dispersion within seconds.

The result is a highly stable and homogenous end product, which is lump-free and contains a minimum of air.

Depending on the selected options, the mixer can be used as a batch and an inline.



Applications

The ShearMaster has been optimised for mixing of a wide range of products, e.g.:

- Products for spray drying
- Soft drinks & syrup
- Recombined milk-based products
- Sugar & pectin solutions
- Slurries & Soups
- Petfood gravy

Depending on type of viscosity (Shear sensitive e.g. Ketchup) products with up to 5000 cP can be processed.

Equipment

STANDARD EQUIPMENT

Mixer unit (WEG) (230/400V 50Hz) with shaft sealing (to be frequency controlled)

Welding flange

O-Ring EPDM

Shaft seal carbon/SIC bellow

STANDARD ON SHEARMASER 80-160

*Double mechanical shaft seal with solenoid valve and throttle valve

OPTIONS

Other motors, Nema exx & etc on request.

Propeller for extra turbulence

Start/stop box with soft starter

Start/stop box with frequency inverter

Shaft seal SIC/SIC

Sterile balance shaft seal carbon/SIC

Sterile balance shaft seal SIC/SIC

Technical data

| Model | Motor | Flow | Shear rate | Recommended tank size |
|--------------------|--------|-------------------------|---------------------------|-----------------------|
| ShearMaster 65-125 | 5.5 kW | 50 - 70 m ³ | 18-35 000 s ⁻¹ | 50 - 100 l |
| ShearMaster 65-125 | 7.5 kW | 60 - 80 m ³ | 18-35 000 s ⁻¹ | 75 - 150 l |
| ShearMaster 80-160 | 11 kW | 80 - 120 m ³ | 25-50 000 s ⁻¹ | 200 - 400 l |
| ShearMaster 80-160 | 15 kW | 100-130 m ³ | 25-50 000 s ⁻¹ | 300 - 600 l |

| Model | Flange diameter | Service water | Weight | Dimensions (LxD) |
|--------------------|-----------------|---------------|--------|------------------|
| ShearMaster 65-125 | 220 mm | N/X | 65 kg | 550 x 225 mm |
| ShearMaster 65-125 | 220 mm | N/A | 67 kg | 600 x 240 mm |
| ShearMaster 80-160 | 310 mm | 20 L/h | 100 kg | 660 x 260 mm |
| ShearMaster 80-160 | 310 mm | 20 L/h | 110 kg | 700 x 280 mm |