

ProcessMaster

The **ProcessMaster** is the most energy efficient and flexible multi purpose 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

The **ProcessMaster** is developed for products with medium to high viscosities and is designed with a directly driven high shear mixer at the bottom and top mounted agitator.



APPLICATIONS

The **ProcessMaster** represents the next generation of mixing solutions for the process industry.

Not only is it more compact and perfectly optimised for energy-efficient high shear mixing, it is also virtually maintenance-free.

By means of vacuum, the powder is drawn from the funnel into the mixer below liquid level and instantly wetted. The powerful, high shear mixer and scraper agitator generates a controlled vortex in the tank. The combination of vortex and vacuum effectively separates air from the liquid and generates a perfect homogenous dispersion within seconds.

The unit comes with an insulated jacket for quick heating and cooling with steam or ice water. For extra quick heating the unit can be equipped with direct steam valves. For Extra fast cooling flash cooling down to 15° C can be quoted as an option.

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

APPLICATIONS:

The **ProcessMaster** is used for mixing of:

- Sauce
- Mayonnaise (max. 1000 kg)
- Dressing
- Gels
- Cream
- Emulsion
- Etc.

Homogenization down to 2µ lump free and viscosity up to 50.000 cP.



PROCESSMASTER

EQUIPMENT

STANDARD EQUIPMENT:

| |
|--|
| Mixer unit (WEG) with flushed mechanical shaft seal (requires frequency control) |
| Vacuum pump with water-saving unit (requires frequency control) |
| Insulated Steam/cooling jacket flange connection |
| Scraper agitator with SEW gear |
| 3-way valve for CIP of vacuum pipe |
| Manholde with safety sensor |
| Inspection glass with wiper / inspection glass with LED light source (Lumiglas) |
| 2 x powder valves with Alfa Laval LKLA actuator (butterfly) |
| 1 x outlet valve with Alfa Laval LKLA actuator (butterfly) |
| 2 x rotating spray balls with 3-way valve from vacuum pipe (Alfa Laval Uniq type 21) |
| 2 x level sensors top & bottom (IFM) |
| Temperature transmitter (IFM) |
| Pressure sensor (IFM) |
| Fittings: TRI-Clams, SMS or DIN-ISO |

OPTIONS

| |
|--|
| Valve battery for cooling and heating |
| Direct steam valves with 5µ ultra filter +valves |
| Powder funnels (100l, 250l, 500l, 1000l & 2000l) |
| Powder funnel (25l) for small ingredients incl. manual butterfly valve |
| Flash Cooling |
| Extra powder valve 2½" butterfly / extra liquid top inlet/sample valve |
| MCC panel with inverters |
| I/O Panel for connection to master PLC |
| Outlet pump (Alfa laval SRU Positiv pump) |
| Load cells (2 pc global weighing) with transmitter in stainless box |
| Process valve - dfferent type (GEA, SPX, etc.) |

TECHNICAL DATA

| Model: | Mixer size | Steam Jacket | Direct steam | Cooling Water | Mixer effect: | Vacuum pump | Agitator |
|---------|------------|--------------|---------------|----------------------|---------------|-------------|----------|
| 250 VA | 160 | 300 kg/h | 300 kg/h (1) | 10 m ³ /h | 18,5 kW | 3 kW | 1.5 kW |
| 500 VA | 160 | 400 kg/h | 300 kg/h (1) | 10 m ³ /h | 22,5 kW | 3 kW | 1.5 kW |
| 1000 HV | 200 | 500 kg/h | 600 kg/h (2) | 15 m ³ /h | 30 kW | 5.5 kW | 3 kW |
| 2000 VA | 250 | 600 kg/h | 600 kg/h (2) | 15 m ³ /h | 55 kW | 5.5 kW | 3 kW |
| 3000 VA | 325 | 800 kg/h | 900 kg/h (3) | 20 m ³ /h | 75 kW | 7.5 kW | 5.5 kW |
| 5000 VA | 325 | 1000 kg/h | 1200 kg/h (4) | 20 m ³ /h | 90 kW | 7.5 kW | 7.5 kW |

| Model: | Outlet/U | Powder valve | CIP | Inlet | Service Water | Dimensions (H x W x D) | Shipping weight | Shipping volume |
|---------|--------------|----------------------|-----|--------|---------------|--------------------------|-----------------|---------------------|
| 250 VA | Ø51/650mm | 1 x Ø51 1 x Ø63,5 | Ø51 | 1x Ø51 | 100 L/h | 2400 x 1300 x 1000 mm | 600 kg | 3.1 m ³ |
| 500 VA | Ø51/650mm | 1 x Ø51 1 x Ø63,5 | Ø51 | 1x Ø51 | 100 L/h | 2600 x 1400 x 1100 mm | 900 kg | 4.0 m ³ |
| 1000 VA | Ø63,5/650mm | 1 x Ø51 1 x Ø63,5 | Ø51 | 1x Ø51 | 100 L/h | 3600 x 1500 x 1300 mm | 1400 kg | 7.0 m ³ |
| 2000 VA | Ø63,5/1000mm | 2 x Ø63.5 | Ø51 | 2x Ø51 | 100 L/h | 4000 x 2100 x 1800 mm | 1800 kg | 15 m ³ |
| 3000 VA | Ø76/1200mm | 2 x Ø63.5 | Ø51 | 2x Ø51 | 150 L/h | 4500 x 2600 x 2100 mm | 2200 kg | 24.5 m ³ |
| 5000 VA | Ø76/1200mm | 2 x Ø63.5 | Ø51 | 2x Ø51 | 150 L/h | 4800 x 2700 x 2300 mm | 2300 kg | 30 m ³ |