

# ProcessMaster

## ABOUT THE PROCESSMASTER

The ProcessMaster is the most energy efficient and flexible multi purpose mixer on the market:

- Low energy consumption/high efficiency
- High shear rate and 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 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.

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.



## Applications

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

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

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

## Equipment

### STANDARD EQUIPMENT

Mixer 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

Manway with safety net and safety switch

Inspection glass with wiper or with LED light source

2 x powder valves with actuator (butterfly)

1 x outlet valve with actuator (butterfly)

2 x rotating spray balls with 3-way valve from vacuum pipe

2 x level sensors top & bottom

Temperature transmitter

Pressure sensor

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 (Positive pump)

Load cells (2 pc global weighing) with transmitter in stainless box

Process valve - different types

## Technical data

Model	Mixer size	Steam jacket	Direct steam	Cooling water	Mixer effect	Vacuum pump	Agitator
250	160	300 kg/h	300 kg/h (1)	10 m³/h	18.5 kW	3 kW	1.5 kW
500	160	400 kg/h	300 kg/h (1)	10 m³/h	22.5 kW	3 kW	1.5 kW
1000	200	500 kg/h	600 kg/h (2)	15 m³/h	30 kW	5.5 kW	3 kW
2000	200	600 kg/h	600 kg/h (2)	15 m³/h	55 kW	5.5 kW	3 kW
3000	325	800 kg/h	900 kg/h (3)	20 m³/h	75 kW	7.5 kW	5.5 kW
5000	325	1000 kg/h	1200 kg/h (4)	20 m³/h	90 kW	7.5 kW	7.5 kW

Model	Outlet/U	Powder valve	CIP	Inlet	Service water	Dimensions (HxWxD)	Shipping weight
250	Ø51/650 mm	1 x Ø51 1 x Ø63.5	Ø51	1 x Ø51	100 L/h	2400 x 1300 x 1000 mm	600 kg
500	Ø51/650 mm	1 x Ø51 1 x Ø63.5	Ø51	1 x Ø51	100 L/h	3600 x 1400 x 1100 mm	900 kg
1000	Ø63.5/650 mm	1 x Ø51 1 x Ø63.5	Ø51	1 x Ø51	100 L/h	3600 x 1500 x 1300 mm	1400 kg
2000	Ø63.5/650 mm	2 x Ø63.5	Ø51	2 x Ø51	100 L/h	4000 x 2600 x 1800 mm	1800 kg
3000	Ø76/1000 mm	2 x Ø63.5	Ø51	2 x Ø51	150 L/h	4500 x 2600 x 2300 mm	2200 kg
5000	Ø76/1000 mm	2 x Ø63.5	Ø51	2 x Ø51	150 L/h	4800 x 2700 x 2300 mm	2300 kg