Daniatech

BasicMaster

ABOUT THE BASICMASTER

The BasicMaster is the most energy-efficient and flexible mixer on the market:

- **Low energy consumption/high efficiency**
- **High shear & 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 BasicMaster is developed for products with low to medium viscosities and is designed with a directly driven high shear mixer at the bottom. It is designed for mixing, homogenising and dispersing of a wide range of products.

Powder is added manually through the manway or automatically by e.g. a screw conveyour through the tank top and 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, inline or continous mixer. For inline production the BasicMaster can be fitted with a bigger hydration or silo tank.

Applications

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

- **Products for spray drying**
- **Soft drinks & syrup**
- **Ice cream & recombined milk-based products**
- **Sugar & pectin solutions**
- **Slurries & soups**

The final product should be pumpable with a centrifugal pump - up to 500 cP. Depending on type of viscosity (shear sensitive e.g. ketchup), products with up to 2000 cP can be processed. For viscosity above 2000 cP, a ProcessMaster mixer is required.

Equipment

STANDARD EQUIPMENT
Mixer unit with flushed mechanical shaft seal (requires frequency control)
Manway with safety net and safety switch
1 x outlet valve (butterfly)
1 x liquid inlet
2 x rotating spray balls
2 x level sensors - top & bottom
Fittings: TRI-Clams, SMS or DIN 11864

OPTIONAL EQUIPMENT
Extra top inlet/sampling
Sack delivery chute
Level control pressure transmitter/control valve with tangential side admission
Load cells with transmitter in stainless steel box
Outlet pump (must be equipped with frequency converter, if used as inline mixer)
MCC panel with frequency inverters
Insulated jacket

Technical data

Model	Product density	Viscosity	Mixer effect	Powder capacity
250	1-1.35 kg/l	1-2000 cP	11 - 18.5 kW	50 kg/min
500	1-1.35 kg/l	1-2000 cP	18.5 - 22 kW	50 kg/min
1000	1-1.35 kg/l	1-2000 cP	22 - 30 kW	100 kg/min
2000	1-1.35 kg/l	1-2000 cP	45 - 55 kW	100-150 kg/min
3000	1-1.35 kg/l	1-2000 cP	55 - 75 kW	200 kg/min
5000	1-1.35 kg/l	1-2000 cP	75 - 90 kW	300 kg/min
Powder capacity based on sugar or standard milk based powders.				

Model	Outlet/U	CIP	Inlet	Dimensions (H x W x D)	Shipping weight	Shipping volume
250	Ø51/650 mm	Ø51	1 x Ø51	2200 x 1200 x 900 mm	500 kg	2 m^3
500	Ø51/650 mm	Ø51	1 x Ø51	2400 x 1300 x 1000 mm	700 kg	2.5 m^3
1000	Ø63.5/650 mm	Ø51	1 x Ø51	3400 x 1400 x 1200 mm	1000 kg	2.5 m^3
2000	Ø63.5/650 mm	Ø51	1 x Ø51	3800 x 2000 x 1700 mm	1400 kg	10.5 m^3
3000	Ø76/1200 mm	Ø51	1 x Ø51	4300 x 2500 x 2000 mm	1600 kg	16.5 m^3
5000	Ø76/1200 mm	Ø51	1 x Ø51	4600 x 2600 x 2200 mm	1700 kg	21 m^3