Daniatech

InlineMaster

ABOUT THE INLINEMASTER

The InlineMaster 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 avaiable on inquiry**

Specifications

The InlineMaster is developed for products with low to medium viscosities and is designed with a directly driven high-shear mixer at the bottom and top mounted agitator. The InlineMaster is not only more compact and perfectly optimised for energy-efficient high shear mixing, it is also virtually maintenance-free.

The vacuum feature allows automatic handling of the powder, dosing directly from big bags or silos. By means of vacuum, the powder is drawn into the mixer below liquid level and is instantly wetted. The powerful high-shear mixer generates a controlled vortex in the tank. The combination of vortex and vacuum effectively separates air from liquid and generates a perfect, homogenous dispersion within seconds.

The result is a highly stable and homogenous, air- and lump-free end product. Due to the discharge flow/ pressure of the InlineMaster, an external recirculation pump is in some cases not required.

Applications

The InlineMaster can be used for various applications e.g.:

- **Products for spray drying**
- **Soft drinks & syrup**
- **Ice cream & recombined milk-based products**
- **Milk-based products**
- **Sugar & pectin solutions**
- **Sweetened condensed milk***

The final product should be pumpable with a centrifugal pump - up to 1000 cP.

*Mixer size and effect on request

Equipment

STANDARD EQUIPMENT

- Mixer unit with flushed mechanical shaft seal (requires frequency control)
- Vacuum pump with water-saving unit (requires frequency control)
- 3-way valve for CIP of vacuum pipe
- Cleanable vacuum system
- Manway with safety sensor
- Inspection glass with wiper/inspection glass 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 and pressure transmitter
- Fittings: TRI-Clams, SMS or DIN 11864

OPTIONAL EQUIPMENT

- Powder hoppers (100 l, 250 l, 500 l, 1000 l & 2000 l)
- Powder hopper for small ingredients incl. butterfly valve
- Extra powder valve 2½" butterfly/extra inlet in top
- MCC panel with inverters
- I/O panel for connection to central control
- Outlet pump
- Insulated jacket
- Load cells (2 pc global weighing) with transmitter in stainless box
- Process valve - different types

Technical data

Model	Mixer size	Product density	Viscosity	Mixer effect	Powder flow rate	Vacuum volume	Discharge flow	Internal flow	Discharge pressure
500	160	1-1.35 kg/l	1-1000 cP	18.5-22 kW	4-5 ton	5.5 kW	15-20 m^3	80 m^3/h	1 bar
1000	200	1-1.35 kg/l	1-1000 cP	22-30 kW	5-8 ton	7.5 kW	20-30 m^3	220 m^3/h	1 bar
2000	250	1-1.35 kg/l	1-1000 cP	45-55 kW	8-10 ton	11 kW	30-50 m^3	350 m^3/h	1 bar
3000	325	1-1.35 kg/l	1-1000 cP	55-75 kW	10-12 ton	11 kW	50-75 m^3	500 m^3/h	1 bar

Model	Outlet/U	Powder valve	CIP	Inlet	Service water	Dimensions (HxWxD)	Shipping weight	Shipping volume
500	Ø51/650 mm	1 x Ø51 1 x Ø63.5	Ø51	1 x Ø51	100 l/h	2400 x 1300 x 1000 mm	900 kg	3,4 m^3
1000	Ø63.5/650 mm	1 x Ø51 1 x Ø63.5	Ø51	1 x Ø51	100 l/h	3400 x 1400 x 1200 mm	1400 kg	5.7 m^3
2000	Ø75/1000 mm	2 x Ø63.5	Ø51	2 x Ø51	100 l/h	3800 x 2000 x 1700 mm	1800 kg	13 m^3
3000	Ø101.7/1200 mm	2 x Ø63.5	Ø51	2 x Ø51	150 l/h	4300 x 2500 x 2000 mm	2200 kg	21.5 m^3