# **MixSing Vortex**

### Key benefits

- Stable powder introduction
- High flow
- Improved ergonomic
- Noise <78 dB(a)
- High outlet pressure
- Hygienic design
- Ease of maintenance
- CAPEX & OPEX optimised
- EHEDG, EC 1935 and CE marked



Shear performance 2600 rpm	
	Mean shear rate
	200000.
	166833.
	133667.
	100500.
	67333.
	34167.
	1000.

#### Operations

Creating the perfect suspension without particle separation or the quintessential emulsion, the MixSing caters for your needs.

The impeller vortex effect forces the ingredients through the impeller / stator construction where the product will be exposed to high shear forces up to 200,000 s<sup>-1</sup> reducing the size of the particles.

The high shear unit is designed for operation between 300 - 3600 rpm.

### Design basis

## Computational Fluid Dynamics form the basis of the design development and optimisation.

Experienced resources created a virtual model and arranged a simulation of flow & shear patterns, vacuum effect on flow, cavitation risk, visualisation of flow, shear, CIP-ability, baffle design, wear and strength analyses. A physical unit was tested for operational performance to confirm the advanced and optimised design.





The power of simplicity

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### **MixSing Vortex**

### **Application integration**

Batch, in-line or continuous mixing — no limitation. Designing the right process for your product recipe and adapting it as your process needs changes, the MixSing facilitates your requirements.



#### Dairy

- Recombined milk products
- Flavoured milk
- Ice cream

#### Beverage

- Sugar dissolvers
- Syrup preparation
- Stabiliser blends



Contact us for other applications

### Design

- Mixer system
  - Norm motor
  - Frequency inverter
  - Shaft seal and drive
  - Impeller & stator system
- Product inlet/outlet
- Injector
- Pump protection shield
- Table with frame (optional)
- Adjustable feet
- Powder hopper

- Mesh
- Service valves for water flush
- Other requirements

### Technical data

	Unit	Vortex
Power installed	kW	11-18.5
CIP	m³/h @ 2 bar(g)	6
Service water	l/h	60
Built-in tank volume	I	75
Dimensions HxWxD	m	1.0x 1.2x 1.8
Shipping weight	kg	250
Shipping volume	m <sup>3</sup>	3

\*Typical capacity <100 kg/min of skimmed milk powder

\*Customisation/products can alter values



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