

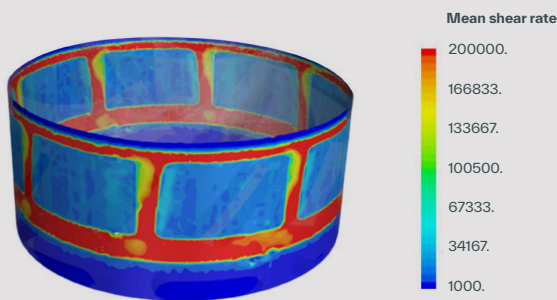
# MixSing Process

## Key benefits

- Stable emulsion
- Products with particles
- High viscosity products
- Noise <78 dB(a)
- Low utility consumption
- Hygienic design
- Ease of maintenance
- CAPEX & OPEX optimised
- EHEDG, EC 1935 and CE marked



Shear performance 2600 rpm



## 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  $s^{-1}$  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 optimization.

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.



# MixSing Process

## 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

- Processed cheese
- Beverage
- Sport energy gels



### Prepared food

- Mayonnaise
- Mustards
- Ketchup
- Dips
- Hummus
- Salad dressings



### Personal care

- Gels
- Creams
- Soaps
- Shampoo
- Lotion



Contact us for other applications

## Design

- Mixer system
  - Standard motor
  - Frequency inverter
  - Shaft seal and drive
  - Impeller & stator system
- Vacuum system
  - Liquid ring pump
  - Frequency inverter
  - Service water
- Scraper-agitator
- Pressure sensor
- Product outlet valve
- Powder valve(s)
- Level switches
- Manway
- Non-foam inlet
- CIP spray balls (2 pcs.)
- Sight glass with lamp
- Sight glass with wiper
- Adjustable feet
- Other requirements

## Technical data

	Unit	500	1500	3000	6000
Power installed	kW	15 - 22	28 - 51	38 - 63	55 - 120
CIP	m <sup>3</sup> /h @ 2 bar(g)	12	12	12	12
Service water	l/h	350 - 1500	350 - 1500	350 - 1500	350 - 1500
Compressed air	nl/min @ 7 bar(g)	Negligible consumption variable with production			
Steam jacket	kg/h (peak)	200 (500)	500 (1000)	750 (1250)	1000 (1500)
Direct steam	kg/h @ 3 bar(g) (nozzles)	250 (1)	500 (2)	750 (3)	1000 (4)
Cooling water	m <sup>3</sup> /h @ 2 bar(g)	10	10	20	20
Dimensions HxWxD	m	3.2 x 1.1 x 1.2	3.9 x 1.4 x 1.5	4.5 x 1.8 x 1.8	5.3 x 2.2 x 2.3
Shipping weight	kg	712	1230	1795	3045
Shipping volume	m <sup>3</sup>	6	11	19	36

\*customisation/products can alter values



The power of simplicity

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