MixSing Vacuum

Key benefits

- Stable emulsion
- Perfect dispersion of powders
- Low incorporation of air
- 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	
	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⁻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 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.



Web tps.ltd

Europe

Fejringhusvej 16 DK-8722 Hedensted erik.harbo@tps.ltd Rest of world 11 Irving Place Singapore 369551 claus.siegaard@tps.ltd



The power of simplicity

ps.ltd

MixSing Vacuum

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.

•

•

•

.

Ice cream



Dairy

- Recombined milk products
- Flavoured milk
- Baby/infant formula
- Nutritional
- Fat filled product
 - .

Contact us for other applications

Design

- Mixer system
 - Standard motor
 - Frequency inverter
 - Shaft seal and drive
 - Impeller & stator system

Vacuum system

- Service water

Pressure sensor

•

•

- Liquid ring pump

- Frequency inverter

Product outlet valve

Non-dairy creamer

Condensed milk

- r Sugar dissolvers
- Cappuccino foamer Protein standardisation
 - tion Syrup preparation
 - Stabiliser blends
 - Juices and nectars
 - Soft drinks
- Sweetened condensed milk Smoothies
 - Whey based drinks
 - Sports & energy drinks
 - 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	14-25	25-48	35-60	45-110
CIP	m ³ /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)	Negligble comsumption variable with production			
Dimensions HxWxD	m	3.2×1.0×1.0	3.8x1.3x1.3	4.4x1.6x1.6	5.1x2.1x2.1
Shipping weight	kg	592	985	1525	2735
Shipping volume	m ³	4	9	15	30

*customisation/products can alter values



The power of simplicity

Web tps.ltd Europe

Fejringhusvej 16 DK-8722 Hedensted erik.harbo@tps.ltd Rest of world 11 Irving Place Singapore 369551 claus.siegaard@tps.ltd

