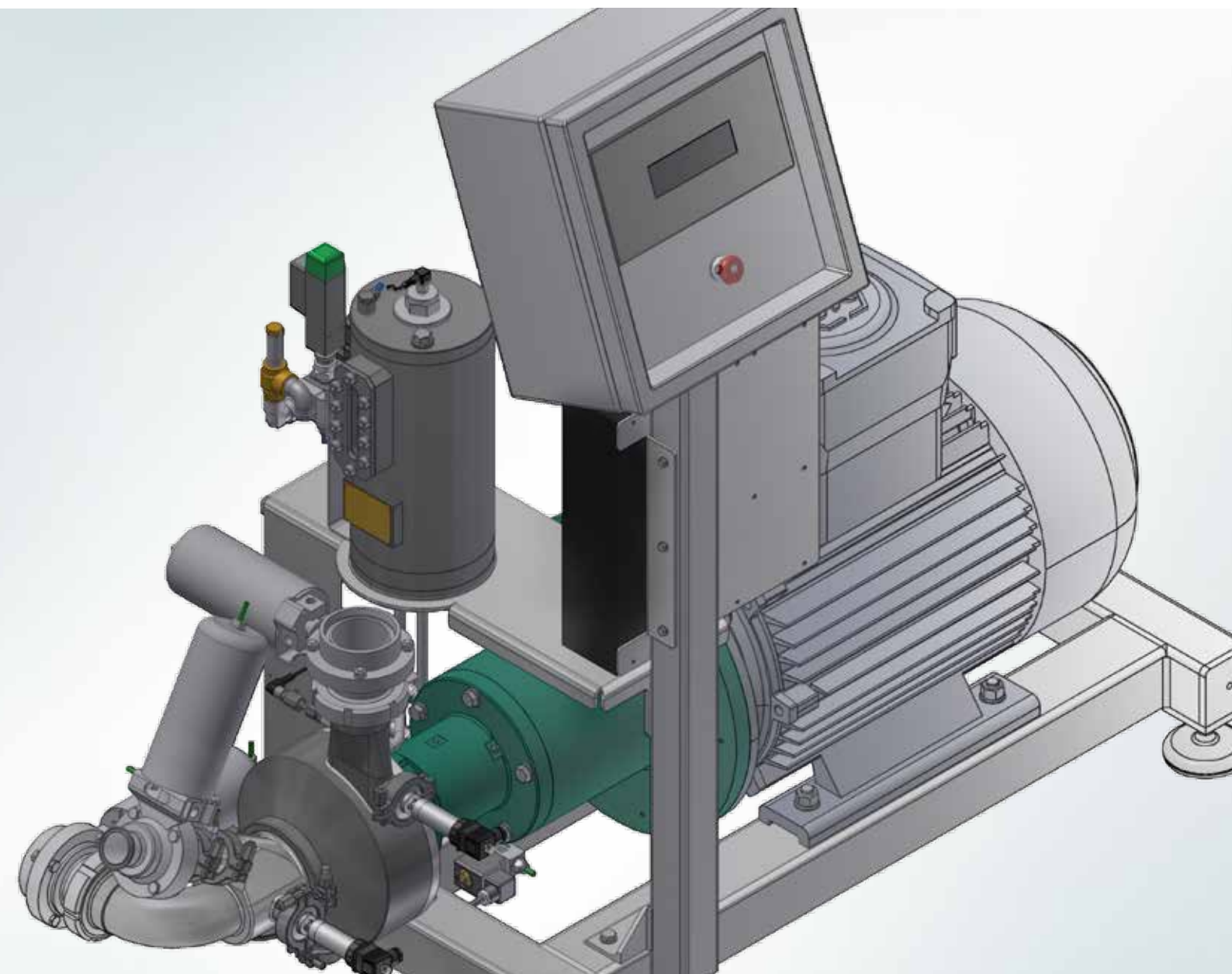


NETZSCH



EPSILON Inline Disperser

The New Inline Mixing Experience

A Revolutionary System

FOR THE DISPERSION OF SOLIDS IN LIQUIDS

With the *EPSILON* NETZSCH offers a new, compact solution for producing homogeneous dispersions with reproducible quality in an inline process. As the dispersion process takes place in an atmospherically closed process housing, it is dust and emission free.

The *EPSILON* inline disperser is operated in circulation mode whereby the powder can be fed from almost any kind of packings like bags, big bags or silo. Light powders can also be fed via suction lance to avoid dust creation.

The *EPSILON* works similar to a pump. Because of the flow-optimized design a negative pressure is created in the process housing when liquid is circulated. No external vacuum creation is necessary. The negative pressure is used to draw in the powder in dense flow without introducing false air when an appropriate powder feeding system is used.

Contrary to the dispersion principle of classic rotor-stator systems, where high shear forces are used to achieve a good dispersion, the *EPSILON* does not pump the product through a stator. The unique wetting process of the *EPSILON* is based on inducting powder under negative pressure in a continuous large liquid surface. Due to the pressure gradient between the feeding and discharge side of the machine, the liquid is rapidly pressed into the agglomerate structure and an almost ideal wetting of the powder is achieved. Because of the low shear rates the energy input is significantly lower than with conventional rotor-stator systems. This also leads to the ability to process shear and temperature sensitive products.

Applications

- Emulsion paints
- Industrial coatings
- Automotive coatings
- Pigment and additive dispersion
- Printing inks
- Pesticides
- and many more ...

Technical data	<i>EPSILON 30</i>
Powder induction rate [kg/h]	50 - 5 500
Suspension flow during powder intake [m ³ /h]	15 - 30
Suspension flow during circulation	67 (water)
Drive power [kW]	30
Max. speed [1/min]	3 600
Max. discharge pressure [bar]	3
Min. feeding pressure [bar]	0.1 - 0.5



- 1 Barrier fluid system
- 2 Product outlet
- 3 Processing chamber
- 4 Powder inlet
- 5 Liquid inlet
- 6 Residual discharge
- 7 Mechanical seal
- 8 Frame
- 9 Motor
- 10 Control panel

YOUR BENEFIT

Dispersion quality

- Continuously reproducible product quality
- High production capacity due to quick powder intake
- Small temperature input

Easy handling and cleaning

- Minimal effort for cleaning due to optimized design
- Quick product changes

Dust and emission free

- Closed process housing allows clean and loss free production
- No dust in circulation tank avoids encrustation on tank wall and cover

Process reliability

- Software eliminates operating errors
- Tolerant of small foreign objects
- Explosion proof version available

The new EPSILON provides tremendous cost and time savings

Business Unit Grinding & Dispersing – The World's Leading Grinding Technology

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The three Business Units – Analyzing & Testing, Grinding & Dispersing and Pumps & Systems – provide tailored solutions for highest-level needs. Over 3400 employees at 210 sales and production centers in 35 countries across the globe guarantee that expert service is never far from our customers.

NETZSCH-Feinmahltechnik GmbH
Sedanstraße 70
95100 Selb
Germany
Tel.: +49 9287 797 0
Fax: +49 9287 797 149
info.nft@netsch.com

NETZSCH®

www.netsch.com