

YSTRAL Z-Inline Disperser

Extreme fine distribution of suspensions and emulsions

High shear gradient with the Rotor-Stator-Principle

The YSTRAL-Inline Dispersing machines work according to the Rotor-Stator-Principle. Due to the narrow gap between rotor and stator and a very high peripheral speed of the rotating rotor a very strong shear gradient is created.

The product passes the slots in-between the teeth of the rotor and reaches the shear zone and leaves the same through the slots of the stator. Due to the multiple teeth geometries of both rotor and stator additional mechanical forces are applied to the product being dispersed.



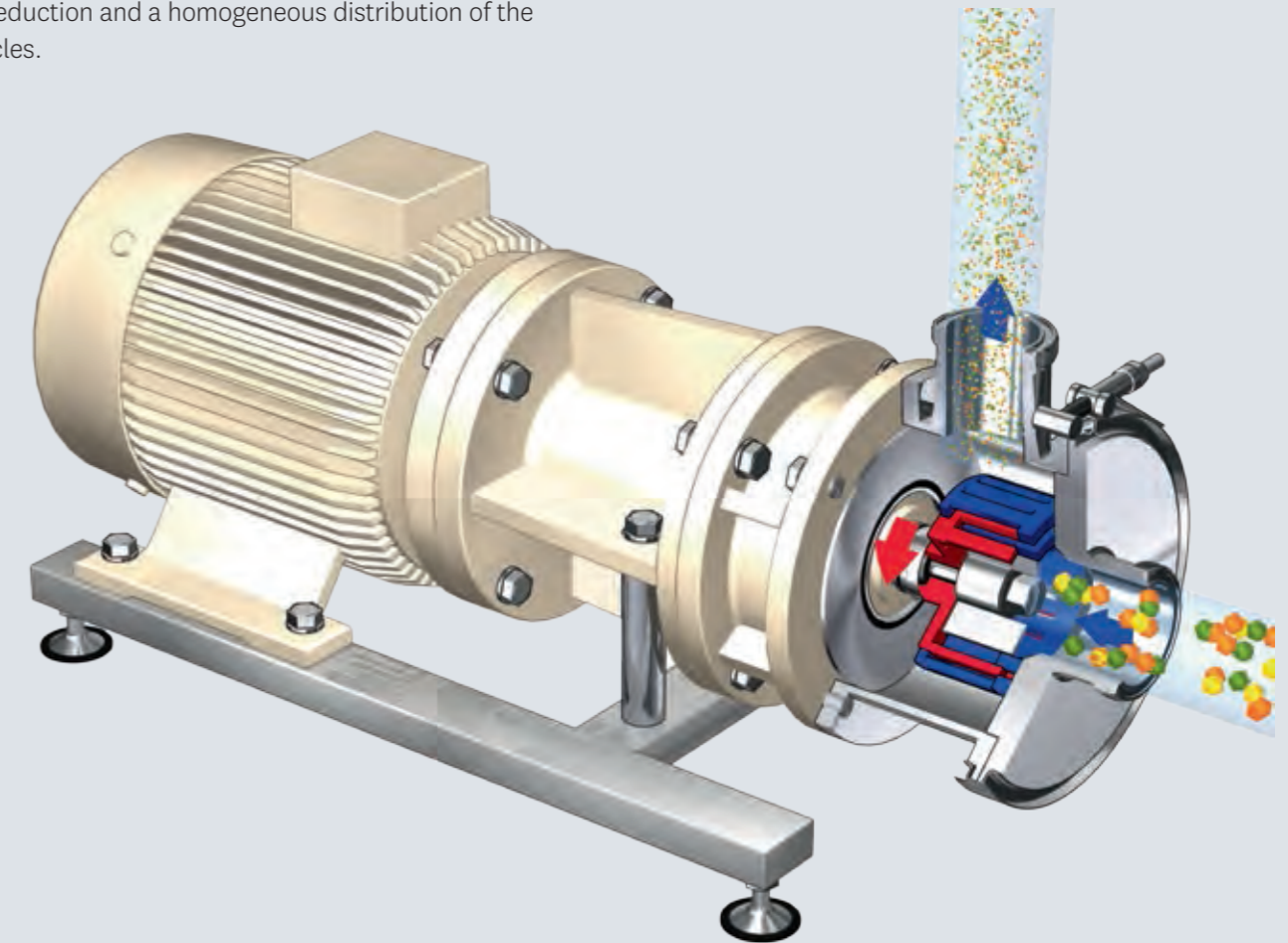
The essential advantages:

- Batch dispersing in a loop or Inline dispersing in one passage
- Short and reproducible processes
- Precise and if required multi stage shear tools
- Narrow droplet spectrum for emulsions as well as a complete des-agglomeration for suspensions
- 3A Certificate – simple cleaning by CIP
- Self pumping for low to medium viscosity products
- Peripheral speed up to 54 m/s



The function of the YSTRAL Z-Inline Disperser:

- The product is guided through a rotor-stator-system.
- The inner rotor ring accelerates the product to maximum speed, the stator reduces the speed of the product to zero and then it is again accelerated by the next rotor ring.
- This results in a very efficient particle size and/or droplet size reduction and a homogeneous distribution of the particles.



Technical Data

Power	1,5 – 55 kW
Voltage	230 / 400 V, 50 / 60 Hz, special voltages
Speed	750 / 1.500 min ⁻¹ , 1.500 / 3.000 min ⁻¹ , Infinitely variable speed up to 3.600 min ⁻¹ with a frequency converter
Dispersing chamber	stainless steel 1.4404 (AISI 316 L), special materials
Flow rate for liquids	0,2 - 100 m ³ /h
Peripheral speed	10 – 54 m/s
Seal	configuration depending on operational conditions
Options	explosion proof execution, certifications, qualifications

