

Function.....

Together with the Dispermix stator, a high speed rotor creates two liquid streams in different directions. A partial vertical stream is directed to the bottom of the vessel where it is reflected and causes strong turbulence in the whole vessel. The second partial stream is redirected horizontally and forced to pass through the dispersing zone of the Dispermix bead.....

Principle.....

Turbulence in the Dispermix bead and strong vertical forces are mandatory for optimum mixing of the contents of a vessel. The patented Dispermix bead works according to the principle of a rotor-stator system and causes strong turbulence in the vessel as well as particle size reduction of solids and agglomerates.....

Installation.....

For a Dispermix there is no "unfavourable" design of vessel. Depending on the application, the Dispermix may be installed to a tank from the top, from the bottom or as side entry.....

Technology.....

High-quality materials guarantee reliable, continuous operation. Motor and mixing shaft are assembled separately, all rotating parts are protected against accidental contact.....

Advantages.....

The product is mixed without incorporation of air by a vortex or along the mixing shaft. All the contents of the vessel, even highly viscous products, are mixed homogeneously and dispersed. While mixing, all agglomerates are broken down, the solids reduced to their primary particle size and completely wetted. In many cases, an additional dispersing step with a high shear machine can be avoided. The facility to use an electronic speed control, the modular design as well as the choice of a range of dispersing tools for each application, fulfil the requirements of any demanding production process.....

DISPER MIX

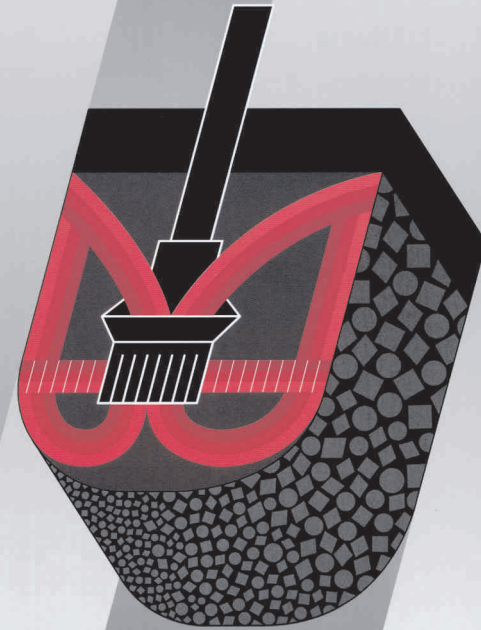
DISPERSING MIXER

TECHNOLOGY	
Technical information	Separate assembly of motor and mixing shaft
	Fixed speed or stepless regulation with a frequency converter
	The modular system allows adaptation to different dispersing tasks
	High reliability in continuous operation
TECHNICAL DATA	
Power	0.5 to 55 kW
Voltage	230/400 V, 50Hz, special voltages on request
Speed	Pole switchable 750/1500 rpm, 1500/3000 rpm stepless speeds up to 3600 rpm (gear box, frequency converter)
Bearing flange	Aluminium, coated Aluminium, coated steel
Wetted parts	Stainless steel 1.4571/1.4539, special steel
Seal	Single or double mechanical seal, depending on application
Head diameter	125 - 400 mm
Shaft length	500 - 3000 mm in steps of 100 mm

The ystral program

- Jetstream mixers
- Dispersing mixers
- Batch dispersers
- Inline dispersers
- Powder wetting machines
- Laboratory dispersers
- Stands
- Processing systems

Ystral



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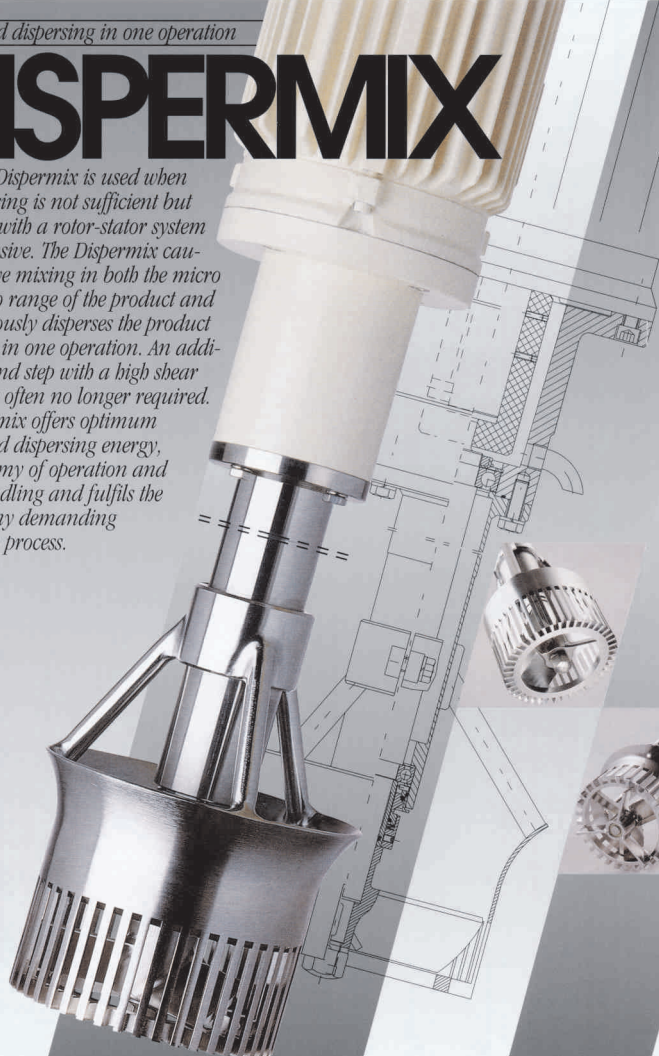
DISPERMIX

Dispersing mixer

Mixing and dispersing in one operation

DISPERMIX

The ystral Dispermix is used when simple mixing is not sufficient but dispersing with a rotor-stator system is too intensive. The Dispermix causes intensive mixing in both the micro and macro range of the product and simultaneously disperses the product completely in one operation. An additional second step with a high shear machine is often no longer required. The Dispermix offers optimum mixing and dispersing energy, high economy of operation and simple handling and fulfils the needs of any demanding production process.



VARIANTS



- Emulsions:** * Narrow droplet spectrum, short processing time, saving of additional processing steps (high pressure homogeniser, high shear machine),
- Pigment suspension:** * Good wetting of pigments, maximum concentration of dry substances,
- Thickener solutions:** * Absolutely lump-free solutions, independent of the powder addition rate,
- Dilution:** * Dilution of SLES from 70% to 5-28% in a very short time without foaming. Additional processing steps with the same machine to finish the product (e.g. shampoo, ..)
- Sauces:** * Complete dissolution of the powder compounds and simultaneous emulsifying of the liquid,
- Concentrate for drinks:** * Remarkable reduction of additional processing stage using a high pressure homogeniser,
- Premix for ice cream:** * High concentrations of dry substances are treated without any problem. Fat (liquid or blocks) is emulsified completely,
- Wax emulsion or wax dispersion:** * Fast treatment of the wax phase (blocks, pellets, flakes, etc.), short homogenising time, reproducible droplet spectrum,

ADVANTAGES

- Applications:** * Saves time as no additional high shear treatment is required,
- * Reduction of the post-processing time with a high shear homogeniser,
- * Short, reproducible process when mixing-in dry substances because of immediate wetting and dispersing of all powder,
- * A lump-free solution provides consistent quality - especially for difficult to dissolve products,
- * Narrow droplet spectrum for emulsions because of the homogeneous distribution of the shear energy throughout the contents of the vessel,
- * Less raw material by choosing products independently of their dispersing and wetting characteristics,
- * Less raw material and emulsifiers because of better wetting and dispersion,
- * Insensitive to variations of viscosity and flow characteristics,
- * Complete dis-agglomeration and suspension,
- * Complete circulation of the product avoids local heating with high viscosity products,

APPLICATIONS

