DISPAX-REACTOR® DRS 2000/05

The DISPAX-REACTOR® DRS is an inline ultra high shear dispersing machine used to achieve the finest micro-emulsions and suspensions. Extremely high shear rates (up to 190,000 s⁻¹) combined with a fine generator geometry enable crushing of droplets and solids particles down to nanoscale. The resulting product has long-term stability which reduces the need for emulsifying agents and thickeners. Because of the extremely high energy density, other dispersing aids can be reduced or possibly eliminated.

The DRS is usually equipped with a two-stage rotor/stator system (generators). The high tip speed of 40 m/s (10,000 fpm) often negates the need for a third stage. The DRS, designed with the same high quality features as the ULTRA-TURRAX® and the DISPAX-REACTOR® DR, is especially well suited for challenging pharmaceutical applications.

The high shear dispersing machine DISPAX-REACTOR® DRS 2000 is available in five sizes. The possible throughput (H₂O) varies from 3 to 175 gpm. All machine sizes work with the same circumferential speed of the rotor which provides for reliable scale-up.

Advantages of the DISPAX-REACTOR® DRS 2000 machine:

Simple, yet robust design, which is synonymous with long service life
Improved dispersing performance. Simple speed adjustment by use of a belt drive
Pharmaceutical execution available
Explosion protected execution available
Manufactured according to EHDG guide lines
3A-Sanitary conformed and certified
Easy scale-up of processes
High-value seals with wear-resistant materials
High quality surface finishes
Machine is self-draining and CIP, SIP capable
All wetted parts are made of 316L stainless steel
Capable of operating under pressure of up to 16 bar
Special materials and finishes are available upon request
Low noise level

IKA engineers and application experts are available to assist you with selection of machine type, execution and dispersing tools as well installation into existing process systems or extension to the new production plants.