

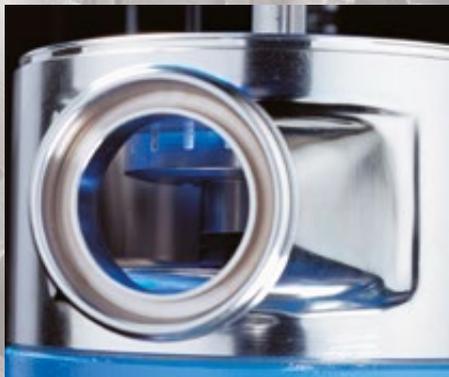
Inline dispersing & solid-liquid mixing

/// The details make all the difference!

A first-class belt drive together with a specific bearing provide an efficient and flexible drive system. A constant circumferential speed and the same design for all sizes guarantee maximum scalability for your processes. Cartridge mechanical seals provide high reliability and easy service.

IKA only uses first-class materials for exceptional mechanical strength and corrosion resistance. We have worked closely with our customers and research institutions to optimize the generators for improved dispersing and efficiency. Our generators (rotor/stator) are also available in many materials other than stainless steel for abrasive and corrosive applications. Our standard inline dispersing machines are already designed with resistant surfaces and have an optimized design for exceptionally easy cleaning.

IKA mixers can be cleaned or steamed in place. The 2000 Series has so many advantages, there are too many to list here.



DISPAX REACTOR DR 2000

/// For very fine emulsions and suspensions with a narrow particle spectrum

The DISPAX REACTOR is a three-stage inline dispersing machine for the production of very fine emulsions and suspensions with a narrow particle spectrum. Thanks to the three rotor-stator combinations (generators) connected in series, it is suitable for both recirculation processes and fully continuous operation. The DR line offers the same advantages as the UTL for scalability and sanitary design, and is also ready for CIP and SIP. A wide range of generators is available, so that the machine can be optimally adapted to your application. For the greatest possible flexibility, the generators can also be easily interchanged later on.

Example applications

- > API wet milling
- > Creams
- > Lotions
- > Toothpaste
- > Fruit juices
- > Salt solutions
- > Catalysts/fungicides
- > Lacquers
- > Polymer emulsions
- > Pesticides
- > Herbicides
- > Fungicides



Sizes DR 2000	Motor power [kW]	Flow rate* max. [l/h]	Motor speed [rpm]	Circumferential speed [m/s]
DR 2000/03 (magic LAB)	0.9	80	3,000	23
DR 2000/04 (Process Pilot)	1.5	500	3,000	23
DR 2000/05	7.5	2,500	3,000	23
DR 2000/10	15	8,000	3,000	23
DR 2000/20	37	20,000	3,000	23
DR 2000/30	55	40,000	1,500	23
DR 2000/40	75	80,000	1,500	23
DR 2000/50	160	125,000	1,500	23

* Self pumping rate based on H₂O and standard tool configuration

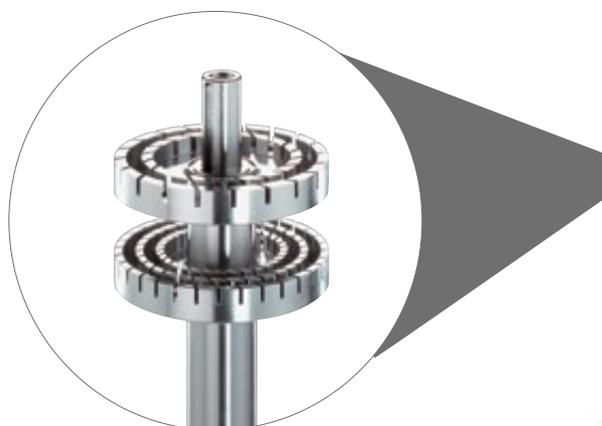
DISPAX REACTOR DRS 2000

/// Maximum shear rate and maximum energy input

The circumferential speed and the associated shear rate are among the most important factors for achieving the desired dispersion result. The DISPAX REACTOR DRS combines a circumferential speed of ≥ 40 m/s with fine generator geometries and thereby achieves extraordinarily high shear rates. The generator design also provides very high energy inputs, which are required for particularly demanding wet grinding tasks or emulsions below 1μ . The DRS is designed with the same high quality features as the UTL and the DR, and is especially suited to the most demanding applications.

Example applications

- > Vaccines
- > API wet milling
- > Metal-oxide suspensions
- > Inks
- > Printing dyes
- > Deagglomeration of pigments
- > Urea fertilizers (NPK)
- > Lacquers



Sizes DRS 2000	Motor power [kW]	Flow rate* max. [l/h]	Motor speed [rpm]	Circumferential speed [m/s]
DRS 2000/03 (magic LAB)	0.9	140	26,000	41
DRS 2000/04 (Process Pilot)	4	380	13,800	41
DRS 2000/05	5.5	700	3,000	40
DRS 2000/10	15	2,500	3,000	40
DRS 2000/20	37	7,000	3,000	40
DRS 2000/30	75	20,000	1,500	40
DRS 2000/50	200	40,000	1,500	40

* Self pumping rate based on H₂O and standard tool configuration