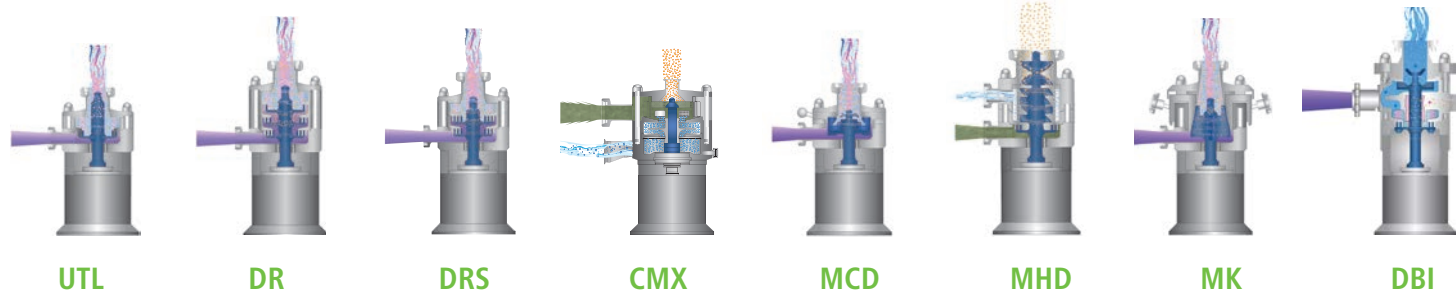


# Series 2000 | Sophistication in the details

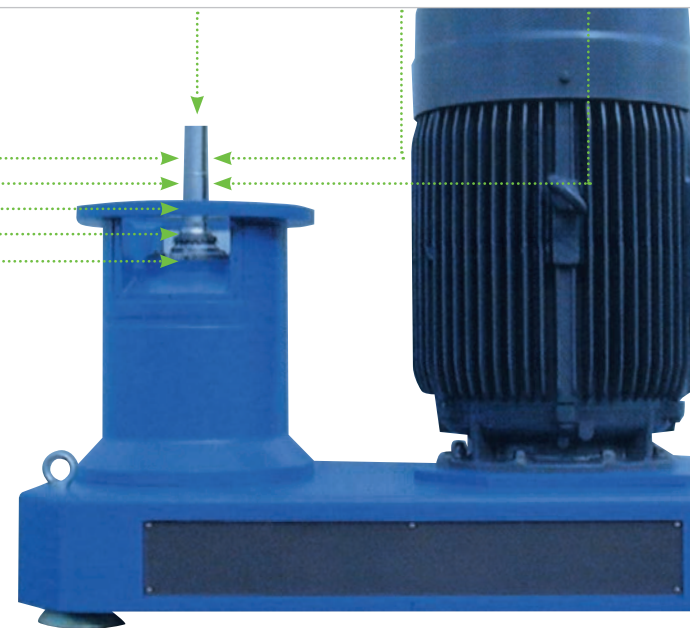
## Modular design – Provides better value and flexibility

### 2000 Series – Modular Design | A system with a great future!

As diverse as the mixing industry may be, there are many similarities from one machine to the next. IKA® has developed a new modular series of machines that takes advantage of these similarities. A basic drive unit can be fitted with a multitude of different machine heads, providing a solution for almost any mixing application. Our engineers, in cooperation with our customers, combined their expertise to develop the most innovative machine program in the industry!



UTL DR DRS CMX MCD MHD MK DBI



### Benefits of the 2000 series

- > Self draining due to vertical orientation
- > Dead spots are eliminated
- > Surface finishes meet FDA, 3A and EHEDG
- > CIP and SIP capable
- > Extensive mixing tool options
- > Low noise levels
- > Designed to meet food and pharmaceutical industry standards
- > Suitable for high pressure and temperature
- > Cartridge seal can convert into Single or Double mechanical
- > Directly Scaleable by maintaining constant tip speed

# ULTRA-TURRAX® Inline | UTL 2000

## Applications

- > Sauces
- > Binders
- > Fruit juices
- > Molten resins
- > Marmalades
- > Lotions
- > Sugar solutions
- > Adhesives
- > Dyes
- > Stabilizers



The UTL is a single stage dispersing machine used for the production of emulsions and suspensions requiring a coarse to medium particle size with a narrow distribution. A wide variety of rotor-stator combinations (generators) are available for adapting the machine to the application.

The UTL maintains a constant tip speed, regardless of machine size, ensuring scalability. A wide range of options is available on the motor, base, materials of construction, and more. The ULTRA-TURRAX® has high quality surface finishes for easy cleaning, and the machine is self-draining and CIP capable.

Type	Flow rate* [l/h]	Motor power [kW]	Motor speed [rpm]	Circumferential speed [m/s]
UTL 2000/03 (magic LAB®)	130	0.9	15,000	23
UTL 2000/04 (PROCESS/LABOR-Pilot)	300	1.5	3,000	23
UTL 2000/05	2,500	4	3,000	23
UTL 2000/10	8,000	7.5	3,000	23
UTL 2000/20	20,000	22	3,000	23
UTL 2000/30	40,000	37	1,500	23
UTL 2000/40	80,000	55	1,500	23
UTL 2000/50	125,000	110	1,500	23

\* Self pumping rate based on H<sub>2</sub>O and standard tool configuration

# DISPAX-REACTOR® Inline | DR 2000

## Applications

- > Creams
- > Lotions
- > Tooth paste
- > Fruit juices
- > Salt solutions
- > Catalysts
- > Lacquers
- > Polymer emulsions
- > Pesticides
- > Herbicides
- > Fungicides



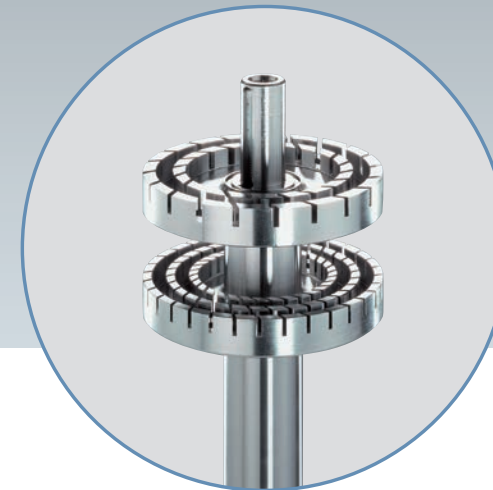
The DISPAX-REACTOR® is a high shear, three stage dispersing machine for the production of micro-emulsions and very fine suspensions, for wet milling and deagglomeration of fine solid particles. Three rotor-stator combinations (generators) in a series produce a small droplet or particle size, with a very narrow distribution. The generators can be easily interchanged, offering the ultimate in flexibility. The DR line offers the same advantages as the UTL for scalability and sanitary design, and is CIP and SIP capable.

Generators available: Coarse, Medium, Fine, Superfine, 2P.

# DISPAX-REACTOR® Inline | DRS 2000

## Applications

- > Vaccines
- > API wet milling
- > Metal-oxide suspensions
- > Inks
- > Printing colors
- > Deagglomeration of pigments



It is well known that tip speed, and therefore shear rate, is one of the most important factors in achieving the finest micro-emulsions. The SUPER DISPAX REACTOR® combines extremely high shear rates with a fine generator geometry to produce the ultimate in high energy dispersing.

Due to the high tip speeds, two stages are often all that is needed to achieve the results that are desired. The DRS is designed with the same high quality features as the UTL and the DR, and is especially suited for even the toughest pharmaceutical applications. The DRS can be an alternative to costly high pressure homogenizers.

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

\* Self pumping rate based on H<sub>2</sub>O and standard tool configuration

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

\* Self pumping rate based on H<sub>2</sub>O and standard tool configuration