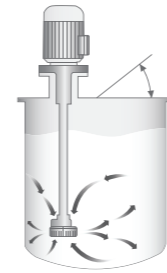




## Dispersing / Stirring in a batch process

- > Various shaft seal types
- > Surfaces according to pharmaceutical requirements optional
- > Generators in various designs, increased shear rate and frequency

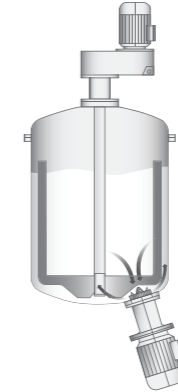
**ULTRA-TURRAX®  
UTC-KT  
(ambient)**



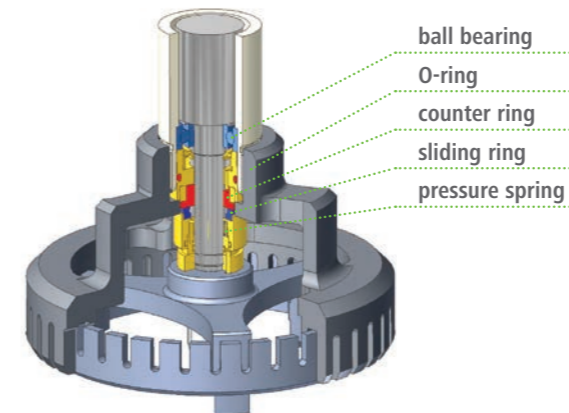
**ULTRA-TURRAX®  
UTC-KD  
(vacuum/pressure)**



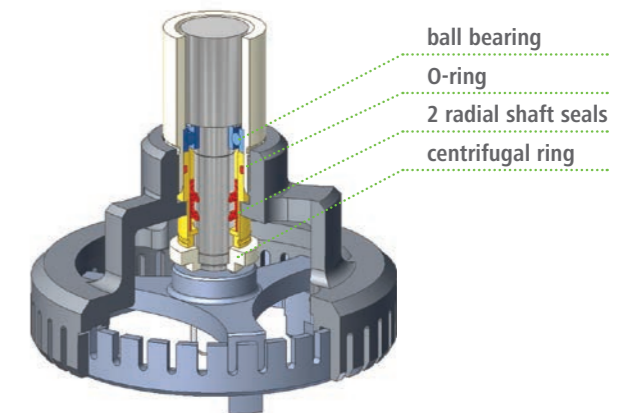
**ULTRA-TURRAX®  
UTE  
(vacuum/pressure)**



**Sealing type KD  
(mechanical seal)**



**Sealing type KT  
(lip seal)**

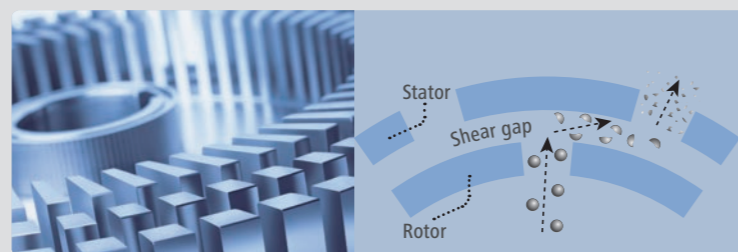


## Batch Dispersing

IKA® is the world leader in the design and manufacturing of high shear mixers and systems. IKA® produces a full range of mixers from laboratory to production scale. Our high shear mixers and dispersers feature our proven rotor-stator designs that are used in thousands of chemical, food, pharmaceutical and cosmetic companies.

The machines are designed to withstand the most demanding applications while providing the ultimate flexibility for your application needs.

**Rotor-Stator System**  
The best in dispersing technology



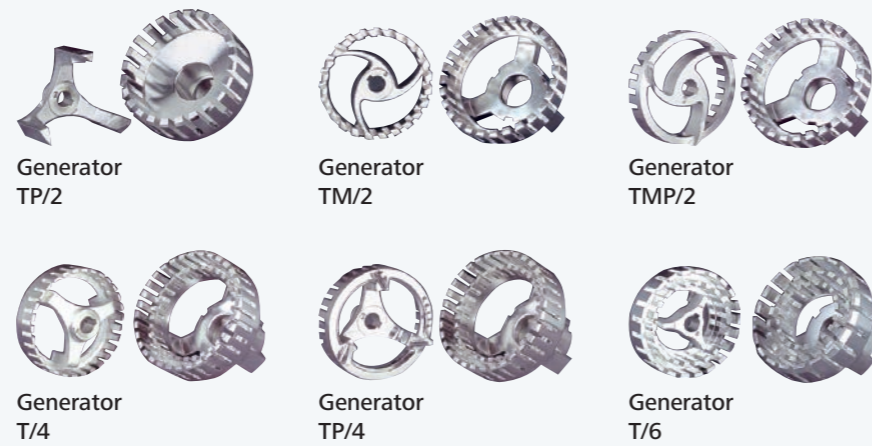
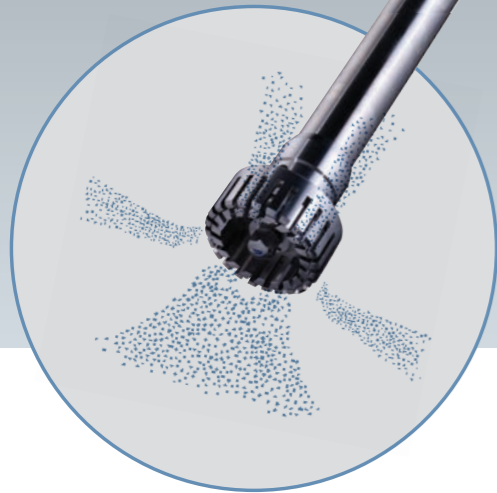
For several decades, the ULTRA-TURRAX® name has been synonymous with quality and reliability. The machines are used for the production of any kind of emulsions, suspensions and hydro-colloidal solutions. A variety of interchangeable generators (rotor + stator) enable further adaptations to the respective mixing task. Moreover, different types of seals allow different fitting positions as well as working under pressure up to 10 bar and with temperatures up to approx. 160 °C.

The models UTC, UTS and UTE are basically only differing in their peripheral design, the type of seal and assembly in the vessel. Nevertheless, the generators from these models are always the same so that the same mixing result is achieved. While the machine types UTC and UTS are for top entry assembly, the UTE is mounted on the vessel bottom. Therefore the UTE model is preferred in case of varying filling levels in the container.

# ULTRA TURRAX® | UTC / UTS - Top Entry

## Applications

- > Lotions
- > Waxes
- > Polishing agents
- > Gelling agents
- > Disperse dyes
- > Polymer emulsions



# ULTRA TURRAX® | UTE - Bottom Entry

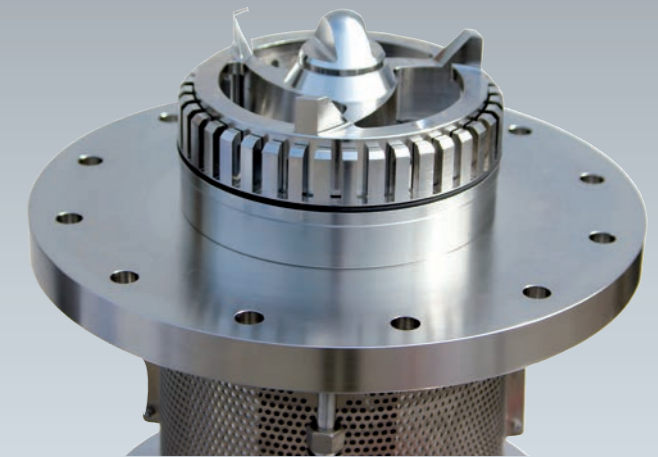
## Applications

- > Lotions
- > Wax emulsions
- > Resin solutions
- > Gelling agents
- > Filter cake suspensions
- > Rubber solutions



## Advantages of the ULTRA-TURRAX® UTE:

- > Prevents aeration
- > Capable of operating under pressures of up to 16 bar
- > CIP and SIP capable
- > No shaft tube where material can stick on
- > Machine can run at very low liquid levels
- > Easy for cleaning
- > No bearings in the product



## High-shear Batch Mixers - bottom & side entry

The ULTRA-TURRAX® UTE for bottom or side mounting to vessels is, mainly used in case of varying filling levels and when strong spouts and air inclusions have to be avoided. Suitable for operation with pressures from 0.1 up to 16 bar and temperatures from -40 °C up to 160 °C.

Type	Batch size range* [l]	Rotational speed [rpm]	Circumferential speed** [m/s]	Motor power [kW]
UTC 80	30 – 150	3,000	10	1.5
UTC / UTS 115	100 – 500	3,000	15	3
UTC / UTS 150	350 – 1,700	3,000	21	7.5
UTC 220	500 – 2,500	1,500	15	11
UTC / UTS 280	750 – 3,500	1,500	20	18.5
UTC 300	800 – 4,000	1,500	21	30
UTC 330	1,000 – 5,000	1,000	15	22
UTC 350	1,200 – 6,000	1,000	17	32

\* Depending on the product viscosity. Regular range 1 – 5,000 mPas.

\*\* Higher Tip Speeds can be achieved with optional VFD Speed Controller on all UTC and UTS models.

Type	Batch size range* [l]	Circumferential speed** [m/s]	Motor power [kW]
UTE 60	20 – 70	23	1.85
UTE 115	80 – 400	15	2.5
UTE 150	150 – 750	21	5.5
UTE 220	250 – 1,200	15	11
UTE 280	500 – 2,500	20	22
UTE 300	800 – 4,000	21	30
UTE 450	10,000 – 25,000	30	160

\* Depending on the product viscosity. Regular range 1 – 5,000 mPas.

\*\* Higher Tip Speeds can be achieved with optional VFD Speed Controller on all UTC and UTS models.