

Data Sheet

UTE 150



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The ULTRA-TURRAX® UTE is a high-performance dispersing machine designed for bottom entry into vessels. It mixes, emulsifies, and disperses free-flowing or liquid media with a viscosity of up to 5.000 mPas in batch operation. Using the rotor-stator principle, the UTE is best suited for applications that cannot be accomplished using conventional stirring methods.

Strong vortices as well as aeration are avoided with the UTE machine, even when very low fill levels occur in the tank or vessels are emptied during stirring or dispersing.

The UTE machine has a simple, robust design. The three phase motor, the shaft for the rotor drive, and the flange for mounting of the stator are combined by means of a lantern into one compact unit. The standard version of the ULTRA-TURRAX® UTE is suitable for process temperatures of up to 120°C. The shaft seal occurs via a low-maintenance mechanical seal.

The UTE series is available with three seal options:

The "B" version with a single-acting mechanical seal is permissible for operating pressures of up to 10 bar and is recommended when contamination of the product to be processed due to a mini leakage of the sealing medium is to be avoided.

The "BW" version with a single-acting mechanical seal on the product side and a shaft sealing ring atmosphere-sided combines the advantages of the "B" version with the option of flushing or sterilization of the mechanical seal from the backside.

The "P" version is equipped with a double-acting mechanical seal offering a reliable dry run safety. The UTE-P machines can be used when processing abrasive media and/or in vessels with operating pressures of up to 16 bars.

The large selection of tools provides for adaptation to a variety of mediums and mixing tasks.

The description of the machine contains the following information:

- Machine type
- Generator type
- Size of the machine (outer diameter of the dispersing tool)

Technical Data

Batch size max. (H2O)	750 l
Viscosity, max.	5000 mPas
Process pressure (max.)	16 bar
Vacuum, max	100 mbar
Process temperature, max.	120 °C
Dispersing tool	rotor-stator
Tip speed	21 m/s
Rotor rotational speed	3000 rpm
Motor power, standard	5.5 kW
Motor power max.	11 kW
Type of seal	double acting mechanical seal
Weight approx.	80 kg
Ident. No.	000UTE150

Number of toothed rings on the dispersing tool
Type of seal

Example: The UTE TP 115/4-P is an ULTRA-TURRAX® UTE machine with a TP 115/4 generator (four toothed rings, outer diameter of 115 mm) and a double-acting seal.

Advantages of the ULTRA-TURRAX® UTE machine:

- Simple and robust design
- Prevents occurrence of aeration and vortices
- Can be adapted to most mixing and dispersing tasks because of the wide variety of available generators (dispersing tools)
- Capable of operating under pressures of up to 16 bar
- When using special materials, suitable for operation at temperatures up to approximately 160°C
- CIP and SIP capable
- Comes in various sizes for batch volumes from 20 to 4.000 liters
- Infinite speed control option available
- All parts that come in contact with the product are made of stainless steel
- Special materials and top-quality surface finishes are available
- ATEX-approved, explosion-proof machine versions are possible
- A pharmaceutical version of the machine is available (can include gas-lubricated seals)

IKA application experts are pleased to assist you with product selection regarding type of machine and tool.

Technical data of the ULTRA-TURRAX® UTE machine: