

## Data Sheet

UTS 80/KD



## UTS 80/KD

The ULTRA-TURRAX® UTS is a high-performance dispersing machine for the production of emulsions and suspensions in batch operations. Using the rotor-stator principle, the UTS is best suited for applications that cannot be accomplished using conventional stirring methods. The UTS machine is capable of processing highly abrasive products and media with a viscosity of up to 5.000 mPas.

The UTS stator is connected to the motor with a mounting flange and extension rods. Because the rotating shaft seal is located directly on the motor flange, seal contact with the actual product is prevented. The UTS machine design meets specifications for dispersion production in the pharmaceutical industry or for processing of abrasive products in other industries.

The UTS models come in two different varieties:

The KT version is designed for use in open or pressure-less closed vessels. The flange contains a sealing bushing with a built-in radial shaft seal ring. The KT version can be operated at temperatures of up to 140°C.

The KD version is intended for use in closed pressure vessels. The KD model contains a double-acting mechanical seal housed at the sealing flange, and a barrier system for lubrication and cooling of the seal rings. Composite materials can be customized to meet individual requirements. The standard KD machine is capable of operating with pressures of up to 16 bar (UTS 80-KD up to 10 bar) and temperatures ranging from -40°C up to 160°C.

The preferred installation positions for the UTS are: diagonal from above or vertical off-centre.

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

The UTS machine for open vessels is available with floor, wall or mobile stands.

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)	150 l
Viscosity, max.	5000 mPas
Process pressure (max.)	10 bar
Vacuum, max	500 mbar
Process temperature, max.	160 °C
Dispersing tool	rotor-stator
Tip speed	10 m/s
Rotor rotational speed	3000 rpm
Motor power, standard	1.5 kW
Motor power max.	3 kW
Type of seal	double acting mechanical seal
Built-in length, standard	600 mm
Built-in length, max.	1000 mm
Weight approx.	52 kg
<b>Ident. No.</b>	<b>00UTS80-KD</b>

Number of toothed rings on the dispersing tool

Version

Pharmaceutical capabilities rating

Example: The UTS TP 115/4-KT-Ph is an ULTRA-TURRAX® UTS machine with a TP 115/4 generator (four toothed rings, outer diameter of 115 mm). The UTS machine is designed for use with open or pressure-less vessels (KT) and meets pharmaceutical production guidelines.