

LABORATORY SYSTEMS

APPLICATIONS

- Disruption of cells, bacteria, virus, tissue, also mixed tissue e. g. for extraction of cell contents.
- Emulsifying of hardly mixable liquids, e.g. oil and water.
- Deagglomeration of nanoparticles in material in medicine, biotechnology, automobile industry.
- Acceleration of chemical reactions.
- Production of dispersions.
- Reduction of particle size.



Analysis

Homogenizing of cheese samples for determination of nitrates
Preparing samples for grain size determination or environmental analysis

Biochemistry – Biology - Medicine

Due to high amplitudes, disruption of highresistant bacteria, cells or tissues is possible.
Detection of prions by cyclic amplification of protein misfolding

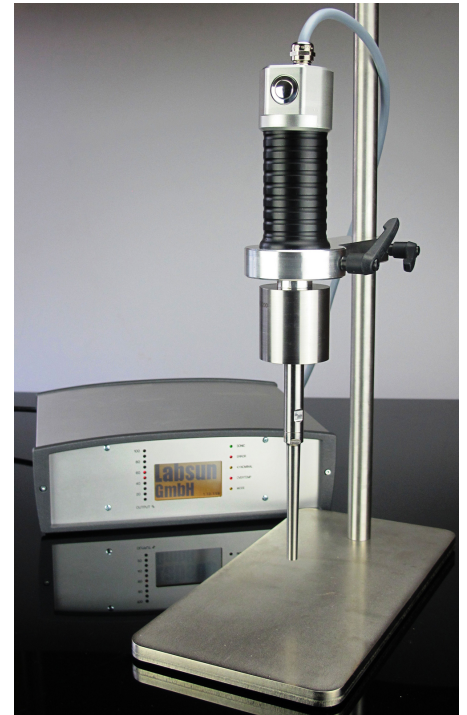
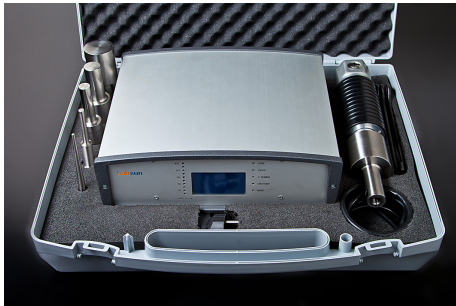
Chemistry - Sonochemistry

Acceleration of chemical reactions
Acceleration of chemical reactions

Pharmacy - Cosmetics

Production of larger volumes of long lasting emulsions, e. g. lotions
Production of antigens,vaccin es or liposomes

LABORATORY SYSTEMS



TECHNICAL FEATURES

- Sonotrodes (1-10mm) are available as accessories
- Power output maximum 50 / 100 watts
- Ultrasonic frequency 30 kHz
- Sonotrodes (3-40mm) are available as accessories
- Power output maximum 200 / 400 watts
- Ultrasonic frequency 24 kHz
- Constant amplitude at the sonotrode under all working conditions
- Output-amplitude adjustable in 1%-steps
- Automatic frequency-tuning for the sonotrode
- Protected against overtemperature, overload and short circuit
- idle run without load possible, even in air 24 hours
- Easy readout of process parameters such as power, energy , time and the medium temperature
- Designed for continuous operation
- Extensive accessories available