

Ultrasonic Process Laboratory

Feasibility testing and optimization of ultrasonic processes

Hielscher's [ultrasonic process lab](#) in Teltow, Germany is equipped with the full range of high power ultrasound devices which allows to sonicate small samples starting at 0.1mL up to larger volumes with approx. 1000L/hr. The facility is well equipped to test and optimize ultrasonic applications such as homogenizing, dispersing, emulsification, milling, lysis, extraction, sonochemistry, degassing, and cleaning.

Our lab manager supports you with his long-time experience in ultrasound technology and process engineering.



Ultrasonic Devices



Flow-Through System



SonoStep & Particle Size Analyzer

| | |
|---|--|
| ultrasonic lab homogenizers | VialTweeter , 100W , 200W and 400W ultrasonic devices |
| ultrasonic industrial processors | UIP1000hd (1kW) and UIP2000hd (2kW) for batch and inline flow-through sonication |
| flow-through processing | <ul style="list-style-type: none"> various ultrasonic flow cells, boosters and sonotrodes progressive cavity pumps with flow rates from 0.3 to 3L/min pressurizable system (0 to 30barg) temperatures up to 200degC heating/ cooling jacket heat exchanger |
| sample preparation | <ul style="list-style-type: none"> SonoStep (stirring, sonication, and pumping in one devices) ultrasonic lab sieves mixer microwave lab scale |
| analysis | <ul style="list-style-type: none"> microscopes with digital CCD camera and PC interface particle size measurement with MicroTrac S3500 Tri-laser technology (0.024 to 2800 µm) pH meter, viscosimeter, grindometer |
| lab ware | <ul style="list-style-type: none"> tanks, vessels, lab glass ware, eye droppers etc. safety goggles, gloves, ear protection, lab coats |

All lab results are recorded in a [detailed lab report](#), which documents the trials and includes graphics, tables and measurements as well as a recommendation for further steps.

For further information and quotation, please contact info@imlab.fr!