Ultrasonic Processor

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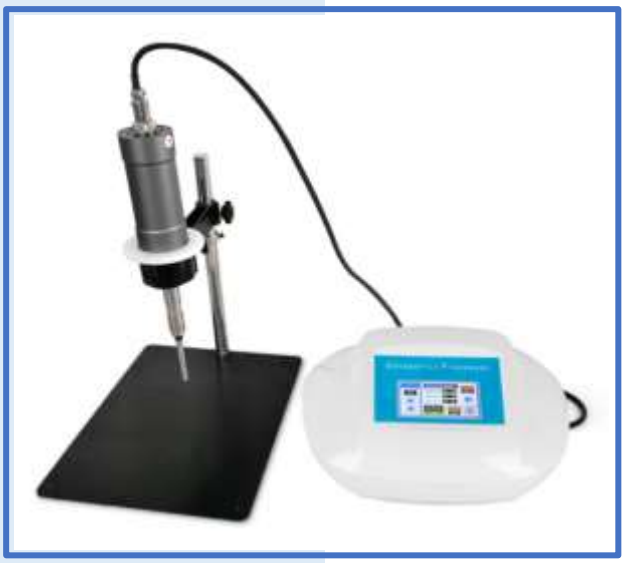

Overview

FC-series Ultrasonic Processor is a multi-functional and multi-purpose instrument that uses the ultrasonic to generate cavitation effect in liquid and ultrasonically treats the material. It is equipped with a fully digital intelligent ultrasonic generator, which greatly improves the instrument work, Stability and reliability. The instrument can be used for the crushing of various animal and plant cells and virus cells, and can be used for emulsification, separation, homogenization, extraction, defoaming, washing and accelerating chemical reactions. It is widely used in biochemistry, microbiology, medicinal chemistry, surface chemistry, physics, zoology and other fields.

Main application:

1. Drug extraction, cell, bacteria, and viral tissue disruption. Such as the extraction of cell contents.
2. Dispersion, homogenization, and emulsification of the material particles. Such as the dispersion of nanomaterials.
3. Accelerate the dissolution and accelerate the chemical reaction. For chemical synthesis, this ultrasonic device is equipped with a soundproof box bracket, a special soundproof box, and a low temperature system.
4. Ultrasonic crushing is an application of sonochemical equipment, which can be used for plant extraction, water treatment, solid-liquid dispersion, deagglomeration of particles in liquid, promotion of solid-liquid reaction, etc., so that aggregates with larger particle sizes are dispersed. Smaller particles. Stabilization means ensuring long-term uniform dispersion of powder particles in the liquid, etc.

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Technical features:

1. The latest ultrasonic circuit, continuous uninterrupted ultrasound, automatic tracking frequency and automatic resonance point and power control, no need to manually adjust energy manually
2. Working mode: 3.5-inch touch screen touch operation, the operation is simple and convenient; the screen displays the working parameters in real time, and the running status is cumulatively displayed; the micro- processing controller can store more than 20 groups of working program, and the 99-hour process control timer controls the total time: 1 second to 99 hours 99 mins 99 seconds
3. Ultrasonic frequency converter adopts lead zirconate titanate crystal piezoelectric frequency converter to seal and isolate water vapor and corrosive gas.
4. On/Off pulse timer, closed cycle and open cycle can be set arbitrarily from 1 second to 99 seconds to ensure high intensity processing of samples.
5. Unique automatic amplitude and pulse compensation function to ensure that the probe amplitude does not change due to load change during ultrasonic.
6. The transducer is made of German IBDI ceramic wafer material, which has high ultrasonic efficiency and is not easy to heat for a long time.
7. Ultrasonic probe is made of US standard TC4 titanium alloy. It is not easy to wear and cavitation when using probe for a long time (requires on-site verification, continuous ultrasonic for 30 mins without damage to the probe)
8. The equipment can work intermittently or at no load. It meets the requirements of different experiments and needs to be verified (no-load ultrasonic for 10 mins is acceptable)
9. The whole equipment is opened for mold making, with small volume and high efficiency, and beautiful appearance.

Specification

Models	FC100	FC200	FC400
Operating mode	Automatic, Manual	Automatic, Manual	Automatic, Manual
Screen size	3.5 inch high definition large touch screen control		
Ultrasonic power(W)	5-150	5-250	5-400
Frequency(KHz)	19-25	19-25	19-25
Duty ratio(%)	1-99%	1-99%	1-99%
Handling capacity(ml)	0.1-50	0.5-100	0.5-300
Ultrasonic time(s/min)	1s-99m-99h	1s-99m-99h	1s-99m-99h
Random horn(Φ mm)	2	3	6
Power source	220V/ 50Hz		
Optional horn(Φ mm)	2,3	2,3,6	3,6,8
Mainframe Weight(kg)	4.2	4.2	4.5
Total package weight(kg)	5.8	6.2	6.5