

Ultrasonic Extraction Machine

Ultrasonic extraction machine is a frequency search control system in ultrasound biological treatment process (extraction, crushing, washing, etc.), specifically supporting the ultrasonic bio-processing equipment, design and produce various types of ultrasonic bio-processing equipment on the base.



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UEM-M ultrasonic extraction machine changes your way to research and develop the micro-world.

Innovates and believes

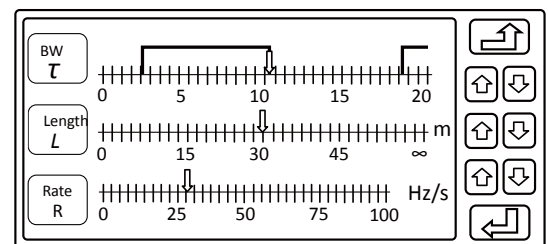
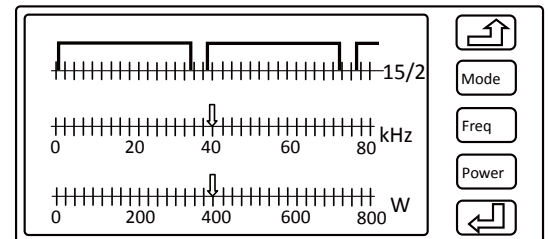


On production processes, in the growing emphasis on food safety, environmental protection era, ultrasonic biological treatment is a very promising industrial means.

The products mainly use machinery, power electronics, software engineering, non-toxic, harmless substances, such as means of production for processing, assembling, almost no waste products, but no toxic and hazardous substances released, belong to the clean production.

Overview

The main mechanism of ultrasonic on biological treatment is physical molecular scission and free radical oxidation-reduction reaction, rather than relying on potentially toxic and harmful substances added treatment effect, it does not produce or persistence of any toxic and hazardous substances. Thus, ultrasonic biological treatment is a non-toxic, harmless, non-polluting clean processing mode.



Set the running time, power, pulse width, frequency search rate, start frequency, end frequency and run.

Multi-vibrators

UEM-M adapts multi-vibrator. UEM-M is equipped with 12 vibrators or more against customer requirements, differing from other existing machines in the market which normally have one or two vibrators.

Accurate Frequency Control

Accurate frequency control. Specially designed power supply and control system to make sure of precise vibration frequency.

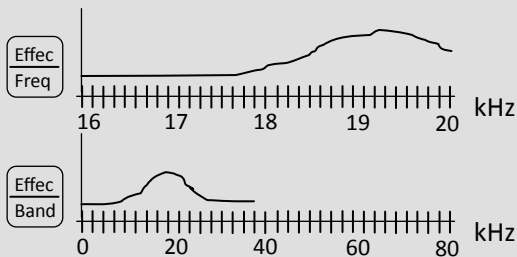
Features

Products using the following key technologies:

- 1.Design and implementation of a wide-band frequency, power control of ultrasonic power.
- 2.On the wideband the synchronous frequency servo of ultrasonic power to resonance match module and transducer execution module.
- 3.Biological treatment efficiency sensing and other key technologies

This product has the following unique advantages:

1. Through a combination of search control with multi-band detection efficiency combined with biological treatment to achieve ultrasonic frequency closed loop optimal control;
2. Through the power wideband ultrasonic generator, vibration plate feedback configuration and processing efficiency, biological treatment to achieve optimal frequency band for each search;
3. Use the process monitor and parameter icon menu,express and record biological processes and conditions.



UEM-M helps target the optimum efficiency/frequency rate easily. Future production can use UCM-1 to reduce costs.

Application innovation

Through the configuration among the wideband ultrasonic generator power supply, transducer vibration plate and treatment efficiency feedback, to achieve optimal biological treatment frequency search.

Using the process monitor and parameter icon menu to describe and record biological processing course and process situation.

In addition to conventional technology, experiment, test applications, the current light industry, chemical industry, food field, potential applications of the relevant fields can be extended to the optimum point search.

Extraction of food additives, biological active ingredients extracted drug active ingredient extraction, crushing and other processing cells.

For the optimum point of object handling is mostly unknown, application of this product will significantly improve equipment efficiency and productivity.

In addition, there are some new applications, such as tenderize meat, edible oil emulsion, extract protein powder from broken rice, grain deep processing.

Customization Service

We offer customization service.

- User can use UEM-M to make experiments and determine the process, we provide customized UEM-1 according to given specifications.
- User can provide the elements that expect to extract from samples, we can make experiments and determine the process, then provide customized UEM-1.

Applications

Oil Chemical (such as oil emulsification, dilution, purification, sterilization, etc.)

Food (such as extracting the active ingredients, toxic component extraction, cleaning, disinfection, breaking, etc.)

Medicine (such as extraction of active ingredients, toxic component extraction, dilution, cleaning, disinfection, broken, etc.)

Light industry (such as the active ingredient extraction, toxic component extraction, purification, dilution, cleaning, disinfection, breaking and so on.)

Success stories

1.Made successful feasibility test of ultrasonic pork tenderization for a food company and provided equipments.

2.Made successful feasibility test of ultrasonic extraction of capsanthin for a food company and provided equipments.

3.Made successful feasibility test of extracting aflatoxin, melamine and other toxins from rice, coin, wheat flour and provided equipments.

Specifications

	Operation mode	Frequency	Functions	Power	Customization
UEM-1	Extraction, crushing, washing	18kHz-68kHz operate at any locked frequency	Fixed frequency	250-500W	Frequency Power
UEM-M	Extraction, crushing, washing	18kHz-78kHz operate at any locked frequency	Search frequency and band, determine the process	12x300W	Frequency range Quantity of Vibrators Frequency of Vibrators Power