3000 Watt Sonication Machine w/ 25L Reactor Vessel

Sonication Nano-Encapsulation Machine for Food, Beverage & Cosmetic uses



Key Features:

- Sanitary 316/304SS Vessel and Titanium Horn Construction
- · Jacketed Flow Cell w/ Chiller Ports
- 25L Stainless Steel Reactor Vessel w/ Thermometer
- Magnetically Coupled Stirrer in Reactor Vessel
- · Peristaltic Pump for Flow Circulation
- Transducer Generator w/ Touch Screen Display
- Titanium Horn/Probe Construction for durability
- Instructions Provided to Produce Water Soluble Oil/Water Emulsions
- Instructions Provided to Sterilize Filter Final Emulsion Mixture, and Remove any Residual Metals.

Thermometer 25L Vessel Peristaltic pump Generator Confidential Information Property of LIF Weeks LLE Rose of this document is probletical substractions and the second of the document is probletical substractions of the second of the document is probletical substractions of the second of the document is probletical substractions of the second of the document is probletical substractions of the second of the document is probletical substractions of the second o

CAD Draft for Device:

Options:

- Filter Cartridge Options
- Refrigerated Chiller for Flow Cell Jacketing
- · Various Horn Options Available

Generator & Transducer



Transducer Horn Options



Sonicator Flow-Cell







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The 3000 Watt Sonication Machine with 25L Reactor Vessel by LDT Works is an all in one solution to produce water soluble oil/water emulsions. We include everything you need to produce water soluble emulsions with your oil/resins. All you must do is provide your ingredients in a thinned format (using food grade solvents) so that the reactor supplied can flow a oil/water mix to our custom designed transducer flow-cell. This flow cell is custom designed by our engineers to allow for the emulsification process to occur with high efficiency. We can supply a variety of transducer horns to accomplish any emulsion goal you are trying to accomplish. These emulsions can then be used directly, be diluted, or even be fed into a spray dryer to create water soluble powders.

We can also supply filtration cartridges to final filter your solutions, ensuring there are no residual contaminates (microbial, fungal, viral, metallic, etc) that are present in your final emulsion products. The supplied peristaltic pump can be used to filter the final solution once emulsification is completed.

These machines come standard in 220V single phase, and can be outfitted as needed for your specific application. We have optional refrigerated chillers that are sized appropriately to chill your transducer head and flow cell so you do not cause any heat related damage. It is important to always cool your transducer/flow cell to ensure no damage occurs to sensitive components.

LDT Works does not sell surfactant/encapsulation powders, but can refer you to the appropriate mixtures commercially available for food & beverage use,

Recommended Products this machine can create:

Beverage mixtures, oil mixtures, cosmetic formulas, water soluble powder precursor solutions, etc...

1. Optional parts of programming may be needed to match the specialty product specifications.

Specifications

Dimensions:

Length: 24"
Wide: 46"
Height: 36"

Volume:

25L Maximum Capacity

Electrical:

220V - 15amp - 1 Phase

Foamy Product: YES

Corrosive Product: NO

Heated Product: YES

Particulates: YES