

Universal Lab Solutions

Reshma Patil -9320645189

Mfg. of
Ultrasonic Cleaner
&
Lab Instruments



APPLICATIONS:

- AUTOMOBILE INDUSTRIES
- PHARMACEUTICAL INDUSTRIES
- MECHANICAL INDUSTRIES
- ELECTRONIC INDUSTRIES
- TEXTILE INDUSTRIES
- MEDICAL FIELDS
- DEFENSE FIELDS

INTRODUCTION:



We are pleased to introduce our selves as a leading manufacturing company, specialized in Ultrasonic Equipment like ultrasonic cleaners, ultrasonic sonicator bath, Compact chiller sonicator bath, External chilled water circulator & accessories.

Maintain by a Quality management system and hard working staff. Our product have a wide variety of application's, taking into consideration the growing importance of cleaning (efficient ultrasonic technologies) nevertheless we have kept flexibility and capability to resolve customers need of cleanliness.

Vibrating frequency above 18Khz (18,000 cycles/per sec) is called Ultrasound. As a result of these vibration's a large amount of tiny vacuum bubbles are formed in the liquid (they are in million's).They implode during high pressure and create highly effective pressure wave. This phenomenon is

called cavitations and result's in removal of dirt contamination from the object which is to be cleaned. To achieve this effect (ultrasonic effect) high frequency generators are used which convert's the frequency developed to the corresponding frequency of the ultrasonic unit which again is transformed into mechanical vibration with the help of electromechanical transducers.

Benefits of ultrasonic cleaning over conventional cleaning:

Ultrasonic cavitations formation and rapid implode process removes dirt & other contamination from items thoroughly and deep from pores & crevices and also from difficult area's to reach for conventional cleaning . Ultrasonic process cleans' faster in few minutes and exceeds in its efficiency, rather than any other conventional method of cleaning. It cleans so gently that even slight damages like scratches are also avoided.



MODEL	CAPACITY	SIZE IN MM	POWER
M1	1 Ltr	150 x 135 x 65	50 W
M 1.5	1.5 Ltrs	240 x 135 x 65	50 W
M 2	2 Ltrs	240 x 135 x 100	50 W
M 3	3 Ltrs	300 x 150 x 100	100 W
M 5	5 Ltrs	235 x 235 x 100	100 W
M 6	6 Ltrs	300 x 240 x 100	150 W
M 9	9 Ltrs	300 x 240 x 150	200 W
M 14	14 Ltrs	500 x 300 x 100	300 W
M 20	20 Ltrs	500 x 300 x 150	400 W
M 30	30 Ltrs	500 x 325 x 200	500 W

MODEL	CAPACITY	SIZE IN INCH	POWER
SM 30 US	3.5	9" x 6"x 4"	100 W
SM 50 US	5	8" x 8"x 5"	100 W
SM 65 US	6.5	12" x 6" x 6"	150 W
SM 100 US	10	12" x 9"x 6"	250 W
SM 140(L) US	14 (L)	21" x 7"x 6"	300 W
SM 200 US	20	14" x 12" x 8"	400 W
SM 200(L) US	20(L)	24" x 9"x 6"	400 W
SM 250 US	25	16" x 16" x 6"	500 W
SM 300 US	30	15" x 15" x 8"	600 W
SM 500 US	50	18" x 17" x 10"	750 W



COMPACT TABLE TOP CHILLER SONICATOR

ULTRASONIC WITH CHILLER



MODEL	CAPACITY	SIZE IN INCH	POWER
SM 100 US CH	10	12 X 9 X 6	250W
SM 200 US CH	20	18 X 12 X 6	400W
SM 200 US CH	20	18 X 12 X 6	400W
SM 250 US CH	25	16 X 16 X 6	500W
SM 300 US CH	30	15 X 15 X 8	600W
SM 400 US CH	40	20 X 20 X 6	650W
SM 500 US CH	50	18 X 17 X 10	750W

■ Compact Table Top Model

■ Floor Mounted Model

*Our speciality to develop Ultrasonic chiller as per customers requirement

Ultrasonic chiller sonicator :

... specially developed compact table top chiller Sonicator & Floor mounted chiller sonicator with Inbuilt chilling system taking into considerations the requirement of space & application of todays Q.C. department in Pharmaceutical field. We are specialized in making Chiller Sonicator as per customers required size & capacity .

ULTRASONIC PIPETTE WASHER



Ultrasonic cleaning for your various pipette, burettes in this machine washing is intense, gentle fast hence time saving and also ECO friendly.

This is done with the help of siphon principle due to which no shifting around takes place accelerated circulation of pipettes no glass breakage. When used according to the operating instruction. It is also used for cleaning upto your plastic pipettes burettes and other glass ware. Maximum length of 765 mm can be easily cleaned. Washing and Rinsing process is in same tank.

PROBE SONICATOR



A ultrasonic Probe (also known as acoustic horn, sonotrode, acoustic waveguide, ultrasonic horn) is a device with tapered metal bar commonly used for increasing the oscillation displacement amplitude provided by an ultrasonic transducer operating at the low end of the ultrasonic frequency spectrum (commonly between 20 and 33 kHz). function of the ultrasonic horn is to efficiently transfer the sound energy from the ultrasonic transducer into the treated media, which may be solid (for example, in ultrasonic welding, ultrasonic cutting or ultrasonic soldering) or liquid (for example, in ultrasonic homogenization, sonochemistry, milling, emulsification, spraying or cell disruption).

MULTISTAGE CLEANING SYSTEMS

ULTRASONIC IMMERSIBLE TRANSDUCERS



- Pre cleaning chamber: Maximum contamination is removed from the surface with the help of Jet spaying or Air agitation.
- U/s cleaning chamber: Precession cleaning is accomplished in this chamber with the help of U/s power, proper chemistry and temperature max cleaning is done from the surface.
- Rinsing chamber: The suspended contamination after Ultrasonic cleaning are cleaned in this chamber with the help of Air agitation of Jet spraying.
- Drying chamber: The forced hot air drying chamber utilizes evaporation, one of the most common drying technique's to remove water. Room air is heated to a 80°C which enables in to absorb moisture from the part.

Note: The process for multistage are settled as per customer requirement and more as per requirement of the jobs to be cleaned.



Immersible transducers can be place whenever you need in your existing tanks. This units gives you complete freedom to design specialized cleaning setup. (Upgrade pre soak tank with Ultrasonic Immersible transducers)

Each immersible transducers is fabricated from 304/316 stainless steel with welded seams & stainless steel fitting these hermitically sealed modular component are available in standard sizes.

Other size can be custom built for special application for more space saving. Flat transducers plates can be built into the tank bottom or side walls.