

# ULTRASONIC BATH (SONICATORS)



## Principle of Ultrasonic Bath

High frequency electrical energy is converted into ultrasound waves by means of ultrasonic Transducers, which are bonded on the base of SS water tank. These high frequency sound waves create countless, Microscopic vacuum bubbles, which rapidly expand and collapse. This phenomenon is called as CAVITATION. These bubbles act like miniature high speed brushes, driving the liquid into all openings and minutes recesses of the object immersed in the liquid. Intense scrubbing of Cavitation cleans away all the dirt and soil from the object immersed and the object is perfectly cleaned. Intricate objects can be cleaned with either complete or little dismantling.

## Application

- Laboratory : For glassware, filters cleaning & HPLC mobile phase degassing
- Industrial : Semi-Conductors, Electronic components, Precious parts & Mechanisms.
- Medical : Dental & Surgical instruments.
- Opticals : Spectacles, Spectacle frames, Lenses
- Jewellery : For all kinds of jewellery, Precious stones etc.
- To Remove : Dust, Oil, Greases, Polishing compounds, Waxes, Swarfs, Stains, Soils and any other contaminant.

## Salient Features

- Easy to operate & made of one piece SS Tank.
- Indigenously manufactured with advanced MOSFET technology, with Auto-tuning facility.
- Digital tuning of transducers with generators to avoid any frequency shifted even during demanding applications.
- Compact, rugged and highly durable systems.
- Extensively protected electronic circuits means longer and safer operations.

## Technical Specifications

- Operating frequency  $33 \pm 3$  KHZ, for all general purpose cleaning is highly recommended. Frequency of 40 KHZ is also available.
- Input voltage range of 200V AC - 230V AC, 50 Hz, single phase.
- Micro controller based timer range 0 to 15 minutes upto 3.5 ltrs. 30/99 min. timer are also available.
- Thermostatic heating
- Digital temperature controller, degassing, PSP (optional) if required.

## Weight Rings

Weight rings for Volumetric Flask / Measuring Cylinder

Model	Inner Dia	Capacity of Flasks	Weight in kg/pc.
WR-20	20	5 ml to 50 ml	0.145
WR-30	30	100 ml to 500 ml	0.250
WR-50	50	1000 ml to 2000 ml	0.375



Special Customised Basket

Model	Capacity	Tank Size (LxBxH) mm	Overall Dim (LxBxH) mm	Wattage
USB-1.5 L	1.5 Ltr	240 x 135 x 65	265 x 160 x 180	60 W
USB-3.5 L	3.5 Ltr	300 x 150 x 100	330 x 175 x 250	120 W
USB-6.5 L	6.5 Ltr	300 x 150 x 150	450 x 200 x 350	200 W
USB-9 L	9 Ltr	300 x 200 x 150	450 x 300 x 375	250 W

- Higher capacity other than mentioned are also available as per customer requirements.
- Different shape baskets available.
- Weight rings of different sizes available for different measuring cylinders.
- Available with Heater, DTC, PSP, Degassing as optional.

## ULTRASONIC PERFORMANCE METER



MODEL : Hygea

Ultrasonic performance meter provides a fast, effective & simple to use method of measuring the ultrasonic activity generated in ultrasonic baths. It is used to give a comparative measurement of one a bath's performance over a period of time.

## Specifications

- Probe Assembly in SS : 15 x 244 mm long
- Handle in ABS : Plastic 105 mm long
- Instrument case in ABS : Plastic 130 x 65 x 25 mm
- Weight (Probe & Cable) : 350 grams
- Weight (Incl. Battery) : 200 grams
- Indicator 1 Frequency : 5 - 50 KHZ
- Indicator 2 Power : 10 - 100 %
- Battery : 9 V
- Cable Connector : BNC 2P
- Calibration Period : 12 months