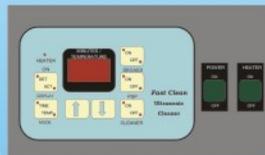
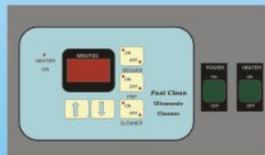


# Most effective "FAST - CLEAN"



SEVEN KEY CONTROL PANEL



FIVE KEY CONTROL PANEL

### CONTROL PANEL

Micro controller based soft touch control panel for easy operation

Digital display : 99 minutes Timer, Temperature set / actual.

Indications : Heater on/off, Ultrasonic on/off, Pulse sweep power on/off, Degass on/off.

Preset auto degassing for removal of dissolved gases for powerful sonication. Unique pulse sweep power mode for uniform sonication to entire volume eliminating standing waves generation. Power Switch and Heater Switch

### APPLICATIONS OF ULTRASONIC CLEANERS :

Ultrasonic cleaners are used in the automotive, sporting, printing, marine, medical, pharmaceutical, engineering and weapons industries.

#### Ultrasonic Cleaners in Scientific Labs

Lab Glassware Test Tubes, Pipettes, Optical & Contact Lenses, Eyeglass Frames, Scientific Instruments, Components

#### Ultrasonic Cleaners in Industrial Manufacturing

Switches, Relays & Motors, Gears, Precision Bearings, Metal & Plastic Parts, Assemblies, Machined Parts, Electroplating

#### Ultrasonic Cleaners in Electronic Manufacturing

PC Boards, SMDs, Ceramic Substrates, Capacitors, Lapping Heads, Packaging Components, Quartz Crystals, High-resolution Glass Plates.

#### Ultrasonic Cleaners in Medical & Dental Labs

Cannulae, Syringe Parts, Surgical Instruments, Blood Oxygenators, Dental Instruments, Burs, Dentures, Caps, Plates.

#### Ultrasonic Cleaners in Jewelry Manufacturing

Watches, Clock Movements, Precious Metals & Gemstones, Intricate Settings, Chains, Charms, Coins, Watch Straps, Glasses and Sunglasses, CDs & DVDs's.

**"You can really see the difference !!!"**

## Ultrasonic Processor



### FEATURES :

- Microprocessor Based – Programmable
- Real Time Display
- Independent On/Off Pulsar
- Integrated Temperature Controller
- Variable Power Output Control
- Automatic Tuning and Frequency Control
- Consistent Reproducibility

MODELS	LC - 250 P	LC - 500 P	LC - 750 P
Power	250 W	500 W	750 W
Frequency	20 Khz	20 Khz	20 Khz
Titanium Probe with tip	3 mm ( 1/8" )	9.5 mm ( 3/8" )	13 mm ( 1/2" )
Optional Probes with tips	6 mm ( 1/4" )	6 mm ( 1/4" )/3 mm ( 1/8" )	6 mm ( 1/4" )/3 mm ( 1/8" )
Sound Reduction Enclosure provided	Yes	Yes	Yes
Independent ON/OFF Pulsar	Yes	Yes	Yes
Integrated Temperature controller	Yes	Yes	Yes
Real Time Display	Yes	Yes	Yes
Timer	Yes	Yes	Yes
Input Supply	230 VAC (110 VAC optional)	230 VAC (110 VAC optional)	230 VAC (110 VAC optional)
Sample Volumes	0.150 ml to 275 ml	0.250 ml to 450 ml	0.350 ml to 600 ml



Life-Care Equipments Pvt. Ltd.

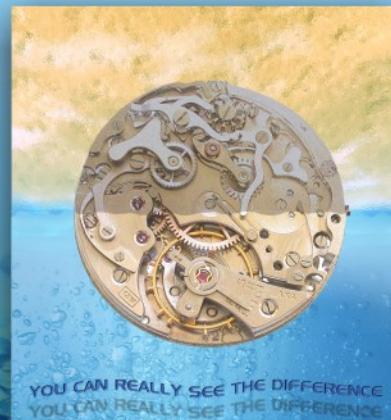
### Some of our esteemed Clients :



Specifications are subject to change without notice due to continuous upgradation process.

## HIGH PERFORMANCE ULTRASONIC TECHNOLOGY

### "FAST - CLEAN" by Enertech



Sole Distributor

Life-Care Equipments Pvt. Ltd.

115, Mahavir Industrial Estate, 32, Mahal Industrial Area, Off. Mahakali Caves Road, Andheri (E), Mumbai - 400 093, INDIA.  
Tel.: 91-22-26875300 / 5434 Fax : 91-22-26875178  
www.life-care.co.in Email : sales@life-careindia.com, lifecare@eth.net

# "ULTRASONIC CLEANING SYSTEMS"

## ABOUT ULTRASONIC CLEANING

Ultrasonic cleaning depends upon cavitation: the rapid formation and violent collapse of minute bubbles or cavities in a cleaning liquid. This activity creates a highly effective and unique penetrating action that blasts dirt from wherever it hides. Nothing cleans faster, safer or more thoroughly.

**Enertech's "Fast Clean"** Ultrasonic technology introduces sound in a unique way to produce Broad Spectrum Cleaning, the enhancement of higher power multiple frequencies in a cleaning bath. This results in improved and more precise cleaning that is also environmentally safe. Broad Spectrum Cleaning removes contaminants that defy soaking, scrubbing, spraying and other conventional cleaning methods.

## SALIENT FEATURES

- ▶ Indigenously manufactured with advance MOSFET technology.
  - ▶ Widest frequency range of 18 KHz. To 68 KHz.
- ▶ Digital tuning of Transducers to avoid any freq. shifting.
- ▶ Compact, rugged and highly durable systems.
- ▶ Efficiency of 90% permits maximum cleaning action, low power consumption.
  - ▶ @ 50% of the weight & size of conventional machines.
- ▶ Extensively protected electronic circuits means longer and safer operations.
  - ▶ Automatic frequency tuning for maximum output.
- ▶ Input range of 170VAC – 270VAC, highest immunity to input supply variations.
  - ▶ Digital 99 min pre-settable timer.
  - ▶ Pre-Set Auto Degassing function.
- ▶ Efficient Sales & Service backup, Competitive rates, One year Warranty.
  - ▶ Pulse Sweep Power for better effective cleaning.
  - ▶ Non-Standard models for specific requirements.



EN 15 US



EN 20 US



EN 20 US



EN 30 US



EN 200 (L) US



EN 60 US



EN 100 US



EN 200 US



EN 300 US



MT 1



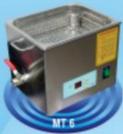
MT 2



MT 2

## OPTIONAL FEATURES

- ▶ **Digital Temperature Controller** with set/ actual value.
- ▶ **Low Noise Ultrasonic Baths** below 70 db with certificate from Government Approved Agency. This unique feature allows the user to use this machine in a closed environment (A.C) without being disturbed. Thus these machines are more user friendly.
- ▶ **Multifre** : For the first time in India "Fast Clean" has introduced a Multiple Frequency Ultrasonic Cleaner for the toughest, rigorous and hi-tech parts of industries. Multifre uses transducers operating at multiple frequencies simultaneously. This process eliminates Dead Spots completely and gives you the best impact and penetrative cleaning effect. (NO DEAD ZONES).
- ▶ **High temperature Bath** up to 90° C for much tougher contaminant cleaning.
- ▶ **Ultra High Frequency Cleaners** from 128 KHz up to 2 MHz for demanding applications.
- ▶ **Power Controller** : Stepless 10% to 100% power controller which would allow the user to select the power level as per the type of component to be cleaned.
- ▶ **Controlled temperature Bath** with water jacket for precise process requirements.



MT 6



MT 10



MT 20



MT 3

## PRECISION METAL CLEANING SYSTEM

Enertech's "Fast Clean" metal cleaning system is a unique precision cleaning system designed to clean a wide assortment of metal components with aqueous-based chemistries. It offers the convenience of being able to handle a variety of alkaline and mildly acidic water based chemistries which are typically encountered in the metalworking industry. It has been designed for removal of oils, greases, metalworking fluids, abrasive polishing compound, and particulate contamination, such as metal fines and shop soils.

"Fast Clean" liquid metal cleaners are specially formulated for effective soil removal. They have high soil loading capacity and are free rinsing, which means no white films, residues, or spots are left behind on your components. Our application engineers will help select and, if necessary perform lab tests to establish the most effective cleaner for your application.

The precision metal cleaning system is a three / four stage, fully-configured, ultrasonic cleaning, rinsing, and drying system.



Precision Metal Cleaning

## IMMERSIBLE ULTRASONIC TRANSDUCERS

ENERTECH'S "FAST CLEAN" immersible ultrasonic transducers can be placed wherever you need them in your existing cleaning tanks. These units give you complete freedom to design specialized cleaning setups or to upgrade pre-soak tanks with ultrasonic.

Each immersible transducer is fabricated from 304 / 316 stainless steels with welded seams and stainless steel fittings. These hermetically sealed modular components are available in standard sizes, other sizes can be custom built for special applications.



Immersion Transducers

## MULTI STAGE CLEANING SYSTEMS

**CLEANING** : Precision cleaning is accomplished in the first tank. This tank is equipped with either 40 KHz or 25 KHz Industrial Ultrasonic, and incorporates thermostatically controlled heat.

**RINSING** : The rinse position includes industrial ultrasonic components as standard to assure that all soils and cleaning chemistry are driven from blind holes and crevices before the dry cycle.

**DRYING** : The forced hot air drying station utilizes evaporation, one of the most common drying techniques to remove water. Room air is heated to above 85° C, which enables it to absorb moisture from the parts.



Multi Stage Ultrasonic System

## STANDARD RANGE - Fabricated Tank

Model No.	Tank Size	Tank Cap.	U/s. Power	U/s. Freq.
EN 15 US	7" x 4" x 3" (H)	1.3 ltrs.	50 Watts	33 ± 3 KHz
EN 20 US	8" x 4" x 4" (H) / 6" x 6" x 3.5" (H)	2 ltrs.	60 Watts	33 ± 3 KHz
EN 30 US	9" x 6" x 4" (H)	3.3 ltrs.	100 Watts	33 ± 3 KHz
EN 50 US	8" x 8" x 5" (H)	5 ltrs.	120 Watts	33 ± 3 KHz
EN 60 US	12" x 6" x 6" (H)	6.5 ltrs.	150 Watts	33 ± 3 KHz
EN 100 US	12" x 9" x 6" (H) / 24" x 5" x 5" (H)	10 ltrs.	250 Watts	33 ± 3 KHz
EN 200 US	14" x 12" x 8" (H)	20 ltrs.	400 Watts	33 ± 3 KHz
EN 200 (L) US	24" x 9" x 6" (H)	20 ltrs.	400 Watts	33 ± 3 KHz
EN 250 US	16" x 16" x 6" (H)	25 ltrs.	500 Watts	33 ± 3 KHz
EN 300 US	15" x 15" x 8" (H)	30 ltrs.	500 Watts	33 ± 3 KHz
EN 500 US	20" x 12" x 12" (H)	47 ltrs.	600 Watts	33 ± 3 KHz

## STANDARD RANGE - Moulded Tank

Model No.	Tank Size	Tank Cap.	U/s. Power	U/s. Freq.
MT 1	150x135x65 mm (H)	1 Ltrs.	50 Watts	40 ± 3 KHz
MT 2	176x162x100 mm (H)	2 Ltrs.	60 Watts	40 ± 3 KHz
MT 3	240x135x100 mm (H)	3 Ltrs.	80 Watts	40 ± 3 KHz
MT 4	300x150x100 mm (H)	4.5 Ltrs.	100 Watts	40 ± 3 KHz
MT 6	300x238x100 mm (H)	6.5 Ltrs.	150 Watts	40 ± 3 KHz
MT 10	300x238x150 mm (H)	10 Ltrs.	250 Watts	40 ± 3 KHz
MT 20	500x300x150 mm (H)	20 Ltrs.	400 Watts	40 ± 3 KHz