

*Supersonics*

HIGHEST CLEANING QUALITY  
THROUGH ADVANCED INDUSTRIAL  
CLEANING TECHNIQUES



**ULTRASONIC  
COMPONENT  
CLEANING MACHINE**





# INTRODUCTION

**SUPERSONICS** is a leading manufacturer and marketer of wide range of Ultrasonic Cleaning systems And Vapor degreasing Systems from past 38 years.

With a wide product range of Ultrasonic and Vapour Degreasing Machines, modular and custom cleaning equipment **SUPERSONICS** serves a wide range of Industries and markets.

Cleanliness is proven to have a significant effect in production quality. We always have the perfect solution for your application.

Our commitment to quality and customer service is driven by constant research and development of new technologies in the field of Ultrasonic Cleaning. All aimed towards supplying highest quality and guaranteed, most reliable, efficient systems. We are fast becoming one of the leading manufacturers and suppliers in this field.

Quality is, when the customers returns, and not when the product returns. To maintain the Best quality we manufacture systems using quality material and perform thorough testing to ensure maximum machine efficiency.

We go beyond the installation of the equipment. Our products are serviced and maintained from Mumbai as well as by few local service engineers all over India.

Our team also provides scheduled maintenance visits and training wherever needed. Our highly qualified engineers are always ready to solve your problem. The right spare parts are in stock, ready for immediate dispatch. We can respond to quality defects immediately.



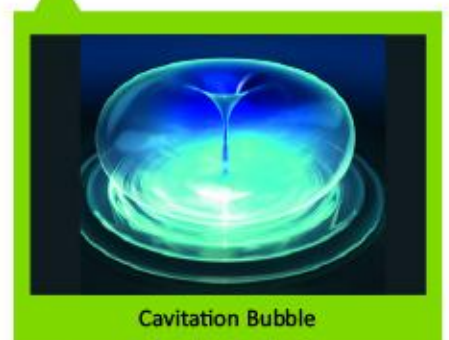
In-order to meet the special requirements of our customers in every industrial sector in the optimum way, we are in partnership with an Italian based company named "M/s. ILSA SPA". Ilsa Spa is a dynamic company which has a wealth knowledge and technical support team in the field of Hermetic Metal Degreasing Systems. Machine reliability, specification and performance characteristics are benefiting many companies worldwide.

We are also in partnership with Switzerland based company named as M/s. ASCO. ASCO is a provider of complete CO2 and dry ice solutions with customers worldwide. The product range includes dry ice blasting units, dry ice production machines, CO2 production and recovery plants and various other CO2 and dry ice equipment. ASCO's product portfolio is based on the expertise of over 130 years of practice in the field of CO2 and dry ice.

## HOW ULTRASONIC CLEANING WORKS :

The frequency beyond audible limit is called Ultrasonic frequency. A normal electrical frequency of 50Hz 230V is converted to very high Ultrasonic frequency. Transducers bonded to the bottom or side of the tank convert this electrical energy to mechanical energy. High intensity ultrasound in liquid creates high & low pressure zones. Under the influence of low pressure period, microscopic bubbles get formed in vacuum form. These bubbles get compressed & eventually collapse & burst.

This process is called as 'Cavitation'. Collapse or implode of these bubbles releases tremendous energy & produces an intense scrubbing action on the object immersed in the liquid. The scrubbing action created by cavitation dislodges particular matter from the material surface.



Cavitation Bubble



Ultrasonic Transducers



# ADVANTAGES OF ULTRASONIC CLEANING:

1. Top quality cleaning process, even when parts have difficult intricate recesses or complex shape.
2. Faster cleaning process reduces standstill periods between productions.
3. The material to be cleaned is not damaged, including its surface.
4. Consistent Quality Cleaning Results can be achieved
5. Once the material is placed in Ultrasonic tank, the presence of operator is not required.
6. Consumption of cleaning media is minimal
7. Safe cleaning systems for the person and the work area environment.
8. Easy to install, maintenance free and do not require special training to operate.

## INDUSTRIAL APPLICATIONS

### Automobile Industry

- Engine Block
- Cylinder Head
- Fuel Injection Parts
- Carburetors
- Valves
- Brake Parts
- Piston & Piston Rings
- Bearing
- Steering Unit Parts & Many More

### Electronic Industry

- Cleaning Of PCBs,
- Video Heads
- Transistor Leads
- Stencils etc

### Optical Industry

- Cleaning of Lenses
- Glasses
- Glass Moulds
- Spectacle Frame

### Textile Industry

- Cleaning of Spinnerets
- Candle Filter
- Ceramic-Nozzles
- Texturing Discs
- Spinning Aprons Etc.

### Gems & Jewellery

- Cleaning of Precious Metals
- Jewellery
- Horological Industry

### Medical Industry

- Cleaning of Dental and Surgical Instrument
- Endoscope Tubes
- Orthopedic Implants
- Surgical Blades
- Hypodermic Needles
- Pharmaceutical Industry
- Syringes And Needles

### Plastic Industry

- Cleaning of Injection Moulds.

### Others

- Pen Tip Industry
- Electroplating Industry
- Brassware, Lock Industry
- Cutleries
- Non Stick Appliance
- Antique, Musical Instrument
- Castings
- Degassing of Liquid & **Many More** Applications

## ULTRASONIC CAN CLEAN FOLLOWING CONTAMINATIONS :

Metal Chips / Swarf, cutting oil, rust preventive oil, lapping paste, grease, polishing compounds, waxes, dirt, soldering flux, plating salts, ink, lacquer, paint and many more.





# OUR PRODUCTS:

1. Ultrasonic Table Top Digital System (Tank & Generator Separate).
2. Ultrasonic Table Top Digital System (Compact).
3. Ultrasonic Single Stage Machines.
4. Ultrasonic Multi-Stage Cleaning Machine. (Manual).
5. Ultrasonic Multi-Stage Cleaning Machine. (Automatic).
6. Ultrasonic Immersible Pad.
7. Ultrasonic Multistage Vapour Degreasing Machine.
8. Single Stage Vapour Degreasing Machine.
9. Ultrasonic Tube / Rod Resonator
10. Hermetic Type Single Chamber Multi Operation Cleaning Systems.
11. Dry Ice Blasting Units & Pellitizers.



# SALIENT FEATURES:

- ◆ Advanced latest IGBT technology based Ultrasonic Generator
- ◆ 100% Degreasing.
- ◆ Components are treated in three or more stages, more cleaning time yet more production.
- ◆ Components are 100% clean & dry.
- ◆ Can be used for distillation.
- ◆ Stainless steel lid with cushion & double locking arrangement.
- ◆ Hard chrome plating to the tank walls where emission takes place
- ◆ Very elegant and easy to operate control panels.
- ◆ German Crystals to obtain optimum cavitation.
- ◆ Our Machine consist of Inbuilt Protection Relay.
- ◆ All PCB's are Wave Soldered with Lead Free Solder.
- ◆ Polyurethane Coating is done on each PCB.
- ◆ Stainless Steel Immersion type Tubular Heaters are used.
- ◆ Australian Imported sound proofing material is used to reduce the sound of machine.
- ◆ Compact Modular Generator design
- ◆ Continuous re-circulation & distillation.



German Transducer



Hardchrome Plating





# STANDARD SINGLE STAGE ULTRASONIC CLEANING SYSTEM

MODEL	ULTRASONIC POWER	SIZE IN INCHES LXBXH	CAPACITY OF TANK	HEATER CAPACITY	TOTAL ELECTRICAL LOAD	RUNNING LOAD	ELECTRICAL UNITS IN 8 HRS WORKING
SUC 150	150 Watts	7" x 7" x 6"	5 Litrs	Nil	150 Watts	150 Watts	1.2 Units
SUC 250	250 Watts	12" x 7" x 8"	11 Litrs.	400 Watts	650 Watts	650 Watts	3.6 Units
SUC 500	500 Watts	15" x 11" x 12"	33 Litrs.	1000 Watts	1500 Watts	800 Watts	6.4 Units
SUC 750	750 Watts	20" x 12" x 12"	48 Litrs.	1500 Watts	2250 Watts	1250 Watts	10 Units
SUC 1000	1000 Watts	24" x 15" x 15"	90 Litrs.	2000 Watts	3000 Watts	1750 Watts	14 Units
SUC 1500	1500 Watts	30" x 16" x 18"	140 Litrs.	4000 Watts	5500 Watts	3000 Watts	24 Units
SUC 2000	2000 Watts	36" x 18" x 18"	190 Litrs.	6000 Watts	8000 Watts	4000 Watts	32 Units
SUC 2500	2500 Watts	40" x 20" x 20"	260 Litrs.	8000 Watts	10,500 Watts	5000 Watts	40 Units
SUC 3000	3000 Watts	46" x 22" x 24"	400 Litrs.	8000 Watts	11,000 Watts	6000 Watts	48 Units

- ◆ All these above model have bottom mounted transducer. In case of side mounted TDR, the tank sizes are different.
- ◆ For example, In case of 2000 Watts model, Side mounted TDR, the tank size will be 22" X 18" X 28".
- ◆ All the above calculations are theoretical & to the best of our knowledge. Specifications are subject to change without prior intimation.

## CLEANING FREQUENCY:

22 + 3 KHz for maximum and vigorous cavitation OR 35 + 3 KHz for intricate designs & delicate parts cleaning.

## HERMETIC TYPE METAL CLEANING EQUIPMENT

- ◆ Excellent & consistent cleaning results that are repeatable and guaranteed in time.
- ◆ High solvent power to solubilize organic dirt.
- ◆ Quick and efficient drying upto 100%, even on complex shaped parts with blind holes.
- ◆ Irrelevant emissions into the atmosphere, considerably lower than regulatory thresholds. (As Per European Norms)
- ◆ Built-in solvent recycling by distillation and automatic carbon regeneration.
- ◆ Low power consumption thanks to process optimisation.
- ◆ Great process flexibility with possibility to combine stages according to specific needs.
- ◆ Possibility to clean different materials, in some applications this is possible even during the same cycle.
- ◆ Compact-size and high productivity.
- ◆ Unique standard for different cleaning technologies.
- ◆ Wide range leaving large room to customisation.
- ◆ "Turnkey" solutions with drives, accessories and services.
- ◆ Inbuilt rust preventive oil operation.



IK Series  
Modified alcohols  
or Hydrocarbon  
based



IPV Series  
Perchloroethylene  
based





🏠 26, 27, 50, New Satguru Nanik Industrial Estate, Western Express Highway, Goregaon (E), Mumbai 400 063

📞 Mobile: +91 91676 20220. • Tel. No.: 022 2685 4322/ 4926, 5212

📠 Fax: 2685 4296

✉ E-mail: sales@supersonics.co.in

🌐 Website: www.ultrasonic.net.in

Scan QR Code  
www.ultrasonic.net.in



Our Partners



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