Tierra Tech® is a leading international company involved in the manufacturing and distribution of Ultrasonic Cleaning Equipment and Systems.

In addition to our 15 years of experience in ultrasound technology, we have two production plants; one, in Europe and one in America, with distribution centres in the United States and France, we also have an extensive network of distributors that represent us in more than 30 countries.

Our technical sales team is highly qualified thus enabling us to offer a personalised service and advice, and an ability to meet the needs of each client. With standard equipment available for immediate despatch, you will have the most advanced and efficient ultrasonic cleaning technology at your facilities.

Here at Tierra Tech®, we have a very efficient Research & Development Department, who are working continuously with new cutting-edge technology and applications for the ultrasonic cleaning environment, therefore, enabling us to offer individual solutions to today’s problems.

We cater for the industrial sector and in addition to standard models, we have special equipment available enabling them to be adapted to suit every requirement. We also have an automatic, multi-stage line, divided into two categories: Smart or Heavy, according to the loading capacity required.

At Tierra Tech® we comply with the highest quality standards in all our processes. We are certified according to the ISO 9001:2008, endorsed by TÜV Rheinland under registry number 0.04.09057.
Tierratech® is located directly in Spain, Mexico, USA and France; Countries where we have design, production and sales facilities. In addition to our subsidiaries, we have an extensive distribution network in more than 30 countries, providing commercial and technical support to all our customers worldwide.
Aplicaciones by Industry

Automotive Industry

TierraTech® have a wealth of experience in supplying standard and special equipment to the automotive and related industries. According to the application and the size and quantity of components to be washed, we will recommend either a standard or custom-made machine best suited to that application.

Aeronautical Industry

The precision of ultrasound cleaning helps both the manufacturers of the components and MRO centres to meet the high-quality specifications and the strict safety standards of this sector. Where safety is of the utmost importance, the equipment offered by Tierra Tech® is essential for the cleaning of hydraulic systems, heat exchangers, engine components, injection pumps, vanes, etc. since ultrasonic cleaning does not affect the materials or alter the dimensions or geometry of the surfaces. Tierra Tech® has extensive experience in the aeronautic industry and can offer you the most suitable solution to your requirements.

Graphics Industry

Ultrasonic cleaning systems are used to clean rollers and anilox sleeves, etching plates, cartridge holders, ceramic rollers and other removable printing pieces that accumulate oil, water, alcohol or UV-based ink. The accumulation of dirt causes a progressive deterioration of the drum, which affects the printing quality. The advantages of ultrasound cleaning are the recovery of the transference level of the cells from the anilox rollers (recovery of the cell volume) and also rotogravure cylinders in all sizes. Therefore, using our machines for your cleaning needs, ensures you obtain a consistent and high printing quality.

Plastics Industry (Moulds)

Immersion washing in our ultrasound tanks is an efficient and high-quality solution for cleaning all kinds of plastic, rubber, rubber/metal, aluminium and zamakinjection moulds. They also enable cleaning the complete mould without having to dismantle the piece and damaging the parts. This is why our equipment offers you the most efficient alternative to traditional cleaning systems. We take into account the amount of moulds you need to clean and any specific requirements and design and manufacture multi-stage cleaning equipment to meet these needs.

Aplicaciones by Industry

Treatment of Surfaces and Electroplating

Ultrasound cleaning before coating components results in considerable time-saving and labour costs because it replaces manual cleaning and the long immersion times required by using traditional cleaning methods. It removes polishing pastes, grease and dirt quickly and efficiently from all types of metal and plastic components, reaching any hidden areas. This means a better adherence to the surface of an electrolytic coating and, therefore, an enhanced appearance and quality of the product.

Stripping

In the field of stripping, the use of ultrasound enables accelerated processes and eliminates all the organic coating from metallic surfaces. This is why we use the latest generation of strippers. Strippers combined with the mechanical action of ultrasound enables the full removal of paint or coating. TierraTech® has considerable experience in industrialised stripping processes for steel, aluminium, etc. We also have considerable experience in restoring valuable parts, for example, alloy wheels, automotive components, aluminium profiles for architectural purposes, etc. and in maintaining instruments used in painting lines.

Energy Industry (nuclear, wind power, thermal, electricity, solar)

The energy industry encompasses sectors such as nuclear, wind, thermal, electric and solar. We have different solutions adapted to the different sectors, such as cleaning of heat exchanger plates and heads in the nuclear sector.

For the Electric Industry, we decarbonise and degrease engines and clean heat interchangers. In the Wind Turbine Industry, ultrasound is used to maintain gear motors.

Food Industry

Our equipment is ideal to remove oil, grease, waste and calcareous encrustation. With the recommended ultrasound system, we achieve a better cleaning result compared to traditional methods. This constitutes a guarantee for the maintenance of equipment and instruments in an industry with such high hygiene standards.
Aplications by Industry

**Pharmaceutical and Laboratory Industry**

TierraTech® equipment is utilised in the pharmaceutical industry. Our ultrasound equipment is used to remove traces of chemical products, oils, pigments, among other residues. We remove dirt from complex components with cracks, joints or restricted access without damaging them. Ultrasound equipment achieves a superior cleanliness and saves time and effort compared to conventional washing.

**Electronics**

Ultrasound cleaning in the electronics field is used for printed circuit boards and electronic components in order to remove soldering residues, dust, grease and other contaminants that reduce the performance. We achieve a high-quality cleanliness even in areas that are hard to reach or blind holes, but at the same time it is delicate with fragile soldering and small components. After the ultrasound cleaning process, the electronic components improve effectiveness and achieve improved results in SIR tests.

**Machining and Precision Parts**

Ultrasound cleaning is the most efficient solution in industrial bar turning and component machining. It is an excellent method for cleaning and removing residue such as shavings, grease, rust, etc. Our systems are being implemented in all machining sub-sectors and bar turning in the ancillary automotive industries, including connections, couplings, implants/medical prosthetics etc.

**Industrial Maintenance**

Ultrasound cleaning is an essential task in the industrial maintenance industry to ensure reduced downtime in the manufacturing process. Preventive maintenance is essential to extend the life of machinery used in this industry and to ensure smooth operation and reduce the possibility of unexpected breakdowns. Our ultrasonic cleaning equipment facilitates cleaning chains, gears, electro-valves, transmissions, hydraulic gears, heat exchangers, filters, etc.

TT Multistage Automatic Smart

TierraTech® has designed a standardised line both in capacity and in cleaning or treatment stages. Since the requirements for quality and quantity of the parts to be cleaned are different, each cleaning system is built according to the prospective customers’ specifications.

The Automatic Smart series are fully automated systems with useful capacities ranging from 50-350 litres. This equipment is designed to meet the highest requirements for industrial cleaning, thereby achieving cleaning results that meet our customers’ specifications.

**TT Automatic 50**

A modular ultrasonic cleaning system with a useful capacity of 50-70 litres. Different modules are incorporated depending on the components to be cleaned, such as rinsing, passivation, drying, etc. The model shown is a standardised system composed of an ultrasonic cleaning system, two cold rinses, one hot rinse and drying.

**Technical specifications**

- **Power supply:** 400V
- **Max. capacity of the tank:** 70 Litres
- **5 cleaning process stations:**
  - Ultrasonic cleaning
  - Cold rinse 1
  - Cold rinse 2
  - Hot rinse
  - Drying
- **Ultrasonic generator with an output power of 800W.**
- **Tank built in stainless steel AISI 316 of 2mm.**
- **External paneling in fingerprint-free steel in 1mm.**
- **Thermal-acoustic insulation K-Flex Duct Net of 20mm.**
- **Automatic covers operated by pneumatic cylinders in all tanks.**
- **Level detectors 9” module PLC with touch screen**
- **Dimensions (length x width x height):**
  - Internal: 500 x 300 x 500 mm
  - Total external: 3770 x 2600 x 2130 mm

**System with Enclosure**

The equipment shown has similar characteristics to the standard system, but it is fully equipped with an enclosure and vapour extraction. Optional equipment can be supplied such as oil extraction, pneumatic covers, filtering systems, rotary baskets, hot air drying, vacuum drying, automatic loading and unloading, or any other options you may require.
TT Multi-Stage Automatic Smart

TT Automatic 100
A modular ultrasonic cleaning system with a useful capacity of 100 litres. Different modules are incorporated depending on the components to be cleaned, such as rinsing, passivation, drying, etc. The model illustrated below is a standard system consisting of ultrasonic cleaning, two cold rinses, hot rinsing and drying.

Technical specifications
Power supply: 400V
Max. capacity of the tank: 100 Litres
5 cleaning process stations:
- Ultrasonic cleaning
- Cold rinse 1
- Cold rinse 2
- Hot rinse
- Drying

Ultrasonic generator with an output power of 1000W.

TT Automatic 150
A modular ultrasonic cleaning system with a useful capacity of 150 litres. Different modules are incorporated depending on the components to be cleaned, such as rinsing, passivation, drying, etc. The model shown model below is a standard system consisting of: ultrasonic cleaning, two cold rinses, hot rinsing and drying.

Technical specifications
Power supply: 400V
Max. capacity of the tank: 150 Litres
5 cleaning process stations:
- Ultrasonic cleaning
- Cold rinse 1
- Cold rinse 2
- Hot rinse
- Drying

Ultrasonic generator with an output power of 1700W.

TT Automatic 300
A modular ultrasonic cleaning system with a useful capacity of 300 litres. The shown model below is a standard system that consists of two ultrasonic cleans, a cold rinse, hot rinse and drying; with built-in enclosure, vapour extraction and a system for decanting oils. Optional extras include the addition of more stations, rinses, passivations, pneumatic covers, filtering systems, rotary baskets, hot air drying, vacuum drying, automatic loading and unloading, or any other options you may require.

Technical specifications
Power supply: 400V
Max. capacity of the tank: 350 Litres
5 cleaning process stations:
- Ultrasonic cleaning
- Cold rinse 1
- Cold rinse 2
- Hot rinse
- Drying

Ultrasonic generator with an output power of 3400W.

System with Enclosure
The equipment shown has similar specifications to the standard system, but it is fully equipped with an enclosure and vapour extraction. Optional equipment can be supplied such as oil extraction, pneumatic covers, filtering systems, rotary baskets, hot air drying, vacuum drying, automatic loading and unloading, or any other options you may require.

Technical specifications
Power supply: 400V
Max. capacity of the tank: 150 Litres
5 cleaning process stations:
- Ultrasonic cleaning
- Cold rinse 1
- Cold rinse 2
- Hot rinse
- Drying

Ultrasonic generator with an output power of 1700W.

Tank built in stainless steel AISI 316 f 2mm.
External paneling in fingerprint-free steel in 1mm.
Thermal-acoustic insulation K-Flex Duct Net of 20mm.
Automatic covers operated by pneumatic cylinders in all tanks.
Level detectors.
9” module PLC with touch screen.
Dimensions (length x width x height):
-Internal: 500 x 450 x 600 mm
-External total: 4270 x 2800 x 2900 mm

PROVIDING SOLUTIONS

Detailed picture of the basket leaving the hot rinse stage. Multi-Stage systems can integrate different drying types and passivations.

Decanting of oils and filter system.

Siemens Screen Mod. KTP900 9" FT panoramic 9", 600 x 480 pixel backlit.
All automatic Systems are equipped with this screen as standard.

Detailed picture showing entry into the ultrasonic station. The racks and baskets are according to the customer’s specification.
The TT Automatic Heavy line is a bespoke system for heavy and very large parts that require high-quality cleaning processes. This equipment is designed to meet the customer’s specifications and provides a cutting-edge robust and functional system. You will find illustrated, some examples of bespoke equipment:

**TT-4 x 800**

Bespoke system for cleaning stainless steel heat exchangers, with a loading capacity of 750kg and useful capacity of 800 litres per tank. The vertical/horizontal conveyor process is performed using an overhead gantry. The four-stage system consists of: ultrasonic cleaning; rinsing; rinsing with demineralised water; drying and includes automatic covers and an area for loading and unloading.

**TT-3 x 750**

Bespoke system designed for cleaning stainless steel cutting discs with a loading capacity of 50kg and a useful capacity of 750 litres per tank. The vertical/horizontal conveyor process is performed using an overhead gantry. The three-stage system consists of: ultrasonic cleaning; cold rinsing and drying. There is also an area for loading and unloading.

**TT-5 x 720**

Bespoke Multi-Stage system for cleaning aluminium frames with a loading capacity of 500kg and a useful capacity of 720 litres. The integrated conveyor process is performed using an overhead gantry. The five-stage system consists of: ultrasonic cleaning; double cold rinsing, hot rinsing and drying. There are also automatic covers and an area for loading and unloading.
TierraTech® specialises in the manufacture of large cleaning tanks for the marine industry, nuclear industry, electroplating industry etc. With our own expert engineering team we are continually developing systems suitable for the ultrasonic cleaning of very large components. You will find illustrated, some examples of cleaning tanks capable of cleaning large engines and components.

**TT-8000**
Large 8,000 litre capacity ultrasonic cleaning tank for marine engines. With 20 emitters and a power of 1700W each, this system has a total power of 34000W. It has an auxiliary tank for the extraction of oil and grease therefore reducing the contamination of the cleaning tank.

**TT-10000**
Bespoke ultrasonic cleaning tank with a 10,000-litre double tank. Before the painting process, metal parts in the production industry are cleaned and degreased. One tank is used for hot degreasing and the second is used for the dewaxing of the parts.

**TT-12000**
Specially designed for the nuclear industry and the cleaning of cooler-plates in nuclear reactors, this machine has internal dimensions of (length x width x height): 5000mm x 400mm x 5600mm and a 12,000 litre capacity tank.

**TT-17000**
Specially designed, extra large tank with a 17,000 litre capacity, for the cleaning and ‘pickling’ of steel parts. This System features TTF2 Filter system and pneumatic pump to recirculate the liquid and for the removal of metallic residues on the bottom of the tank.
These units are aimed at companies with specific cleaning requirements, either due to the characteristics of the parts to be cleaned or due to requirements specific to their fabrication process. They can incorporate several processes such as rinsing, drying or alternatively can include different treatments in addition to cleaning. From the initial enquiry, we liaise very closely with our customers to ensure the specific solution best suited to their needs. Below are some examples of bespoke equipment developed specially for our customers.

**TT-60-1000N+RN**

Machine with a 1,000 litre capacity and a double tank for cleaning automotive rubber injection moulds. The unit has a high power ultrasonic cleaning tank and a second tank for the rinsing process. The machine also has automatic covers.

**TT-150+AC+S**

This machine has a 50 litre capacity and has been specially manufactured for the cleaning of precision-turned parts. It has been designed with an anchoring system for loading, draining and unloading of parts and has three stages: ultrasonic cleaning, rinsing and drying.

**TT-90-2000-US+A+P+S**

Special 2,000 litre capacity, multi-stage tank for cleaning plastic injection moulds used in the manufacturing of razors and disposable razors. The System includes ultrasonic cleaning, rinsing tank with air bubbles, passivation tank and air drying. It has automatic covers.

**TT-2 x 150 NS + Passivating with Air bubbles**

Ultrasonic cleaning system, specially designed according to the internal requirements of ZF. This system provides high power ultrasonic cleaning and passivation and is used to clean mechanical components.
Special Equipment / Automatic Multi-Stage

To provide the correct ultrasonic cleaning system to suit your requirements, we can customize our machines to fulfill your specifications exactly. We can design special baskets, racks, frames or circular drums, that best suits the components to be cleaned, which can incorporate oscillation, swivel or tumbling.

**TT-6 x 30-US+A+US+A+P+SV**

Special, 370 litre capacity, completely automated Multi-Stage system for cleaning springs in the automotive sector. This machine contains a rotary system powered by a gear and mechanical transfer system with anchorage for the transport baskets. Six stages are carried out: ultrasonic cleaning; rinsing in a bath with ultrasound; double rinsing; passivation and vacuum drying. All tanks include a 5 μm Filter system, Automatic loading and unloading, security enclosure and vapour extraction.

**TT-45-600US+E+E+S+S**

Automatic multistage equipment with 6 tanks of 600 litres each. It is used for the cleaning of aluminium and other metal parts and programmed for the degreasing of 32,000 parts in 120 hours.

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**Standard Model**

The standard industrial ultrasonic cleaning line ranges from 30 to 7,000 litres. They are designed to clean, descale and strip all types of components, parts and accessories.

All the equipment in this line, from the 75-litre model onwards, can incorporate an elevation platform to facilitate loading and unloading of parts. They can also be fitted with filters, oil separators, water treatment systems, amongst others.

Large stocks available

IMMEDIATE DELIVERY
### Standard Model

**TT-6030 - 30 litres**

- **Capacity:** 30 litres
- **Internal dimensions:** 550 x 300 x 250 mm
- **Useful basket measures:** 500 x 250 x 175 mm
- **External dimensions:** 740 x 420 x 490 mm
- **Power supply:** 240V
- **Heat resistance:** 2x350W
- **1 ultrasonic generator with a power output of 600W (1200W p-p)**
- **Ultrasonic power:** 600W (1200W p-p)
- **Working frequency:** 40kHz with system of frequency sweep (±2%)
- **12 piezoelectric transducers in IBL, high performance titanium steel**
- **Tank built in stainless steel AISI 316 steel of 2mm**
- **Weight:** 34kg

**TT-7075N - 75 litres**

- **Capacity:** 75 litres
- **Internal dimensions (excluding auxiliary tank):** 650 x 390 x 470 mm
- **Useful measures:** 620 x 325 x 260 mm
- **External dimensions:** 1170 x 735 x 900 mm
- **Power supply:** 240V
- **Heat resistance:** 2250W
- **1 ultrasonic generator with a power output of 800W (1600W p-p)**
- **1 submersible transmitter with a power of 800W (1600W p-p)**
- **The transmitter contains 16 piezoelectric transducers in IBL, high performance titanium steel.**
- **Ultrasonic power:** 800W (1600W p-p)
- **Working frequency:** 40kHz system of frequency sweep (±2%)
- **Tank built in AISI 304 stainless steel of 2mm**
- **Pneumatic lifting reinforced load on dive platform.**
- **Maximum load capacity:** 300kg
- **Auxiliary tank integrated for the separation of lubricants and oils**
- **Optional:** filter for sludge and waste system
- **Weight:** 130kg

**TT-150N - 150 litres**

- **Capacity:** 150 litres
- **Internal dimensions (excluding auxiliary tank):** 700 x 480 x 540 mm
- **Useful measures:** 670 x 415 x 335 mm
- **External dimensions:** 1270 x 825 x 920 mm
- **Power supply:** 240V / 400V
- **Heat resistance:** 3750W
- **Ultrasonic power:** 1700W (3400W p-p)
- **1 ultrasonic generator with an output power of 1700W (3400 p-p)**
- **1 submersible transmitter with a power of 1500W each / 3000W (6000W p-p)**
- **Each transmitter contains 34 piezoelectric transducers in IBL, high performance titanium steel.**
- **Working frequency:** 40kHz with system of frequency sweep (±2%)
- **Tank built in AISI 304 stainless steel of 2mm**
- **Pneumatic lifting reinforced load on dive platform.**
- **Maximum load capacity:** 60kg
- **Auxiliary tank for the separation of lubricants and oils**
- **Optional:** filter for sludge and waste system
- **Weight:** 175 kg

**TT-300N - 300 litres**

- **Capacity:** 300 litres
- **Internal dimensions (excluding auxiliary tank):** 900 x 615 x 640 mm
- **Useful measures:** 860 x 520 x 385 mm
- **External dimensions:** 1520 x 1020 x 1030 mm
- **Power supply:** 400V
- **Heat resistance:** 7500W
- **Ultrasonic power:** 3000W (6000W p-p)
- **1 ultrasonic generator with a power 3000W output (6000W p-p)**
- **2 submersible transmitters with a power of 1500W each / 3000W (6000W p-p)**
- **Each transmitter contains 34 piezoelectric transducers in IBL, high performance titanium steel.**
- **Working frequency:** 40kHz with system of frequency sweep (±2%) Tank built in AISI 304 stainless steel of 2mm
- **Pneumatic lifting reinforced load on dive platform.**
- **Maximum load capacity:** 250kg
- **Auxiliary tank for the separation of lubricants and oils**
- **Optional:** filter for sludge and waste system
- **Weight:** 300kg
### Standard Model

<table>
<thead>
<tr>
<th>Model</th>
<th>Capacity (litres)</th>
<th>Internal Dimensions (excluding auxiliary tank)</th>
<th>Usefu Measures (mm)</th>
<th>External Dimensions (mm)</th>
<th>Power Supply</th>
<th>Heat Resistance</th>
<th>Ultrasonic Power</th>
<th>Working Frequency</th>
<th>Transmitter Details</th>
<th>Tank Materials</th>
<th>Maximum Load Capacity (kg)</th>
<th>Optional Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>TT-400N</td>
<td>400 litres</td>
<td>1100 x 615 x 690 mm</td>
<td>1060 x 520 x 410 mm</td>
<td>1720 x 1020 x 1080 mm</td>
<td>400V</td>
<td>7500W</td>
<td>3400W (6800W p-p)</td>
<td>40kHz</td>
<td>1 ultrasonic generator</td>
<td>AISI 304 stainless steel 2mm</td>
<td>250kg</td>
<td>Filter for sludge and waste system</td>
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<td></td>
<td>submersible transmitters</td>
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<tr>
<td>TT-600N</td>
<td>600 litres</td>
<td>1300 x 735 x 665 mm</td>
<td>1230 x 650 x 430 mm</td>
<td>1950 x 1195 x 1070 mm</td>
<td>400V</td>
<td>9050W</td>
<td>5100W (8000W p-p)</td>
<td>40kHz</td>
<td>1 ultrasonic generator</td>
<td>AISI 304 stainless steel 2mm</td>
<td>350kg</td>
<td>Filter for sludge and waste system</td>
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<td>3 submersible transmitters</td>
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<tr>
<td>TT-1000N</td>
<td>1000 litres</td>
<td>1500 x 810 x 875 mm</td>
<td>1410 x 720 x 570 mm</td>
<td>2280 x 1390 x 1110 mm</td>
<td>400V</td>
<td>10000W</td>
<td>10200W (13600W p-p)</td>
<td>40kHz</td>
<td>12 submersible transmitters</td>
<td>AISI 304 stainless steel 2mm</td>
<td>550kg</td>
<td>Filter for sludge and waste system</td>
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<td>4 generators of ultrasound</td>
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<tr>
<td>TT-2000N</td>
<td>2000 litres</td>
<td>1750 x 1100 x 1080 mm</td>
<td>1600 x 920 x 790 mm</td>
<td>2400 x 1610 x 1345 mm</td>
<td>400V</td>
<td>15000W</td>
<td>20400W (27200W p-p)</td>
<td>40kHz</td>
<td>6 generators of ultrasound</td>
<td>AISI 304 stainless steel 3mm</td>
<td>1500kg</td>
<td>Filter for waste and sludge system</td>
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<td></td>
<td>submersible transmitters</td>
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<tr>
<td>TT-3000N</td>
<td>3000 litres</td>
<td>2000 x 1200 x 1205 mm</td>
<td>1820 x 990 x 880 mm</td>
<td>3610 x 1780 x 1465 mm</td>
<td>400V</td>
<td>12000W</td>
<td>13600W (17200W p-p)</td>
<td>40kHz</td>
<td>8 generators of ultrasound</td>
<td>AISI 304 stainless steel 2.5mm</td>
<td>1500kg</td>
<td>Filter for waste and sludge system</td>
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<td></td>
<td>1 ultrasonic generator</td>
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<tr>
<td>TT-4000N</td>
<td>4000 litres</td>
<td>2400 x 1500 x 1260 mm</td>
<td>2280 x 1380 x 890 mm</td>
<td>3130 x 1610 x 1345 mm</td>
<td>400V</td>
<td>15000W</td>
<td>20400W (24000W p-p)</td>
<td>40kHz</td>
<td>12 generators of ultrasound</td>
<td>AISI 304 stainless steel 3mm</td>
<td>3000kg</td>
<td>Filter for waste and sludge system</td>
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<td></td>
<td>submersible transmitters</td>
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</tbody>
</table>

### Additional Features
- Optional: Filter for waste and sludge system
- Tank built in AISI 304 stainless steel
- Pneumatic lifting reinforced for loading, batting, and unloading platform
- Ultrasonic power as specified
- Frequency sweep (±2%) for working frequency
- High performance titanium steel
- Piezoelectric transducers
- Generator output as specified
**Standard Model**

**TT-8000 - 8000 litres**

Capacity: 8000 litres  
Internal dimensions: 3000 x 2000 x 1500 mm  
Useful measures: 2950 x 1900 x 1180 mm  
Overall dimensions: 3950 x 2575 x 1800 mm  
Power supply: 400V  
Heat resistance: 4x15000W  
Ultrasonic power: 34000W (68000W p-p)  
20 submersible transmitters with a power output of 17000W each / 34000W (68000W p-p)  
each transmitter contains 34 piezoelectric transducers in IBL, high performance titanium steel  
Working frequency: 40kHz with system of frequency sweep (sweep system ±2%)  
Tank built in AISI 304 stainless steel 3mm  
Optional: filter for waste and sludge system  
Weight: 3500kg

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**Table of Specifications for Standard Models**

<table>
<thead>
<tr>
<th>Equipment</th>
<th>Tankage</th>
<th>Internal dimensions (mm)</th>
<th>Useful dimensions (mm)</th>
<th>Ultrasonic power</th>
<th>Frequency</th>
<th>Heating</th>
<th>Pneumatic loading capacity (kg)</th>
<th>Waterflow System</th>
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</thead>
<tbody>
<tr>
<td>TT-6030</td>
<td>30L</td>
<td>550 x 300 x 250</td>
<td>500 x 250 x 175</td>
<td>600W (1200 p-p)</td>
<td>40 kHz</td>
<td>2 x 350W</td>
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<td>TT-7050</td>
<td>50L</td>
<td>650 x 300 x 300</td>
<td>550 x 250 x 125</td>
<td>700W (1500 p-p)</td>
<td>40 kHz</td>
<td>2 x 450W</td>
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<tr>
<td>TT-7075</td>
<td>75L</td>
<td>750 x 350 x 240</td>
<td>650 x 300 x 290</td>
<td>800W (1600 p-p)</td>
<td>40 kHz</td>
<td>3 x 450W</td>
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<tr>
<td>TT-7075N</td>
<td>75L</td>
<td>650 x 390 x 470</td>
<td>620 x 325 x 260</td>
<td>800W (1600 p-p)</td>
<td>40 kHz</td>
<td>2250W</td>
<td>30 kg</td>
<td>✓</td>
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<tr>
<td>TT-150N</td>
<td>150L</td>
<td>700 x 480 x 540</td>
<td>670 x 415 x 335</td>
<td>1700W (3400 p-p)</td>
<td>40 kHz</td>
<td>3750W</td>
<td>60 kg</td>
<td>✓</td>
</tr>
<tr>
<td>TT-300N</td>
<td>300L</td>
<td>900 x 615 x 640</td>
<td>860 x 520 x 385</td>
<td>3000W (6000 p-p)</td>
<td>40 kHz</td>
<td>7500W</td>
<td>250 kg</td>
<td>✓</td>
</tr>
<tr>
<td>TT-420N</td>
<td>400L</td>
<td>1100 x 615 x 690</td>
<td>1060 x 520 x 410</td>
<td>3400W (6800 p-p)</td>
<td>40 kHz</td>
<td>7500W</td>
<td>250 kg</td>
<td>✓</td>
</tr>
<tr>
<td>TT-600N</td>
<td>600L</td>
<td>1300 x 735 x 665</td>
<td>1230 x 650 x 410</td>
<td>5100W (10200 p-p)</td>
<td>40 kHz</td>
<td>9000W</td>
<td>350 kg</td>
<td>✓</td>
</tr>
<tr>
<td>TT-1000N</td>
<td>1000L</td>
<td>1500 x 810 x 875</td>
<td>1410 x 720 x 570</td>
<td>6800W (13600 p-p)</td>
<td>40 kHz</td>
<td>2x7000W</td>
<td>500 kg</td>
<td>✓</td>
</tr>
<tr>
<td>TT-2000N</td>
<td>2000L</td>
<td>1750 x 1100 x 1080</td>
<td>1650 x 910 x 790</td>
<td>10020W (20400 p-p)</td>
<td>40 kHz</td>
<td>2 x 9000W</td>
<td>1000 kg</td>
<td>✓</td>
</tr>
<tr>
<td>TT-3000N</td>
<td>3000L</td>
<td>2050 x 1200 x 1205</td>
<td>1910 x 990 x 880</td>
<td>13600W (27200 p-p)</td>
<td>40 kHz</td>
<td>2 x 12000W</td>
<td>1500 kg</td>
<td>✓</td>
</tr>
<tr>
<td>TT-4000N</td>
<td>4000L</td>
<td>2400 x 1500 x 1260</td>
<td>2280 x 1380 x 890</td>
<td>20400W (40800 p-p)</td>
<td>40 kHz</td>
<td>2 x 15000W</td>
<td>1500 kg</td>
<td>✓</td>
</tr>
<tr>
<td>TT-8000</td>
<td>8000L</td>
<td>3000 x 2000 x 1500</td>
<td>2900 x 1900 x 1180</td>
<td>34000W (68000 p-p)</td>
<td>40 kHz</td>
<td>4 x 15000W</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

All specifications are subject to changes  
*Hydraulic lifting system 2000 - 7000kg

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**Ultrasonic Generators**

**Generator TT-10**

Available power: 600W, 700W, 800W, 1000W and 1500W.  
Operating system:  
• Normal: tracking of frequency wave.  
• Sweep System ±2%: frequency modulation (adjustment set).

**Generator S-10**

Available power: from 1000W to 1700W, with 7 levels of power indicated on LEDs, Analogue Display, Power Control, Start/Stop, PLC, alarm, preheating alarm and Open Short  
Ext control: ultrasonic ON/OFF contact.  
Available frequencies:  
• 28 kHz. (Sweep System ±2%)  
• 40 kHz. (Sweep System ±2%)  
• 60-90 kHz. (Sweep System ±2%)  
Operating system:  
• Normal: tracking of frequency wave.  
• Sweep System ±2%: frequency modulation (adjustment set).

**Generator S-30**

Available power: from 2000W to 3400W, 7 power levels indicated by LEDs, Analogue Display, Power Control, Start/Stop, PLC, Preheat alarm and Open Short  
Ext control: ultrasonic ON/OFF contact.  
Available frequencies:  
• 28 kHz. (Sweep System ±2%)  
• 40 kHz. (Sweep System ±2%)  
• 60-90 kHz. (Sweep System ±2%)  
Operating system:  
• Normal: tracking of frequency wave.  
• Sweep System ±2%: frequency modulation (adjustment set).

**Generator SB-10 digital**

Available power: from 1000W to 1700W, with automatic power monitoring, and monitoring of frequency wave. Display: ranges of power, time, power, operating state, limit alarm. Communication (PLC): RS 422, condition monitoring, Control (ON/OFF, operating system, power, alarm control).  
Available frequencies:  
• 28 kHz. (Sweep System ±2%)  
• 40 kHz. (Sweep System ±2%)  
• 60-90 kHz. (Sweep System ±2%)  
Operating system:  
• Normal: tracking of frequency wave.  
• Sweep System ±2%: frequency modulation (adjustment set)  
• Burst: Modulation of amplitude (adjustment set)  
• Ext control: ultrasonic ON/OFF contact.

**Generator SB-30 digital**

Available power: from 2000W to 3400W, with automatic power monitoring, and monitoring of frequency wave. Display: ranges of power, time, power, operating state, limit alarm. Communication (PLC): RS 422, condition monitoring, Control (ON/OFF, operating system, power, alarm control).  
Available frequencies:  
• 28 kHz. (Sweep System ±2%)  
• 40 kHz. (Sweep System ±2%)  
• 60-90 kHz. (Sweep System ±2%)  
Operating system:  
• Normal: tracking of frequency wave.  
• Sweep System ±2%: frequency modulation (adjustment set)  
• Burst: Modulation of amplitude (adjustment set)  
• Ext control: ultrasonic ON/OFF contact.

**Generator Multitech**

Available power: from 600W, 800W and 1000W to 35-70-105kHz. Display: choice of time, power, alarm, power limited, operating status. Ext control: ultrasonic ON/OFF by contact. Communication (PLC) control: Control ON/OFF, operating system, power, control, 3 frequencies 2 alarms.  
Operating system:  
• Normal: tracking of frequency wave.  
• Sweep System ±2%: frequency modulation (adjustment set).
In addition to the standard dimensions, we are able to alter these to meet your specifications and provide an anchoring system that best suits these specifications.

<table>
<thead>
<tr>
<th>Power</th>
<th>Standard measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>600 W.</td>
<td>450 x 250 mm (transmitter set 1 box)</td>
</tr>
<tr>
<td>1000 W.</td>
<td>550 x 350 mm (transmitter set 1 box)</td>
</tr>
<tr>
<td>1500 W. / 1700 W.</td>
<td>600 x 350 mm / 700 x 350 mm</td>
</tr>
</tbody>
</table>

*For different sizes please contact our Technical Department.

**Table of powers and measures**

**High frequency transmitters**

<table>
<thead>
<tr>
<th>Power / frequency</th>
<th>Standard measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>600 to 1700 W. / 28 kHz. (sweep system ±2%)</td>
<td>450 x 250 mm (transmitter set 1 box)</td>
</tr>
<tr>
<td>600 to 1700 W. / 40 kHz. (sweep system ±2%)</td>
<td>550 x 350 mm (transmitter set 1 box)</td>
</tr>
<tr>
<td>600 to 1700 W. / 40-90 kHz. (sweep system ±2%)</td>
<td>Multi-frequency</td>
</tr>
<tr>
<td>600 to 1000 W. / 70 kHz. (sweep system ±2%)</td>
<td>600 x 350 mm / 700 x 350 mm</td>
</tr>
<tr>
<td>de 600 a 1000 W. / 105 kHz. (sweep system ±2%)</td>
<td></td>
</tr>
</tbody>
</table>

*For different frequencies, please contact our Technical Department.

## Cleaning Product

### Ultrasonic-2
- **Type of product:** Degreaser.
- **Characteristics:** Detergent for iron and carbon steel. Removes encrusted grease sediments, oils and all types of stubborn dirt, preventing it from setting on clean parts again. Surfactants, solvents and alkalies.
- **Dosage:** 2-5%
- **Color:** Yellow
- **Appearance:** Liquid

### Ultrasonic-5P
- **Type of product:** Degreaser.
- **Characteristics:** Cleaning and descaling of grease, oils and all types of stubborn dirt, preventing it from setting on clean parts again. Surfactants, solvents and alkalies.
- **Dosage:** 3%
- **Color:** White
- **Appearance:** Powder

### Ultrasonic-6
- **Type of product:** Degreaser.
- **Characteristics:** Ink and light acrylic paint stripping. Ideal to remove grease and oils from any type of surface.
- **Suitable for:** All kinds of surfaces
- **Dosage:** 2-5%
- **Color:** Transparent
- **Appearance:** Liquid

### Ultrasonic-7W
- **Product type:** Degreaser.
- **Features:** Cleaning and descaling carbon. To achieve these results it should be used together with Ultrasonic-A.
- **Suitable materials:** Iron, galvanized steel and aluminum.
- **Dosage:** 3%
- **Color:** Beige
- **Appearance:** Liquid

### Ultrasonic-17
- **Type of product:** Degreaser.
- **Characteristics:** Alkaline based degreaser. Highly concentrated, developed to clean very soiled steel and light metal components (spare parts).
- **Suitable for:** Iron
- **Dosage:** 8-12%

### Ultrasonic-20
- **Type of product:** Degreaser and decarboniser
- **Characteristics:** High degreasing cleaner. Its carefully selected surfactants facilitate the penetration of the product into the dirt. Specially formulated to be used in hard water, because it prevents the precipitation of calcium and magnetic salts.
- **Suitable for:** Iron
- **Dosage:** 5%
- **Color:** White
- **Appearance:** Liquid

### Ultrasonic-22
- **Type of product:** Degreaser
- **Characteristics:** The strongest alkaline degreaser for ferrous metals.
- **Suitable for:** Ferrous materials
- **Dosage:** 3-5%
- **Color:** White
- **Appearance:** Powder

### Ultrasonic-23
- **Type of product:** Degreaser and decarboniser
- **Characteristics:** Alkaline cleaner formulated to degrease steel surfaces and also to remove phosphate layers.
- **Suitable for:** Iron
- **Dosage:** 5%
- **Color:** White
- **Appearance:** Powder
<table>
<thead>
<tr>
<th>Cleaning Product</th>
<th>Cleaning Product</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ultrasonic-24</strong></td>
<td><strong>Ultrasonic-250</strong></td>
</tr>
<tr>
<td>Alkaline</td>
<td>Acid</td>
</tr>
<tr>
<td>Type of product: degreaser to ‘pickle’ carbon steel and stainless steel</td>
<td>Product type: rust from metals.</td>
</tr>
<tr>
<td>Characteristics: Specific pretreatment before phosphatization, galvanization or coating</td>
<td>Features: Removes stubborn dirt and lime scale from all kinds. Very useful in applications where rust and dirt accumulated are a problem for the use of metal parts and machinery.</td>
</tr>
<tr>
<td>Suitable for: Steel, iron and copper alloys</td>
<td>Suitable Materials: ferrous metals.</td>
</tr>
<tr>
<td>Dosage: 2-5%</td>
<td>Color: transparent.</td>
</tr>
<tr>
<td>Appearance: powder</td>
<td>Appearance: liquid.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Ultrasonic-250</strong></th>
<th><strong>Ultrasonic-PRO</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Acid</td>
<td>Acid</td>
</tr>
<tr>
<td>Type of product: Acid</td>
<td>Type of product: Detergent</td>
</tr>
<tr>
<td>Characteristics: NEUTRAL detergent and cleaning additive.</td>
<td>Characteristics: A dielectric detergent to clean electronic cards, engines and electric parts. Removes encrusted grease sediments, oils or all kinds of dirt difficult to remove, preventing it from setting on clean parts again.</td>
</tr>
<tr>
<td>It is used as a product enhancer to increase the cavitation strength of acid and alkaline products used in ultrasonic cleaning. Indicated to remove encrusted sediments on grease, oils and any type of tough dirt.</td>
<td>Suitable for: Electronic boards.</td>
</tr>
<tr>
<td>Suitable for: All materials.</td>
<td>Dosage: 2-5%</td>
</tr>
<tr>
<td>Dosage: 0-0.5%</td>
<td>Color: Red.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Ultrasonic-MP</strong></th>
<th><strong>Ultrasonic-51</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Alkaline</td>
<td>Acid</td>
</tr>
<tr>
<td>Type of product: degreaser</td>
<td>Product type: paint stripper.</td>
</tr>
<tr>
<td>Characteristics: Very powerful degreaser designed to remove oils and animal and vegetable fat. To be used as a degreasing detergent for food circuits, pasteurisers and recirculation cleaning systems.</td>
<td>Features: Hot it has unique properties for stripping in short periods of time, primers, synthetic resins, water paints and baked powder paint, water paints and very resistant paints of Cataphoresis.</td>
</tr>
<tr>
<td>Dosage: 3-10%</td>
<td>Dosage: 40%</td>
</tr>
<tr>
<td>Colour: brownish</td>
<td>Color: transparent.</td>
</tr>
<tr>
<td>Appearance: liquid</td>
<td>Appearance: liquid.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Ultrasonic-50</strong></th>
<th><strong>Ultrasonic-MP</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Acid</td>
<td>Acid</td>
</tr>
<tr>
<td>Type of product: Decalifying cleaner,</td>
<td>Product type: Dielectric detergent.</td>
</tr>
<tr>
<td>Characteristics: It is a high performance acid detergent that cleans and descales all types of calcareous incrustations.</td>
<td>Features: A dielectric detergent to clean electronic cards, engines and electric parts. Removes encrusted grease sediments, oils or all kinds of dirt difficult to remove, preventing it from setting on clean parts again.</td>
</tr>
<tr>
<td>Dosage: It is used by immersion or applied on the surfaces to treat in a dose from 1: 1 to 1:10.</td>
<td>Dosage: 2-5%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Ultrasonic-51</strong></th>
<th><strong>Ultrasonic-53</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Acid</td>
<td>Acid</td>
</tr>
<tr>
<td>Type of product: Sanitizing acid cleaner.</td>
<td>Product type: stripper.</td>
</tr>
<tr>
<td>Features:</td>
<td>Features: Iron hot (between 80 °C: 90 °C) stripper for stripping in short periods of time, primers, synthetic resins, water paints including paintings by anaphoresis and Cataphoresis, baked paint. Not causes problems of formation of vapours.</td>
</tr>
<tr>
<td>Dosage: 1-10%</td>
<td>Dosage: 40%</td>
</tr>
<tr>
<td>Color: Blue</td>
<td>Color: transparent.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Ultrasonic-52</strong></th>
<th><strong>Electro</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Stripper</td>
<td>Type of product: Detergent</td>
</tr>
<tr>
<td>Product type: alkaline additive to 51.</td>
<td>Characteristics: A dielectric detergent to clean electronic cards, engines and electric parts. Removes encrusted grease sediments, oils or all kinds of dirt difficult to remove, preventing it from setting on clean parts again.</td>
</tr>
<tr>
<td>Features: Hot it has unique properties for stripping in short periods of time, primers, synthetic resins, water paints and baked powder paint, water paints and very resistant paints of Cataphoresis.</td>
<td>Suitable for: Electronic boards.</td>
</tr>
<tr>
<td>Suitable materials: aluminium.</td>
<td>Dosage: 2-5%</td>
</tr>
<tr>
<td>Dosage: 50%</td>
<td>Color: purple.</td>
</tr>
<tr>
<td>Color: Orange</td>
<td>Appearance: liquid.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Ultrasonic-53</strong></th>
<th><strong>Ultrasonic-54</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Acid</td>
<td>Acid</td>
</tr>
<tr>
<td>Type of product: Stripper</td>
<td>Type of product: Stripper</td>
</tr>
<tr>
<td>Features: Hot presents a very high capacity for stains on synthetic resins, baked paints, primers, water paints and paints of Cataphoresis.</td>
<td>Features: Hot presents a very high capacity for stains on synthetic resins, baked paints, primers, water paints and paints of Cataphoresis.</td>
</tr>
<tr>
<td>Dosage: 50%</td>
<td>Dosage: 2-5%</td>
</tr>
<tr>
<td>Color: Brown</td>
<td>Color: Red.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Ultrasonic-550</strong></th>
<th><strong>Ultrasonic-550</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Acid</td>
<td>Acid</td>
</tr>
<tr>
<td>Type of product: Decalifying cleaner,</td>
<td>Product type: Dielectric detergent.</td>
</tr>
<tr>
<td>Characteristics: It is a high performance acid detergent that cleans and descales all types of calcareous incrustations.</td>
<td>Features: A dielectric detergent to clean electronic cards, engines and electric parts. Removes encrusted grease sediments, oils or all kinds of dirt difficult to remove, preventing it from setting on clean parts again.</td>
</tr>
<tr>
<td>Dosage: It is used by immersion or applied on the surfaces to treat in a dose from 1: 1 to 1:10.</td>
<td>Dosage: 2-5%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Ultrasonic-550</strong></th>
<th><strong>Ultrasonic-550</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Acid</td>
<td>Acid</td>
</tr>
<tr>
<td>Type of product: Decalifying cleaner,</td>
<td>Product type: Dielectric detergent.</td>
</tr>
<tr>
<td>Characteristics: It is a high performance acid detergent that cleans and descales all types of calcareous incrustations.</td>
<td>Features: A dielectric detergent to clean electronic cards, engines and electric parts. Removes encrusted grease sediments, oils or all kinds of dirt difficult to remove, preventing it from setting on clean parts again.</td>
</tr>
<tr>
<td>Dosage: It is used by immersion or applied on the surfaces to treat in a dose from 1: 1 to 1:10.</td>
<td>Dosage: 2-5%</td>
</tr>
</tbody>
</table>
### Cleaning Product

#### Antioxidante
**Type of product:** A corrosion inhibitor and metal protector.
**Characteristics:** It can be used on grinders, sharpeners and all kinds of machining. Suitable for cases where a passivating acid bath and metal protection are required, and especially for ferrous materials.
**Suitable for:** Iron,
**Dosage:** 0.2-1%
**Colour:** Orange
**Appearance:** Liquid.

#### Adisec
**Type of product:** Drying additive.
**Characteristics:** Product indicated to lower the superficial tension of the water during cleaning processes.
**Suitable for:** All kinds of surfaces.
**Dosage:** 0.5-3%
**Colour:** Transparent
**Appearance:** Liquid.

---

### Table of products and specifications

<table>
<thead>
<tr>
<th>Product</th>
<th>How to use</th>
<th>Suitable material</th>
<th>Waste that remains</th>
<th>Type of product</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ultrasonic-2</td>
<td>2-5%</td>
<td>40º - 80º</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Ultrasonic-5P</td>
<td>3%</td>
<td>40º - 80º</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Ultrasonic-6</td>
<td>2-5%</td>
<td>40º - 80º</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Ultrasonic-7W</td>
<td>3%**</td>
<td>40º - 80º</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Ultrasonic-17</td>
<td>8-13%</td>
<td>40º - 80º</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Ultrasonic-20</td>
<td>3%</td>
<td>40º - 80º</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Ultrasonic-30</td>
<td>3%</td>
<td>40º - 80º</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Ultrasonic-40</td>
<td>6-5%</td>
<td>40º - 80º</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Ultrasonic-65</td>
<td>5%</td>
<td>40º - 80º</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Ultrasonic-17</td>
<td>3-10%</td>
<td>40º - 80º</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Ultrasonic-4</td>
<td>3%</td>
<td>40º - 80º</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Ultrasonic-A</td>
<td>0.2-0.5%**</td>
<td>40º - 80º</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Ultrasonic-B</td>
<td>0.2-0.5%**</td>
<td>40º - 80º</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>(Oil)</td>
<td>0.1-0.3%</td>
<td>40º - 80º</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Ultrasonic-250</td>
<td>2%</td>
<td>40º - 80º</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Ultrasonic-PMD</td>
<td>0.5-3%</td>
<td>40º - 80º</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Ultrasonic-500</td>
<td>1-3%</td>
<td>40º - 80º</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Ultrasonic-500EL</td>
<td>40-60%</td>
<td>40º - 80º</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Ultrasonic-850</td>
<td>5-10%</td>
<td>40º - 80º</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Ultrasonic-01</td>
<td>100%</td>
<td>40º - 80º</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Ultrasonic-02</td>
<td>30%</td>
<td>40º - 80º</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Ultrasonic-03</td>
<td>40%</td>
<td>40º - 80º</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Ultrasonic-04</td>
<td>50%</td>
<td>40º - 80º</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Antioxidante</td>
<td>0.2-1%</td>
<td>40º - 80º</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Adisec</td>
<td>0.5-3%</td>
<td>40º - 80º</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Electro</td>
<td>2-5%</td>
<td>40º - 80º</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

**Observations:**
- **It should be used with Ultrasonic 70%**
- **It should be used with Ultrasonic A (5%)**

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### Customers

**Some of our clients:**
- ExxonMobil
- AIRBUS
- BOSCH
- ensa
- IBERIA
- IBERDROLA
- ArcelorMittal
- ABB
- Heineken
- CELSA GROUP
- BOMBARDIER
- indra
- GRUPO SIRO
- MAHMUT
- GIGABAR
- INNOTECH GROUP
- renfe
- SAINT-GOBAIN
- Sandoz
- SANDOZ
- DELPHI
- Bombardier
- CATERPILLAR
- SNEMA
- GUARDIAN
- General Electric
- gamesa
- Buhler
- refrene
- Trans Genetics
- Gates
- MORESA
- Bakken
- TAROM
- leica
- Fagor
- SARAFAN GROUP
- tarom
- Generalelectric
- kea
- BHUER
- renfe
- SAINT-GOBAIN
- Sandoz
- SANDOZ
- DELPHI
- Bombardier
- CATERPILLAR
- SNEMA
- GUARDIAN
- General Electric
- gamesa
- Buhler
- refrene
- Trans Genetics
- Gates
- MORESA
- Bakken
- TAROM
- leica
- Fagor
- SARAFAN GROUP
- tarom
- The Chemical Company
- zitrón
- BASF
- SIEMENS
- ZE
- Tetra Pak
- MERCK
- PEACE
- DÜRR
- P&G
- Kongsberg
- Hutchinson
- Ferrovial
- greiner
- Packaging
- Dürr
- TRW