



tierratech®

ULTRASONIC CLEANING SYSTEMS



ULTRASONIC CLEANING EQUIPMENT INDUSTRIAL LINE



www.tierratech.com

TierraTech® is an international leading company in the manufacturing and commercialisation of Ultrasonic Cleaning Equipment and Systems.

With 15 years of experience in ultrasound technology, we have two production plants, in Europe and America, a United States distribution center and a wide network of distributors that provide us presence in more than 30 countries.

Our highly qualified technical and commercial teams enable us to offer personalised service and advice, as required by needs of each client.

With immediate delivery for standard equipment, you will have the most advanced and efficient ultrasonic cleaning technology at your facilities.

We offer solutions and to do so, we have a very efficient R&D department, working continuously on new technologies and applications for the ultrasonic cleaning environment. We incorporate cutting-edge components and materials, achieving a flexible design and a personalised product execution.

We cater for the industrial sector with standard models, special equipment adapted to every requirement and an automatic multi-stage line divided into Smart and Heavy equipment.

At TierraTech®, 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.



Version: March 2016



TierraTech is represented in more than 30 countries through distributors and directly through TierraTech's own distribution network in Spain and Mexico with a distribution center in U.S.A. which enables us to cater to our clients worldwide. TierraTech® has two design and production plants located in Spain for the European market and the second plant in Mexico to serve the American market, as well as a commercial and logistic center in United States to serve North America.



+ Production plant Europe

TierraTech® España | Parque empresarial Morero Nave 27 | C.P. 39611 Guarnizo, Cantabria, Spain.
Tel (+34) 942 269 543 | Fax (+34) 942 269 544 | tierratech@tierratech.com | www.tierratech.com

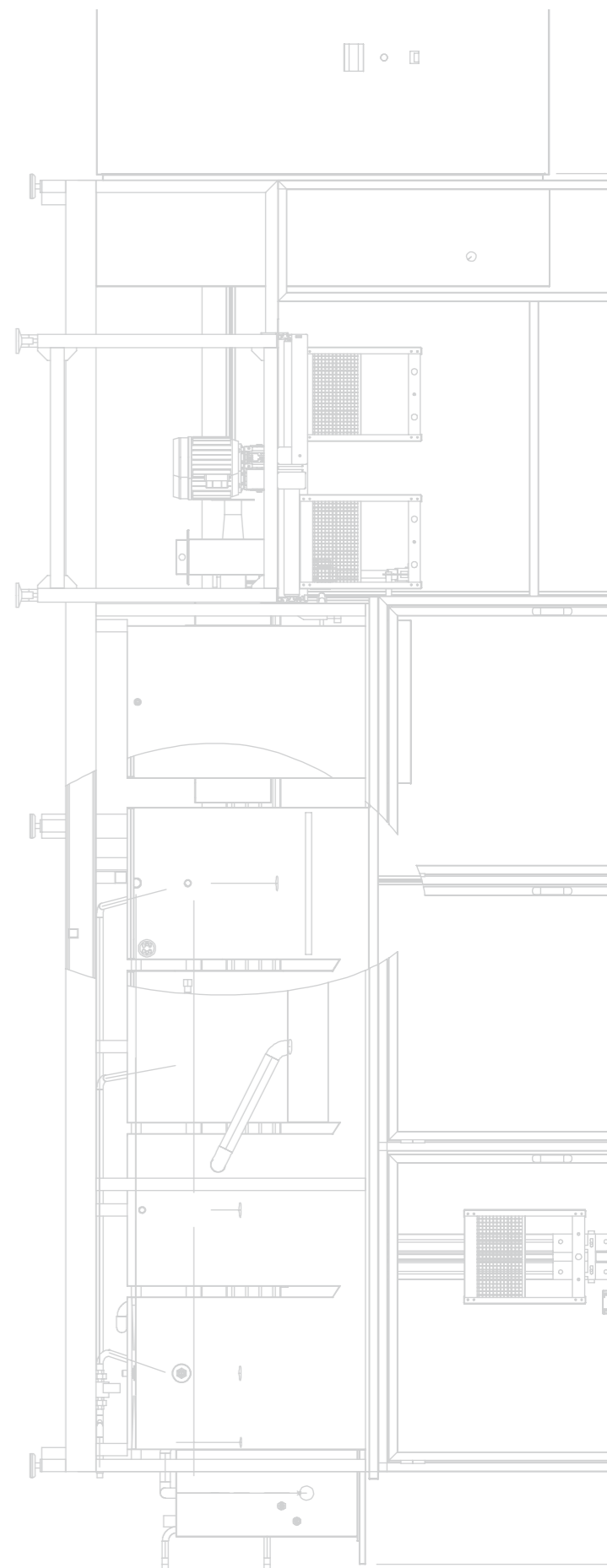
+ Production plant Mexico

TierraTech® México | Calle Oriente 3 - 201. Fraccionamiento Ciudad Ind. Celaya. 38010 Celaya - Guanajuato, México.
Tel. (+52) 461 612 40 82 | Tel. (+52) 461 161 31 58 | Fax (+52) 461 612 97 82 | mexico@tierratech.mx | www.tierratech.com

+ Distribution Center United States

TierraTech® USA 12252 S. Casey Cove Riverton Utah 84065 USA
Tel. (+1) 801 302 2015 | Cell. (+1) 801 244 7126 | sales@tierratech.com | www.tierratech.com

- TierraTech® worldwide 4
- Applications by sector 6
 - Automotive Industry 6
 - Aeronautical Industry 6
 - Graphic Industry 6
 - Plastic industry (moulds) 6
 - Treatment of surfaces and Electroplating 7
 - Stripping 7
 - Industrial Energetic (nuclear, wind power, thermal, cogeneration, solar) 7
 - Industrial Food 7
 - Pharmaceutical and Laboratory Industry 8
 - Electronics 8
 - Machining and Precision Parts 8
 - Industrial maintenance 8
- TT Multistage Automatic Smart 9
 - Standard of 50 Litres 9
 - Standard of 100 Litres 10
 - Standard of 150 Litres 10
 - Standard of 300 Litres 11
- TT Multistage Automatic Heavy 12
- Special Equipment / Large Equipment 14
- Special Equipment / Multistage Manual 16
- Special Equipment / Automatic MultiStage 18
- Standard Models 19
 - TT-6030 20
 - TT-7050 20
 - TT-7075 20
 - TT-75N 21
 - TT-150N 21
 - TT-300N 21
 - TT-400N 22
 - TT-600N 22
 - TT-1000N 22
 - TT-2000N 23
 - TT-3000N 23
 - TT-4000N 23
 - TT-8000 24
- Table of specifications and Equipment 24
- Ultrasonic Generators 25
- Ultrasonic Emitters 26
- Cleaning Products 27
- Table of Cleaning products and specifications 30
- Customers 31



Automotive industry

At TierraTech®, we are backed by a wide experience in supplying standard and special equipment for the automotive industry and related industries. According to the application and the number of pieces to be washed, we will recommend standard or special equipment to best adapt to the needs of the client.



Aeronautical Industry

The precision of ultrasound cleaning helps both the manufacturers of the components and MRO centres to satisfy the high-quality requirements and the strict safety standards of the sector. In a sector where safety is crucial, the equipment offered by Tierra Tech® is essential to clean of hydraulic systems, heat interchangers, engine pieces, injection pumps, vanes, etc. since it does not damage the materials or modify 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.



Graphic Industry

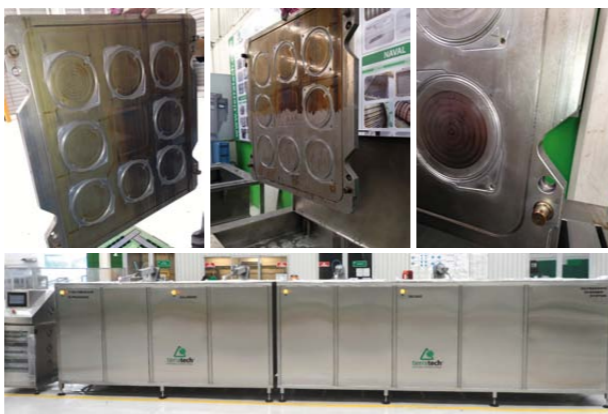
Ultrasound cleaning systems are used to clean rollers and anilox sleeves, etching plates, cartridge holders, ceramic rollers and other removable printing pieces that accumulate oil, water, alcohol or UV-based ink. The accumulation of dirt causes a progressive deterioration of the drum, which affects 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. Ensure a high printing quality by using our machines for your cleaning needs.



Plastic Industry (Moulds)

Immersion washing in our ultrasound tanks is an efficient and high-quality solution to clean all kinds of plastic, rubber, rubber/metal, aluminium injection and zamak injection moulds because they optimise production times. They also enable cleaning the mould in full without having to dismantle the piece and damaging the parts. This is why this represents the most efficient alternative as opposed to traditional cleaning systems.

We design and manufacture multistage cleaning equipment adjusted to the amount of moulds to be cleaned and the particular needs of the production process to best suit each customer.



Treatment of Surfaces and Electroplating

Ultrasound cleaning before coating the pieces entails saving quite a lot of time and labour because it replaces manual cleaning and the long immersion times required by the traditional cleaning methods. It removes polishing pastes, grease and dirt swift and efficiently from any kinds of metal and plastic pieces, 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 ultrasounds enables accelerating processes and eliminating all the organic coating from any metallic surfaces. This is why we use the latest generation of strippers. Strippers combined with the mechanic action of the ultrasounds enables removing paint or coating in full. Tierra Tech® has ample experience in industrialised stripping processes for steel, aluminium, etc. We have considerable experience in recovering valuable parts, for example, alloy wheels, automotive components and aluminium profiles for architectural purposes, etc. and in maintaining instruments used in painting lines.



Industrial Energetic (Nuclear, Eolian, Thermal, Cogeneration, Solar)

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

For the Cogeneration Industry, we decarbonise and degrease engines and clean heat interchangers.

In the Eolian Industry, ultrasounds are used to maintain gear motors.



Industrial Food

Our equipment is ideal to remove oil, greasy dirt, 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 hygienic requirements.



Pharmaceutical and Laboratory Industry

TierraTech® is present in the pharmaceutical industry. Our ultrasound equipment is used to remove traces of chemical products, oils, pigments or prints, among other residues.

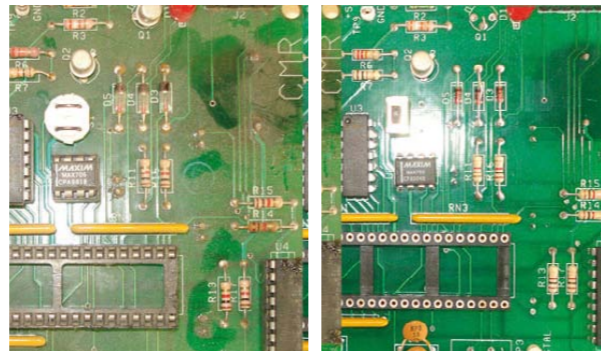
We remove dirt from complex pieces with cracks, hard accesses or joints without damaging them. Ultrasound equipment achieves a superior cleanliness and saves time and effort compared to manual washing.



Electronics

Ultrasound cleaning in the electronic 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 pieces. After the ultrasound cleaning process, the electronic components improve effectiveness and the results of the SIR tests.



Machining and Bar Tuning

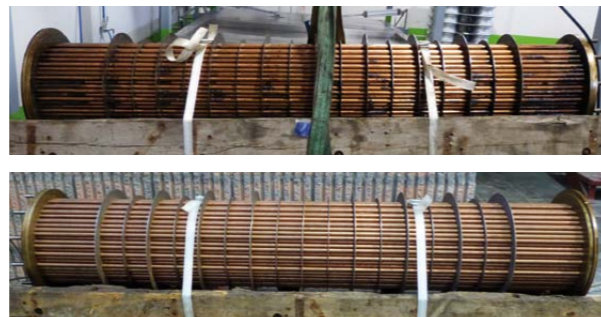
Ultrasound cleaning is the most efficient solution in industrial bar tuning and piece machining.

It is an excellent solution to clean and remove residue such as shavings, remnants of grease, rust, etc. Our systems are being implemented in all machining sub-sectors and bar tuning in the ancillary automotive industries, including connections, couplings, implants/medical prosthesis...



Industrial Maintenance

Ultrasound equipment in industrial maintenance performs an essential task for the entire manufacturing process. The harsh working conditions of this type of machinery makes preventive maintenance essential to extend their useful life and ensure smooth operation. Our ultrasonic cleaning equipment facilitates cleaning chains, gears, electro-valves, transmissions or hydraulic gears, heat interchangers, filters, etc. contributing to a correct maintenance that favours efficient operation of the machinery and reduces the possibility of unexpected breakdowns.



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 accordingly, bearing in mind the production and features of such piece.

The Automatic Smart series are fully automated systems with a useful capacity of 50-350 liters. This equipment is designed to meet the highest requirements for industrial cleaning, thereby achieving cleaning results that meet the requirements and standards demanded by our customers.

TT Automatic 50

Modular system of ultrasonic cleaning with a useful capacity of 50-70 liters. Depending on the part to wash different modules are incorporated as they can be clarified, passivation, dried, etc... The model that we show below is a standardized system that consists of washing by ultrasound, two rinsed in cold, rinsed in hot and dried.



Technical specifications

- Power supply: 400 v
- Maximum capacity by cuba: 70 liters.
- 5 cleaning process stations :
 - ultrasonic
 - rinse in cold 1
 - rinsing in cold 2
 - enlightened in hot
 - Cuba drying

- An ultrasonic generator with an output power of 1200W.
- Tank built in stainless steel AISI 316 steel of 2 mm.
- Exterior panelling steel fingerprint of 1 mm.
- Thermal-acoustic insulation k-flex duct net of 20 mm.
- Thick exterior panelling steel fingerprint of 1 mm.
- Thermal-acoustic insulation k-flex duct net of 20 mm. thick.
- Automatic covers operated by pneumatic cylinder 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



Equipment Fairing

This equipment has characteristics similar to the former but is fully equipped. It consists of fairing and exhaust fumes. You can be added optionally oil extractors, air caps, filtering systems, systems of rotating baskets, dried by hot air dried by vacuum, loading and unloading automatic.

TT Automatic 100

Modular system of ultrasonic cleaning with a useful capacity of 100-120 liters. Depending on the piece to be washed can be incorporated different modules such as rinses, passivation, dried, etc... The model shown below is a standardized system that consists of washing by ultrasound, two rinsed in cold, rinsed in hot and dried.



Equipment Fairing

This equipment has characteristics similar to the former but is fully equipped. It consists of fairing and exhaust fumes. You can be added optionally oil extractors, air caps, filtering systems, systems of rotating baskets, dried by hot air dried by vacuum, loading and unloading automatic.

Technical specifications

- Power supply: 400 v
- Maximum capacity by cuba: 120 liters.
- 5 cleaning process stations:
 - ultrasonic - rinse in cold 1
 - rinsing in cold 2
 - enlighthened in hot
 - Tank drying an ultrasonic generator with an output power of 1000W. Tank built in stainless steel AISI 316 steel of 2 mm.
- Exterior panelling steel fingerprint of 1 mm.
- Thermal-acoustic insulation k-flex duct net of 20 mm. thick.
- Automatic covers operated by pneumatic cylinder in all tanks.
- Level detectors.
- 9" module PLC with touch screen.
- Dimensions (length x width x height):
 - internal: 550 x 450 x 500 mm.
 - External total: 4270 x 2800 x 2800 mm.

TT Automatic 150

Modular system of ultrasonic cleaning with a load capacity of 150-170 liters. According to the piece that you have to wash can incorporate different modules such as rinses, passivation, dried, etc... The model shown below is a standardized system that consists of washing by ultrasound, two rinsed in cold, rinsed in hot and dried.



Equipment Fairing

This equipment has characteristics similar to the former but is fully equipped. It consists of fairing and exhaust fumes. You can be added optionally oil extractors, air caps, filtering systems, systems of rotating baskets, dried by hot air dried by vacuum, loading and unloading automatic.

Technical specifications

- Power supply: 400 v
- Maximum capacity by cuba: 170 litres.
- 5 cleaning process stations:
 - ultrasonic
 - rinse in cold 1
 - rinsing in cold 2
 - enlighthened in hot
 - Cuba drying an ultrasonic generator with an output power of 1000W.
- Tank built in stainless steel AISI 316 steel of 2 mm.
- Exterior panelling steel fingerprint of 1 mm.
- Thermal-acoustic insulation k-flex duct net of 20 mm. thick.
- Automatic covers operated by pneumatic cylinder in all tanks.
- Level detectors.
- 9" module PLC with touch screen.
- Dimensions (length x width x height):
 - internal: 550 x 450 x 600 mm.
 - External total: 4270 x 2800 x 2900 mm.

TT Automatic 300

Modular system of ultrasonic cleaning with a useful capacity of 300-350 liters. The model shown here is a standardized system that consists of two washed by ultrasonic rinsing cold, rinsed and dried. Manufactured with fairing, exhaust fumes and oil sump system. You can optionally add more stations, rinses, passivation, pneumatic covers, filtration systems, systems of rotating baskets, dried by vacuum, loading and unloading automatic.



PROVIDING SOLUTIONS



Basket out of tank by rinsing in hot detail. Multi-stage computers can have various types of drying and passivating parts.



Decanting of oils and filtration tanks.



SIEMENS screen mod. KTP900 TFT panoramic 9 ". Backlit 800 x 480px. All automatic equipment have installed this screen of series.



Detail of basket entering ultrasonic station. Racks and baskets are customized according to the needs of customer size.

TT-Automatic Heavy line is a manufacture of equipment to measure for parts of great weight and volume that require high quality cleaning processes. These equipments are designed according to the customer's needs and are very robust and functional equipment of last generation. We then show you some representative examples:

TT-4 x 800

Special equipment for cleaning heat-switches of stainless steel, it has a load of 750 kg. and a useful capacity of 800 litres/ tank. The system of vertical/horizontal translation is performed by a carriage porch. The team of four seasons is washed by ultrasound, rinse, rinse with demineralized water and drying water. Includes automatic lids and a common area for loading and unloading.



TT-3 x 750

Special equipment of cleaning designed to clean steel cutting discs. It has a load capacity 500 kg. and a useful capacity of 750 litres per tank. The system of vertical/horizontal translation is performed by carriage porch. 3 stages, ultrasonic cleaning, are rinsed in cold and dry. It has common area of loading and unloading.



TT-4 x 750

Special equipment designed for cleaning cutting tools and parts in its manufacturing process. It has a movement of load of 300 kg. and a useful capacity of 750 litres/tank. There are 4 stages, are cleaning by ultrasounds, double rinsing in cold and oiled water repellent. It also has automatic lids and a common area for loading and unloading.



TT-5 x 720

Special multi-tank designed to clean aluminium frame which has a payload of 500 Kg. and a useful capacity of 720 liters per tank. The system of vertical/horizontal translation is performed by carriage porch. It consists of 5 stages, ultrasonic cleaning, double rinsing cold, rinsed and dried. It also has automatic lids and common loading and unloading.



TierraTech® is specialized in the manufacture of large equipment for the naval industry, nuclear industry, electroplating, etc. With an own engineering staff, we develop projects of large vats. We then show you some examples of large capacity equipment:

TT-8000

Equipment for special cleaning of 8000 litres capacity useful for the cleaning of marine engines. With 20 emitters 1700W. each one has a total power of 51000W. It has an auxiliary tank for the extraction of oils and fats in order to avoid contamination in the cleaning tank.



TT-10000

Double-tank of special manufacture of 10000 litres of capacity designed for the cleaning and degreasing of metal parts, for the preparation of parts before painting. Each tank has a capacity of 10000 litres. The first tank is used for degreasing hot and the second cuba for dewaxing of parts.



TT-12000

Machine's internal dimensions (length x width x height): 5000 mm. x 400 mm. x 5600 mm. 12000 liters useful capacity. Developed especially for the nuclear industry and its high cleaning requirements. Equipment designed for the cleaning of plates of coolers for nuclear reactors.



TT-17000

Cleaning system special 17000 litres capacity, for cleaning and descaling of steel parts. It has a filtering system through two filters bag TTF-2. It has pneumatic pump for recirculation of fluids and sweep of metal particles on the bottom.



These machines are aimed at companies with special cleaning needs, well by the characteristics of the parts to be cleaned or the needs of its manufacturing process. They can incorporate several processes such as rinsing, drying or different treatments in addition to the cleaning. From the first moment we work side by side with our client to find the specific solution and more according to your needs. Below are some examples of special equipment developed to measure for our customers:

TT-60-1000N+RN

Machine double-tank for cleaning of automotive rubber injection moulds. With a capacity of 1000 litres. It has a tank of high power ultrasonic washing and rinsing. Automatic covers.



TT-150+AC+S

Special machine for the cleaning of metal parts from precision turned parts, has a useful capacity of 150 litres. Designed with anchor for load, drain and discharge of parts and 3-stage system. Washed by ultrasound, rinsed, and dried.



TT-2 x 150 NS + Passivating

Ultrasonic cleaning system, specially designed for internal requirements of ZF. With a tank of high power and a passivating tank ultrasonic cleaning. Used in machining parts cleaning.



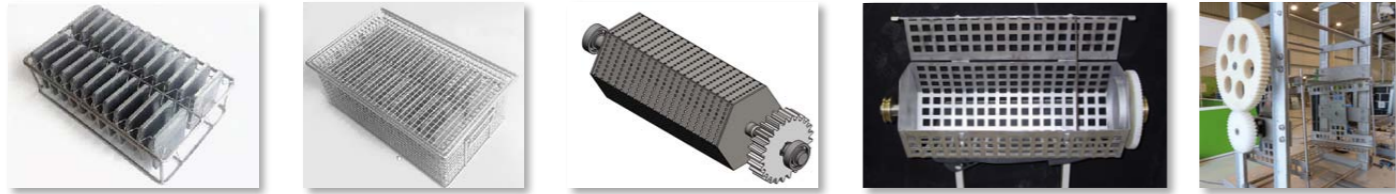
TT-90-2000-US+A+P+S

Special multi-tank ultrasonic cleaning of injection moulding of plastic in the manufacture of razors/rakes of disposable razors. It has a useful capacity of 2000 liters per tank. This team consists of wash tank ultrasonic, rinse hot with microbubbles cuba, cuba cuba's hot air drying and passivating. It has automatic tops opening system.



Special Equipment / Automatic Multistage

For the correct cleaning ultrasonic design tailored to each customer support structures for washing of parts, which can be arranged in baskets, special racks, racks or drums circular, with the possibility of batting, tilt and swivel.



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

Special multi-tank of fully automated cleaning to clean springs for the automotive sector. With a capacity of 370 liters. It carries a gyro system powered by Motor-reducer, gear and transmission oil seals with mechanical system to attach to the tank. 6 stages of cleaning, first wash ultrasonic tank, are second ultrasonic rinse tank, double tank rinsing, passivation cuba and vacuum drying system. All tanks have 5 micron filtration system. Automated loading and unloading system. Fairing and enclosure of safety with fumes.



TT-45-460

Special ultrasonic machine to clean aluminium joints for covers of cylinders and engine components. With a maximum capacity of 100 kg. It carries an electrical lift system. Row of blowers out of cuba to facilitate the drying and draining of parts. Automatic cover.



Standard Models

The industry standard range includes among the 30 teams and the 8000 litres capacity, are modular and are specially designed for cleaning, degreasing and descaling of all kinds of parts, components and accessories. All computers of this line, from 75 liters may incorporate a pneumatic lift platform to facilitate the loading and unloading of parts. They include filtering, separation of oils and water among other treatment systems. All to facilitate and provide the best solution to the industrial sector.



Standard Models

TT-6030 - 30 litres



Capacity: 30 litres.
Internal dimensions: 550 x 300 x 250 mm.
Measures useful basket: 500 x 250 x 210 mm.
Overall dimensions: 670 x 412 x 490 mm.
Power supply: 240V.
Heat resistance: 700W.
1 ultrasonic generator with a power output of 600W. (1200W p-p).
Ultrasonic power: 600W (1200W p-p).
Working frequency: 40 Khz. with system of frequency sweep (sweep system ±2%).
12 piezoelectric transducers in IBL, high performance titanium steel.
Tank built in stainless steel AISI 316 steel of 2 mm.
Weight: 34 kg.

TT-7050 - 50 litres



Capacity: 50 litres.
Internal dimensions: 600 x 300 x 300 mm.
Measures useful basket: 550 x 260 x 225 mm.
Overall dimensions: 720 x 420 x 540 mm.
Power supply: 240V.
Heat resistance: 700W.
1 ultrasonic generator with an output power of 700W. (1400W p-p).
Ultrasonic power: 700W. (1400W p-p).
Working frequency: 40 Khz. with system of frequency sweep (sweep system ±2%).
14 piezoelectric transducers in IBL, high performance titanium steel.
Tank built in stainless steel AISI 316 steel of 2 mm.
Weight: 40 kg.

TT-7075 - 75 litres



Capacity: 75 litres
Internal dimensions: 700 x 350 x 400 mm
Measures useful basket: 660 x 330 x 290 mm.
Overall dimensions: 860 x 510 x 900 mm.
Power supply: 240V.
Heat resistance: 900W.
1 ultrasonic generator with a power output of 800W. (1600W p-p).
Ultrasonic power: 800W. (1600W p-p).
Working frequency: 40 Khz. with system of frequency sweep (sweep system ±2%).
16 piezoelectric transducers in IBL, high performance titanium steel.
Tank built in stainless steel AISI 316 steel of 2 mm.
Weight: 71 kg.

Standard Models

TT-75N - 75 litres



Capacity: 75 litres.
Internal dimensions (excluding auxiliary cuba): 652 x 420 x 468 mm
Useful measures: 620 x 325 x 240 mm.
Measures platform: 620 x 325 mm.
Overall dimensions: 1034 x 650 x 905 mm.
Power supply: 240V.
Heat resistance: 2250W.
1 ultrasonic generator with a power output of 800W. (1600W p-p).
1 submersible transmitter of 800W. (1600W. p-p) built in stainless steel. AISI 316 2, 5 mm. with 16 piezoelectric transducers in IBL, high performance titanium steel.
Ultrasonic power: 800W. (1600W p-p).
Working frequency: 40 Khz. system of frequency sweep (sweep system ±2%).
Tank built in AISI 304 stainless steel of 2 mm.
Pneumatic lifting reinforced load on dive platform.
Maximum load capacity: 30 kg.
Auxiliary Cuba integrated for the separation of lubricants and oils.
Optional: filter for sludge and waste system.
Weight: 130 kg.

TT-150N - 150 litres



Capacity: 150 litres
Internal dimensions (excluding auxiliary cuba): 700 x 510 x 540 mm.
Useful measures: 670 x 415 x 314 mm
Measures platform: 670 x 415 mm.
Overall dimensions: 1120 x 730 x 920 mm
Power supply: 240V. / 400V.
Heat resistance: 3500W. for power supply of 240V and 3750W. optional for 400W
Ultrasonic power: 1700W. (3400 p-p).
1 ultrasonic generator with an output power of 1700W (3400 p-p).
1 submersible transmitter with a power of 1700W. (3400 p-p). The transmitter contains 34 piezoelectric transducers in IBL, high performance titanium steel.
Working frequency: 40 Khz. with system of frequency sweep (sweep system ±2%).
Tank built in AISI 304 stainless steel of 2 mm.
Pneumatic lifting reinforced load on dive platform.
Maximum load capacity: 60 kg
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 cuba): 900 x 650 x 640 mm.
Useful measures: 850 x 495 x 360 mm.
Measures platform: 850 x 495 mm
Overall dimensions: 1340 x 890 x 1020 mm.
Power supply: 400V.
Heat resistance: 7000W.
Ultrasonic power: 3000W. (6000W p-p).
1 ultrasonic generator with a power 3000W output. (6000W p-p).
2 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: 40 Khz. with system of frequency sweep (sweep system ±2%).
Tank built in AISI 304 stainless steel of 2 mm.
Pneumatic lifting reinforced load on dive platform.
Maximum load capacity: 250 kg.
Auxiliary tank for the separation of lubricants and oils
Optional: filter for sludge and waste system.
Weight: 300 kg.

TT-400N - 400 litres



Capacity: 400 litres
 Internal dimensions (excluding auxiliary cuba): 1100 x 650 x 690 mm.
 Useful measures: 1050 x 495 x 415 mm.
 Measures platform: 1050 x 495 mm
 Overall dimensions: 1540 x 890 x 1070 mm
 Power supply: 400V.
 Heat resistance: 7000W.
 Ultrasonic power: 3400. (6800W p-p).
 1 ultrasonic generator with a power output of 3400. (6800W p-p).
 2 submersible transmitters with a power 1700W. each / 3400. (6800W p-p).
 Each transmitter contains 34 piezoelectric transducers in IBL, high performance titanium steel.
 Working frequency: 40 Khz. with system of frequency sweep (sweep system ±2%).
 Tank built in AISI 304 stainless steel of 2 mm
 Pneumatic lifting reinforced load on dive platform.
 Maximum load capacity: 250 kg.
 Auxiliary tank for the separation of lubricants and oils.
 Optional: filter for sludge and waste system.
 Weight: 320 kg.

TT-600N - 600 litres



Capacity: 600 litres
 Internal dimensions (excluding auxiliary cuba): 1300 x 800 x 690 mm.
 Useful measures: 1240 x 636 x 415 mm.
 Measures platform: 1240 x 636 mm.
 Overall dimensions: 1770 x 1040 x 1070 mm.
 Power supply: 400V.
 Heat resistance: 9000w(max).
 Ultrasonic power: 5100W. (10200W p-p).
 1 ultrasonic generator with a power output of 5100W (10200W p-p).
 3 submersible transmitter with a power of 1700W each / 5100W (10200W p-p). Each transmitter contains 34 piezoelectric transducers in IBL, high performance titanium steel.
 Working frequency: 40 Khz. with system of frequency sweep (sweep system ±2%).
 Tank built in AISI 304 stainless steel 2,5 mm.
 Pneumatic lifting reinforced for loading, batting and unloading platform.
 Maximum load capacity: 350 kg.
 Auxiliary tank for the separation of lubricants and oils.
 Optional: filter for sludge and waste system.
 Weight: 400 kg.

TT-1000N - 1000 litres



Capacity: 1000 litres.
 Internal dimensions: 1500 x 900 x 860 mm
 Useful measures: 1400 x 720 x 560 mm.
 Measures platform: 1400 x 720 mm
 Overall dimensions: 2666 x 1326 x 1098 mm. (incl. cuba generators Assistant and wardrobe).
 Power supply: 400V.
 Heat resistance: 12000W.
 Ultrasonic power: 6800W. (13600W p-p).
 2 generators of ultrasound with a power output of 6800W. (13600W p-p).
 4 submersible transmitter with a power of 1700W. each / 6800W. (13600W p-p). Each transmitter contains 34 piezoelectric transducers in IBL, high performance titanium steel.
 Working frequency: 40 Khz. with system of frequency sweep (sweep system ±2%).
 Tank built in AISI 304 stainless steel 2,5 mm.
 Pneumatic lifting reinforced for loading, batting and unloading platform.
 Maximum load capacity: 750 kg.

TT-2000N - 2000 litres



Capacity: 2000 litres.
 Internal dimensions: 1750 x 1100 x 1080 mm.
 Useful measures: 1650 x 910 x 800 mm.
 Measures platform: 1650 x 910 mm.
 Overall dimensions: 3025 x 1580 x 1323 mm. (incl. auxiliary tank and distribution board).
 Power supply: 400V.
 Heat resistance: 18000W.
 Ultrasonic power: 10200W (20400W. p-p).
 3 generators of ultrasound with a power output of 10200W. (20400W p-p).
 6 submersible transmitter with a power of 1700W. each / 10200W. (20400W.p-p). each transmitter contains 34 piezoelectric transducers in IBL, high performance titanium steel.
 Working frequency: 40 Khz. with system of frequency sweep (sweep system ±2%).
 Tank in AISI 304 stainless steel 2,5 mm.
 Pneumatic lifting reinforced for loading, batting and unloading platform
 Maximum load capacity: 1000 kg.
 Auxiliary tank for the separation of lubricants and oils.
 Optional: filter for waste and sludge system
 Weight: 1250 kg

TT-3000N - 3000 litres



Capacity: 3000 litres.
 Internal dimensions: 2050 x 1200 x 1240 mm.
 Useful measures: 1930 x 990 x 880 mm.
 Measures platform: 1930 x 990 mm.
 Overall dimensions: 3496 x 1725 x 1465 mm. (incl. auxiliary tank and distribution board).
 Power supply: 400V.
 Heat resistance: 24000W.
 Ultrasonic power: 13600W. (27200W p-p).
 4 generators of ultrasound with a power output of 13600W. (27200W p-p).
 8 submersible transmitter with a power of 1700W. each / 13600W. (27200W p-p). Each transmitter contains 34 piezoelectric transducers in IBL, high performance titanium steel.
 Working frequency: 40 Khz. with system of frequency sweep (sweep system ±2%)
 Tank built in AISI 304 stainless steel 2,5 mm.
 Pneumatic lifting reinforced for loading, batting and unloading platform.
 Maximum load capacity: 1500 kg
 Auxiliary tank for the separation of lubricants and oils.
 Optional: filter for waste and sludge system
 Peso: 1850 kg.

TT-4000N - 4000 litres



Capacity: 4000 litres.
 Internal dimensions: 2400 x 1500 x 1260 mm
 Useful measures: 2340 x 1320 x 880 mm.
 Measures platform: 2340 x 1320 mm.
 Overall dimensions: 2700 x 1920 x 1558 mm. (incl. auxiliary tank and distribution board).
 Power supply: 400V.
 Heat resistance: 30000W.
 Ultrasonic power: 20400W. (40800W p-p).
 6 generators of ultrasound with a power output of 20400W. (40800W p-p).
 12 submersible transmitter with a power of 1700W. each / 20400W. (40800W p-p). Each transmitter contains 34 piezoelectric transducers in IBL, high performance titanium steel.
 Working frequency: 40 Khz. with system of frequency sweep (sweep system ±2%)
 Tank built in AISI 304 stainless steel 3 mm.
 Pneumatic lifting reinforced for loading, batting and unloading platform.
 Maximum load capacity: 2000 kg
 Auxiliary Tank for the separation of lubricants and oils
 Optional: filter for waste and mud system
 Weight: 2800 kg.

TT-8000 - 8000 litres



Capacity: 8000 litres.
 Internal dimensions: 3000 x 2160 x 1500 mm.
 Useful measures: 2900 x 1900 x 1180 mm.
 Overall dimensions: 3833 x 2435 x 1800 mm.
 Power supply: 400V.
 Heat resistance: 60000W.
 Ultrasonic power: 34000W. (68000W p-p).
 10 generators of ultrasound with a power output of 34000W. (68000W. p-p)
 20 submersible transmitter with a power of 1700W. each / 34000W. (68000W. p-p)
 each transmitter contains 34 piezoelectric transducers in IBL, high performance titanium steel
 Working frequency: 40 KHz. with system of frequency sweep (sweep system ±2%)
 Tank built in AISI 304 stainless steel 3 mm.
 Optional: filter for waste and sludge system
 Weight: 3500 kg.

Table of equipment and standard equipment specifications

Equip-ment	Volume	Internal Measures (mm.)	Ultrasonic power	Frequency	Warming	Pneumatic power payload (Kg)	Basket and platform measures (mm)	Waterflow System
TT-6030	30L	550 x 300 x 250	600 W (1200 p-p)	40 KHz (sweep sys. ±2%)	700 W	—	500 x 250 x 210	—
TT-7050	50L	600 x 300 x 300	700 W (1500 p-p)	40 KHz (sweep sys. ±2%)	700 W	—	550 x 260 x 225	—
TT-7075	75L	700 x 350 x 400	800 W (1600 p-p)	40 KHz (sweep sys. ±2%)	900 W	—	680 x 330 x 290	—
TT-75N	75L	652 x 420 x 468	800 W (1600 p-p)	40 KHz (sweep sys. ±2%)	2250 W	30 kg	620 x 325	✓
TT-150N	150L	700 x 510 x 540	1700 W (3400 p-p)	40 KHz (sweep sys. ±2%)	3500 W/3750W	60 kg	670 x 415	✓
TT-300N	300L	900 x 650 x 640	3000 W (6000 p-p)	40 KHz (sweep sys. ±2%)	7000 W	250 kg	850 x 495	✓
TT-400N	400L	1100 x 650 x 690	3400 W (6800 p-p)	40 KHz (sweep sys. ±2%)	7000 W	250 kg	1050 x 495	✓
TT-600N	600L	1300 x 800 x 690	5100 W (10200 p-p)	40 KHz (sweep sys. ±2%)	9000 W	350 kg	1240 x 636	✓
TT-1000N	1000L	1500 x 900 x 860	6800 W (13600 p-p)	40 KHz (sweep sys. ±2%)	12000 W	750 kg	1400 x 720	✓
TT-2000N	2000L	1750 x 1100 x 1080	10200 W (20400 p-p)	40 KHz (sweep sys. ±2%)	18000 W	1000 kg	1650 x 910	✓
TT-3000N	3000L	2050 x 1200 x 1240	13600 W (27200 p-p)	40 KHz (sweep sys. ±2%)	24000 W	1500 kg	1930 x 990	✓
TT-4000N	4000L	2400 x 1500 x 1260	20400 W (40800 p-p)	40 KHz (sweep sys. ±2%)	30000 W	2000 kg	2340 x 1320	✓
TT-8000	8000L	3000 x 2160 x 1500	34000 W (68000 p-p)	40 KHz (sweep sys. ±2%)	60000 W	*	—	✓

All equipment and features are susceptible to changes in catalog.

*Hydraulic lifting system 2000kg. -7000kg.

We make available to our customers a wide range of ultrasonic generators. Depending on the application, material of parts and to remove dirt, TierraTech® will always recommend the most appropriate generator. Since mono equipment 28/40 kHz. Sweep - System frequency ±2% to generators of last generation models SB - 10 and SB - 30 fully digital Burst and Multitech frequency system.

Generator TT-10



Available power 600W, 700W, 800W, 1000W and 1500W.

- Available frequencies:**
- 28 kHz. (Sweep System ±2%)
 - 40 kHz. (Sweep System ±2%)
 - 40-90 kHz. (Sweep System ±2%)

- Operating system:**
- Sweep System ±2%: modulation of frequency (setting set).

Generator S-10



Powers available 1000W to 1700W, 7 power levels indicated by LEDs, analog Display, Control power, 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%
 - 40-90 kHz. Sweep System ±2%

- Operating system:**
- Normal: tracking of frequency wave.
 - Sweep System ±2%: frequency modulation (adjustment set).

Generator S-30



Powers available 2000W to 3400, 7 power levels indicated by LEDs, analog display, Control power, 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%)
 - 40-90 kHz. (Sweep System ±2%)

- Operating system:**
- Normal: tracking of frequency wave.
 - Sweep System ±2%: frequency modulation (adjustment set).

Generator SB-10 digital



Available power 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%)
 - 40-90 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 2000W to 3400, 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%)
 - 40-90 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 600W, 800W and 1000W to 35-70-105kHz. Display (choice of time, power, alarm, power limiter, 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).

Depending on the needs, we have a wide range of ultrasonic emitters in standard sizes. For special applications we design the issuer according to the client's needs, with multiple different applications.



Sets of ultrasonic special application of petroleum industry (large tanks).



Tubular ultrasonic sets for degassing of liquids in continuous procedure.



Emitters covered in hard 30 Micron chrome layer.

Table of powers and measures	Power	Standard measures
	600 W.	450 x 250 mm. transmitter set 1 box
	1000 W.	550 x 350 mm. transmitter set 1 box
	1500 W. / 1700W.	<ul style="list-style-type: none"> • 550 x 350 mm. • 700 x 350 mm.

*For different sizes please contact our Technical Department

High frequency transmitters	Power / frequency
	600 to 1700W. / 28 kHz.(sweep system ±2%)
	600 to 1700W. / 40 kHz.(sweep system ±2%)
	600 to 1700W. / 40-90 kHz.(sweep system ±2%) Multi-frequency
	600 to 1000W. / 70 kHz.(sweep system ±2%)
de 600 a 1000W. / 105 kHz.(sweep system ±2%)	

*For different frequencies, please contact with our Technical Department

In addition to the standard measures, we adapt ourselves to your needs, giving the possibility to develop sets of special measures with the anchoring system that best suits your needs



Ultrasonic-2 Alkaline 1kg/5kg/10kg/20kg



Product type: degreaser.
Features: Detergent for iron and steel. Removes embedded sediments of fats, oils, and any kind of stubborn, avoiding that it redeposite on the parts already clean. Surfactants, solvent and alkali. stubborn, avoiding that it redeposite on the parts already clean. Surfactants, solvent and alkali.
Dosage: 2-5%
Color: yellow.
Appearance: liquid.

Ultrasonic-5P Alkaline 1kg/5kg/10kg/25kg/30kg



Product type: degreaser.
Features: Cleaning and descaling of fats, oils, and any kind of stubborn, avoiding that it redeposite on the parts already clean.
Suitable materials: all materials and metals (including aluminum and its alloys).
Dosage: 3%
Color: white.
Appearance: powder.

Ultrasonic-6 Alkaline 1kg/5kg/10kg/25kg/30kg



Product type: degreaser.
Features: Pickled light ink and acrylic paintings. Ideal for the Elimination of fats and oils in any surface.
Suitable materials: all types of surfaces.
Dosage: 2-5%
Color: transparent
Appearance: liquid.

Ultrasonic-7 Alkaline 1kg/5kg/10kg/25kg/30kg



Product type: degreaser.
Features: Cleaning and descaling charcoal. 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 Alkaline 1kg/5kg/10kg/25kg/30kg



Product type: degreaser.
Features: Nature alkaline degreaser. Highly concentrated, developed for the cleaning of heavily soiled components (spare parts) of steel and light metals.
Suitable Materials: iron.
Dosage: 8-12%
Color: transparent.
Appearance: liquid.

Ultrasonic-20 Alkaline 1kg/5kg/10kg/25kg



Product type: degreaser and surfactant.
Features: High cleaner power degreaser. Their carefully selected surfactants facilitate the penetration of the product within the soil. Especially formulated for use in hard water, since it prevents the precipitation of the calcium and magnesium salts.
Suitable Materials: iron.
Dosage: 5%
Color: white.
Appearance: powder.

Ultrasonic-22 Alkaline 1kg/5kg/10kg/25kg



Product type: degreaser.
Features: Strong alkaline degreaser for ferrous metals.
Suitable Materials: ferrous materials.
Dosage: 3-5%
Color: white
Appearance: powder.

Ultrasonic-23 Alkaline 1kg/5kg/10kg/25kg



Product type: degreaser and surfactant.
Features: Alkaline cleaner formulated for the degreasing of surfaces of steel and suitable also for the Elimination of phosphate layers.
Suitable Materials: iron.
Dosage: 5%
Color: white.
Appearance: powder.

Ultrasonic-24 Alkaline 10kg / 25kg / 30 kg



Product type: alkaline degreaser for pickling of steel and stainless steel.
Features: Specific pretreatment before phosphatization, Galvanic deposition and glazed.
Suitable Materials: stainless steel, iron and copper alloys.
Dosage: 2-5%
Appearance: yellowish powder.

Ultrasonic-A Alkaline 1kg / 5kg / 10kg / 25kg / 30 kg



Product type: degreasing additive.
Features: Agent addition of degreasing solutions.
Dosage: 0.2% - 0.5%
Color: Orange.
Appearance: liquid.

Ultrasonic-B Alkaline 1kg / 5kg / 10kg / 25 kg / 30 kg



Product type: degreasing additive.
Features: Agent addition of degreasing solutions.
Dosage: 0.2% - 0.5%
Color: beige.
Appearance: liquid.

Ultrasonic-MP Alkaline 1kg / 5kg / 10kg / 24kg



Product type: degreaser.
Features: Indicated Superdesengrasante to remove oils and fats of animal and vegetable. Indicated as a degreaser cleaner food circuits, pasteurizers and cleaning by recirculation systems.
Suitable materials: iron, steel
Dosage: 3-10%
Color: Brown.
Appearance: liquid.

Ultrasonic-D-100W Alkaline 1kg / 5kg / 10kg / 20 kg



Product type: stripper.
Features: Stripper of aluminium and its alloys for the stripping of paint and contaminants organic great tenacity and grip on any type of metal substrate. For stripping in short periods of time, synthetic resins, primers, baked paintings, paintings to water and even the paintings of Cataphoresis.
Suitable materials: metals
Dosage: 100%
Color: transparent.
Appearance: liquid.

Ultrasonic-Ainox Acid 1kg / 5kg / 10kg / 25kg / 30 kg



Product type: rust, paint remover.
Features: Specific for cleaning of stainless steel weld, eliminate resistant oxides and give a passivation to the treated surface.
Material: stainless steel.
Dosage: 1-5%
Appearance: liquid.

Ultrasonic-250 Acid 24kg



Product type: rust from metals.
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.
Suitable Materials: ferrous metals.
Dosage: 2%
Color: transparent.
Appearance: liquid.

Ultrasonic-PRO Acid 5kg / 25kg / 35 kg



Product type: stripper
Features: Pickling Gel for stainless steel suitable for the cleaning of austenitic stainless steels and alloy steels very strong base of nickel and chromium. The parts with anti-rust treatment is recommended.
Suitable materials: steels
Dosage: 0,5 - 3%
Color: purple.
Appearance: liquid.

Aliquat Acid 1kg / 5kg / 10kg / 20kg / 25kg



Product type: sanitizing acid cleaner.
Features: Moderately acid product for use in the integral cleaning by contact surfaces and utensils strongly contaminated in the food industry, catering, large collectivities and surfaces and institutional hygiene, where in addition require descaling of lime deposits produced by the hardness of the water.
Suitable materials: plastics.
Dosage: 1-10%
Color: Blue
Appearance: liquid.

Ultrasonic-51 Stripper 1kg / 5kg / 10kg / 25 kg



Product type: paint stripper.
Features: Hot it has unique properties for stripping in short periods of time, synthetic resins, primers, paints and baked powder paint, water paints and very resistant paints of Cataphoresis.
Suitable Materials: aluminium.
Dosage: 100%
Color: beige.
Appearance: liquid.

Ultrasonic-52 Stripper 1kg / 25kg



Product type: alkaline additive to 51.
Features: Hot it has unique properties for stripping in short periods of time, synthetic resins, primers, paints and baked powder paint, water paints and very resistant paints of Cataphoresis.
Suitable Materials: aluminium.
Dosage: 50%
Color: Orange
Appearance: liquid

Ultrasonic-53 Stripper 1kg / 5kg / 10kg / 25 kg



Product type: stripper.
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.
Dosage: 40%
Color: transparent.
Appearance: liquid.

Ultrasonic-54 Stripper 1kg / 5kg / 10kg / 25kg



Product type: stripper.
Features: Hot presents a very high capacity for stains on synthetic resins, baked paints, primers, water paints and paints of Cataphoresis.
Suitable Materials: iron.
Dosage: 50%
Color: Brown.
Appearance: liquid.

Ultrasonic-4 Other 1kg / 5kg / 10kg / 20 kg



Product type: degreaser.
Features: Removes embedded sediments of fats, oils, and any kind of stubborn, avoiding that it redeposite on the parts already clean.
Suitable materials: aluminum, iron and alloys.
Dosage: 3%
Color: blue.
Appearance: liquid

Antioxidante Other 1kg / 5kg / 10kg / 20kg



Product type: inhibitor of corrosion and metal shield.
Features: It can be used in smoothing sharp and machining of all kinds. In those cases in which a bath passivation and protection of metals and in particular ferrous materials is required. Material: iron.
Suitable Materials: iron
Dosage: 0, 2 - 1%
Color: Orange
Appearance: liquid.

Adisec Other 1kg / 5kg / 10kg / 20kg / 25 kg



Type of product: additive secant.
Features: Product indicated to lower the surface tension of water in parts cleaning processes.
Suitable materials: all types of surfaces.
Dosage: 0,5 - 3%
Color: transparent.
Appearance: liquid.

Electro Other 1kg / 5kg / 10kg / 20kg



Type of product: detergent
Features: Dielectric detergent for the cleaning of electronic cards, motor and electrical parts. Suitable to remove embedded sediments of grease, oils or any other type of stubborn, avoiding that it is redeposite on the parts already clean.
Suitable materials: electronic
Dosage: 2-5%
Color: red.
Appearance: liquid

Tenso Other 1kg / 5kg / 10kg



Type of product: detergent
Features: Detergent and neutral cleaning additive. Used as Enhancer product to increase the power of cavitation of acids and alkaline products used in the ultrasonic cleaning. Suitable to remove sediments embedded in fats, oils, and any kind of stubborn.
Suitable materials: all
Dosage: 0, 1-0, 5%
Color: transparent.
Appearance: liquid.

Table of products and specifications

Product	How to use		Suitable material					Waste that removes				Type of product				
	Concentration in water (%)	Bath temperature	Aluminium	Iron	Stainless steel	Plastic	Electronic plates	Oil	Fat	Char	Painting	Degreaser	Surfactant	Deoxidizer	Stripper	Additive
Ultrasonic-2	2-5%	40° - 80°		✓	✓	✓		✓	✓			✓				
Ultrasonic-5P	3%	40° - 80°	✓	✓				✓	✓			✓				
Ultrasonic-6	2-5%	40° - 80°	✓	✓				✓	✓		✓					
Ultrasonic-7	3% **	40° - 80°	✓	✓				✓	✓							
Ultrasonic-17	8-12%	40° - 80°	✓	✓				✓	✓			✓				
Ultrasonic-20	5%	40° - 80°		✓				✓	✓			✓	✓			
Ultrasonic-22	3-5%	40° - 80°		✓				✓	✓			✓	✓			
Ultrasonic-23	5%	40° - 80°		✓				✓	✓			✓	✓			
Ultrasonic-24	4,5-9%	40° - 80°		✓	✓							✓	✓	✓		
Ultrasonic-A	0,2-0,5% *	40° - 80°	✓	✓						✓		✓				✓
Ultrasonic-B	0,2-0,5% *	40° - 80°	✓	✓						✓		✓				✓
Ultrasonic-MP	3-10%	40° - 80°		✓				✓	✓			✓				
Ultrasonic-D100W	100%	40° - 80°	✓	✓							✓				✓	
Ultrasonic-Ainox	40-60%	40° - 80°			✓								✓		✓	
Ultrasonic-250	2%	40° - 80°		✓									✓			
Ultrasonic-PRO	0,5-3%	40° - 80°			✓										✓	
Aliquat	1-10%	40° - 80°	✓	✓		✓						✓				
Ultrasonic-51	100%	40° - 80°	✓											✓		
Ultrasonic-52	50%	40° - 80°	✓												✓	
Ultrasonic-53	40%	40° - 80°		✓											✓	
Ultrasonic-54	50%	40° - 80°		✓											✓	
Ultrasonic-4	3%	40° - 80°	✓	✓				✓	✓			✓				
Antioxidante	0,2-1%	40° - 80°		✓					✓							✓
Adisec	0,2-1%	40° - 80°	✓	✓												✓
Electro	2-5%	40° - 80°					✓									✓
Tenso	0,1-0,5%	40° - 80°	✓	✓	✓	✓	✓	✓	✓	✓			✓			✓

Observations: *It should be used with Ultrasonic 7 (3%)
 **It should be used with the Ultrasonic (0.5%)

Some of our clients:





tierratech[®]
ULTRASONIC CLEANING SYSTEMS

Tierra Tech[®] Spain

Tierra Tech[®] España
Parque empresarial Morero Nave 27
C.P. 39611 Guarnizo, Cantabria, Spain.
Tel (+34) 942 269 543
Fax (+34) 942 269 544
tierratech@tierratech.com

Tierra Tech[®] Mexico

Tierra Tech[®] México
Calle Oriente 3 - 201.
Fraccionamiento Ciudad Ind. Celaya.
38010 Celaya - Guanajuato, México.
Tel. (+52) 461 612 40 82
Tel. (+52) 461 161 31 58
Fax (+52) 461 612 97 82
mexico@tierratech.mx

Tierra Tech[®] U.S.A.

Tierra Tech[®] U.S.A.
12252 S. Casey Cove, Riverton
Utah 84065 USA
Tel. (+1) 801 302 2015
Cell. (+1) 801 244 7126
sales@tierratech.com

www.tierratech.com