

BROCHURE 2016

COMPREHENSIVE SOLUTIONS FOR ULTRASONIC CLEANING

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KEY



Drain valve



Tactile control screen



Sweep System



Temperature control



T Filtering system



Pneumatic platform



Timer



Pump



Grease separator



Fe Iron



Au Gold



Al Aluminium



Zn Zinc



Cu Copper



Ag Silver



Pla Plastic

GREENTECHNOLOGIES

About us

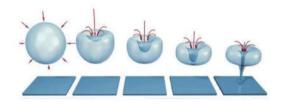
Green Technologies designs, manufactures, exports and sells ultrasonic cleaning equipment and systems for industrial applications with a commitment to the environment and to its clients. Current environmental regulations have transformed processes, which were formerly only chemical, into a true physical and chemical challenge in order to achieve a marginal impact on our ecosystem.

Here is where the importance of our Research and Development department resides. Thanks to a highly qualified team we can offer solutions to the many different cleaning problems of our clients. Our ultrasonic cleaning systems for industrial applications are amongst the most efficient systems known to date, able to reach levels of energy efficiency of up to 95%.

This means that the ultrasonic cleaning systems developed by Green Technologies are the best available.

ULTRASOUND

Ultrasonic cleaning is a process created by the action of high frequency sound waves passed through a liquid that acts as a cleaning solution. Through a process known as "cavitation" millions of small bubbles are formed and collapsed in the liquid. These bubbles can penetrate very small grooves and cracks. Cavitation is caused by the alternation of the compression and expansion generated in the half cycle of a sound wave. This creates low and high pressure points. During the low-pressure phase the liquid is expanded beyond its tensile strength and these cavities start to increase in size. In the subsequent compression phase, the cavities implode suddenly. This phenomenon occurs at a speed that is proportional to the ultrasonic frequency applied. Although in cavitation the bubbles are microscopic and release only a small amount of energy, the cumulative effect of millions of implosions is intense, creating a strong cleaning effect that can remove the most tenacious contamination.

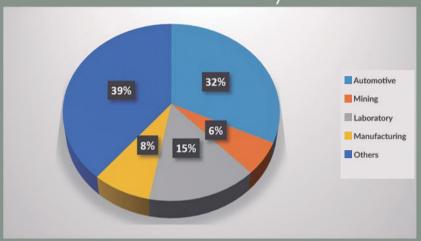


Technology moves forward

The use of ultrasound for cleaning and degreasing was first used for industrial purposes in the 1950s. To date, this technology has been perfected and it is now an essential tool whenever fast and efficient cleaning is needed, without requiring additional manual labour or damaging the objects to be cleaned.

An effective cleaning method

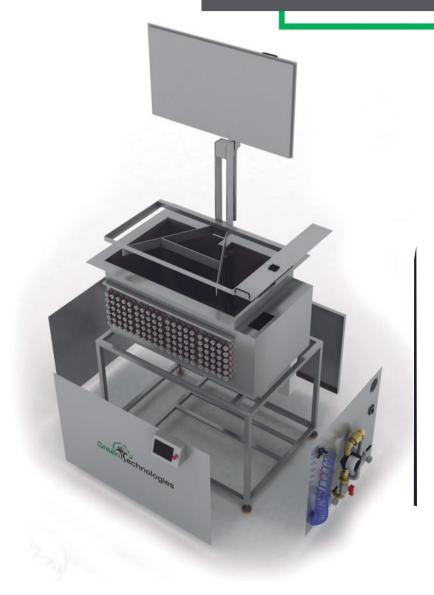
Ultrasound use by sectors



Ultrasonic cleaning can be used in any sector whenever an exhaustive and precise cleaning is needed. Thanks to its great penetrating cleaning action where other cleaning methods are not as effective, ultrasonic cleaning has become the best option available.



Cutting-edge design and manufacture



In technical terms, Green Technologies manufactures individually each component of the ultrasonic cleaning system, encouraging our commitment to evolve and research into our equipment and technology. We strive to ensure that every item used in the manufacture of our equipment is of the highest quality and cutting-edge technology: stainless steel of the highest quality and thickness according to its industrial use and high-tech manufacturing methods at the forefront of design. At Green Technologies, we are very proud of our commitment to offer electronics that are manufactured exclusively with European components. All manual labour is carried out in our facilities.

We also stand out for having our own detergent line: ECOCLEAN. Our detergents have been designed especially for our ultrasonic cleaning systems. These are the result of a long research process that allows us to reach the perfect balance and unity of all our components to achieve superior cleaning results. Of course, all our detergents have been formulated to protect the environment, but also those handling it: our detergents are biodegradable, free from VOCs and provide extra protection for the operator.

GTS SERIES

EVERYTHING YOU NEED



GTS-16



160 litres

1500 W of ultrasonic power 4500 W of heater power Tank dimensions: 700 x 550 x 500 Usable dimensions: 680 x 440 x 350 Load capacity: 100 kg



GTS-31



310 litres

3000 W of ultrasonic power 6000 W of heater power Tank dimensions: 950 x 700 x 550 Usable dimensions: 930 x 560 x 390 Load capacity: 220 kg

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GTS-42



420 litres

4500 W of ultrasonic power 7500 W of heater power Tank dimensions: 1100 x 750 x 600 Usable dimensions: 1080 x 610 x 440 Load capacity: 320 kg



GTS-60



600 litres

6000 W of ultrasonic power 9000 W of heater power Tank dimensions: 1250 x 800 x 700 Usable dimensions: 1230 x 660 x 540 Load capacity: 450 kg

STANDARD SYSTEMS



940 litres

7500 W of ultrasonic power 12000 W of heater power Tank dimensions: 1500 x 900 x 800 Usable dimensions: 1480 x 760 x 640 Load capacity: 700 kg



GTS-150

1500 litres

12000 W of ultrasonic power 15000 W of heater power Tank dimensions: 1700 x 1100 x 1000 Usable dimensions: 1680 x 960 x 840 Load capacity: 1000 kg



GTS-400



4000 litres

24000 W of ultrasonic power 18000 W of heater power Tank dimensions: 2550 x 1500 x 1200 Usable dimensions: 2530 x 1360 x 1040 Load capacity: 1500 kg

GTS SERIES

7" tactile and intuitive control screen. Independent configuration for each function.

ECO operating mode.

Pneumatic platform with up-down option.

SWEEP X3 ultrasound generator.

Built with stainless steel.

PLAY-PAUSE function for the platform.

Speed/load force adjustment.

Delayed temperature start.

STOP-START function for the platform.

Overheating control system.

Surface side sweep.

Auxiliary tank for grease collection.

Filtering system.

Liquid level sensor.

Integrated air pistol.

End of shift lid with thermal insulation.

UP-DOWN agitation function.





















GTM SERIES

THE MANUAL ONE



GTM-16



160 litres 1500 W of ultrasonic power 4500 W of heater power Tank dimensions: 700 x 550 x 500 Usable dimensions: 680 x 500 x 350 Manual platform



GTM-31



310 litres
3000 W of ultrasonic power
6000 W of heater power
Tank dimensions: 950 x 700 x 550
Usable dimensions: 900 x 650 x 390
Manual platform

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420 litres 4500 W of ultrasonic power 7500 W of heater power Tank dimensions: 1100 x 750 x 600 Usable dimensions: 1050 x 700 x 440



GTM-60



600 litres 6000 W of ultrasonic power 9000 W of heater power Tank dimensions: 1250 x 800 x 700 Usable dimensions: 1200 x 750 x 540 Manual platform

MANUAL SYSTEMS.



940 litres

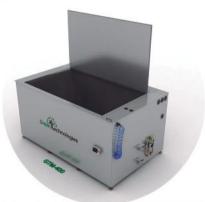
7500 W of ultrasonic power 12000 W of heater power Tank dimensions: 1500 x 900 x 800 Usable dimensions: 1450 x 850 x 640 Manual platform



GTM-150

1500 litres

12000 W of ultrasonic power 15000 W of heater power Tank dimensions: 1700 x 1100 x 1000 Usable dimensions: 1650 x 1050 x 840 Manual platform



GTM-400



4000 litres

24000 W of ultrasonic power 18000 W of heater power Tank dimensions: 2550 x 1500 x1200 Usable dimensions: 2500 x 1450 x 1040 Manual platform

GTM SERIES

7" tactile and intuitive control screen. Independent configuration for each function. ECO operating mode.

> Can be fitted with castors or legs. SWEEP X3 ultrasound generator.

Built with stainless steel.

Optimised compact design.

Transducers on vertical surface. Delayed temperature start. Basket/rack for products to be cleaned.

Overheating control system.

Surface side sweep.

Auxiliary tank for grease collection.

Filtering system.

Liquid level sensor.

Integrated air pistol.

End of shift lid with thermal insulation.

Forced ventilation.



















GTL SERIES

LABORATORY



GTL-05



5 litres 200 W of ultrasonic power 190 W of heater power

Tank dimensions: 220 x 180 x 170 Usable dimensions: 200 x 160 x 130



35 litres 800 W of ultrasonic power 1000 W of heater power Tank dimensions: 450 x 260 x 350 Usable dimensions: 430 x 240 x 310



GTL-15



15 litres 400 W of ultrasonic power 380 W of heater power

Tank dimensions: 350 x 200 x 300 Usable dimensions: 330 x 180 x 260



GTL-60



60 litres 1200 W of ultrasonic power

2000 W of heater power

Tank dimensions: 600 x 350 x 350 Usable dimensions: 580 x 330 x 310

BASIC SERIES



GT-BASIC 2



2 litres

50 W of ultrasonic power 100 W of heater power

Usable dimensions: $150 \times 140 \times 100$ Overall dimensions: $190 \times 170 \times 220$



GT-BASIC 13



13 litres

300 W of ultrasonic power 400 W of heater power

Usable dimensionss: $330 \times 300 \times 150$ Overall dimensions: $360 \times 330 \times 310$



GT-BASIC 6



6 litres

150 W of ultrasonic power 300 W of heater power

Usable dimensions: $300 \times 155 \times 150$ Overall dimensions: $330 \times 180 \times 310$



GT-BASIC 27



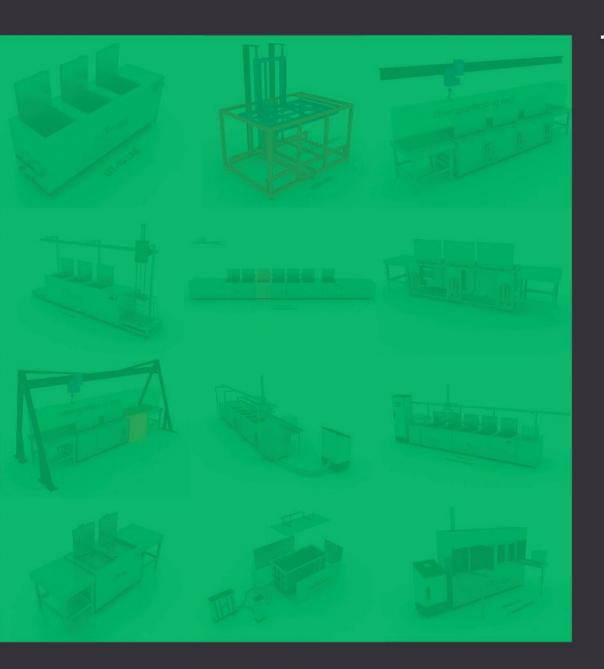
27 litres

500 W of ultrasonic power 500 W of heater power

Usable dimensions: $500 \times 300 \times 200$ Overall dimensions: $550 \times 330 \times 360$

CUSTOM-MADE SYSTEMS





Tailored to your needs

Standard cleaning systems are not necessarily the best solution for those looking for ultrasonic cleaning equipment. Here is where our Design and Development department comes in. We listen to the clients and take note of their needs to transform them into a feasible. sustainable and productive idea before starting with the design of the project. Multiple-stage systems, size according to cleaning needs, automated transport system, rinsing, passivation, drying or any other process required. In order to speed up the installation and activation of the equipment we offer the possibility to order 3D blueprints with the equipment's connections, dimensions and, if necessary, the civil work that must be carried out.

ECOCLEAN

EXCLUSIVE DETERGENTS



GT-10

Au Zn Ag Fe Al Cu Pla

Detergent for ferrous metals and light alloys. Options: 5, 10, 25 and 1000 litres. Concentration: 3 to 5% in water.



GT-10 P

Au Zn Ag Fe Al Cu Pla

Enhancer for heavy contamination. Options: 5, 10, 25 and 1000 litres. Concentration: 0.8 to 2% in water.



GT-DHI

Au Zn Ag Fe Cu Pla

Paint remover for ferrous metals. Options: 5, 10, 25 and 1000 litres. Concentration: 30 to 50% in water.



GT-SNC

Au Zn Ag Fe Cu Pla

Powdered degreaser for ferrous material. Options: 5, 10, 25 and 1000 kg. Concentration: 15 to 25% in water.



GT-ELC

Au Zn Ag Fe Al Cu Pla

Degreaser solution for electronic equipment. Options: 5, 10, 25 and 1000 litres. Concentration: 15 to 25% in water.



GT-POT

Au Zn Ag Fe Al Cu Pla

Generic cleaning enhancer for heavy contamination. Options: 5, 10, 25 and 1000 litres. Concentration: 0.8 to 2% in water.

ecoclean



GT-DAL

Au Zn Ag Fe Al Cu Pla

Paint remover for aluminium. Options: 5, 10, 25 and 1000 litres. Concentration: pure.



GT-DN

Au Zn Ag Fe Cu Pla

Degreaser solution for ferrous metals. Options: 5, 10, 25 and 1000 litres. Concentration: 3 to 10% in water.

After a long research and development process we are proud to offer our exclusive ultrasonic detergents: ECOCLEAN.

A wide range of detergents that aims to cover all the ultrasonic cleaning needs:

from a biodegradable degreaser to a paint remover free from VOCs, drying additives, germ killers for the food industry and disinfectants.

Always working towards the protection of the environment, we have designed detergents to be used exclusively with ultrasonic cleaning equipment, with precipitating additives and surfactants to achieve the best results in combination with ultrasonic cavitation. In addition, Green Technologies is committed to continue developing its ECOCLEAN line to satisfy the needs of all its clients.

Through the analysis of the surface to be cleaned and our chemical design in real time we can create a product tailored to any cleaning or de-scaling need. Green Technologies will attend to your cleaning requests and will analyse, design and test all the chemical products needed for the specified cleaning difficulty.

Loyal to the company's philosophy for optimization, functionality, progress and sustainability, ECO-CLEAN is an environmentally friendly detergent line, economical in its use and at competitive prices. The detergents are available in 5, 10, 25 and 1000 litre containers, always in stock.

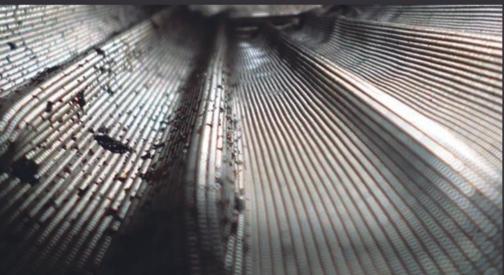


EXAMPLES

BEFORE AND AFTER







SECTORS + OBJECTS = RESULTS

drill heads bearings pistons engine scraps machinery scraps wind turbines electric engines particulate filters transport systems mining equipment mining equipment electronics board catalysers heavy-duty transmission ship engine components rotary drills excavation machinery wheel rims mine trolleys medical appliances cylinder heads vibrating screens pneumatic components transmission scraps power tools automatic transmission general car scraps hydraulic units

shipping industry foundry food & drink
hotel and restaurant automotive
machinery agriculture
dentistry electronics electro-plating
general industry surface treatment
maintenance mining screen printing
extractive industries heavy goods vehicles
nanoelectronics manufacture maintenance
building tattoo engineering
recycling renewable energy medical
farming scrapyards computer industries health
reconstruction cogeneration (CHP)
rail industry petrochemical

rust removal
rinsing paint removal
chip remo

TECHNICAL SUPPORT AND AFTER SALES SERVICE

Over 10 years' experience vouch for our work in the ultrasound industry and in the manufacture of standard and tailored systems. We have invested in state-of-the-art equipment and a qualified team to design, manufacture, develop and assemble our ultrasonic cleaners.

FIRST, PROVIDE A SOLUTION... THEN, FIND THE ORIGIN...

We are committed to our clients, and we offer an after sales service and a warranty of the highest level.

At Green Technologies we know what it means when machinery from a production line stops working; that is why we provide support to all our clients with an immediate technical assistance service. Regardless of the case or the location, Green Technologies will provide a technician as soon as possible to solve the problem.



If you are interested in any of the products mentioned in this catalogue or would like more information, don't hesitate to contact us. We will attend to your enquiry personally, analyse your needs in order to prepare a tailored estimate, identify the desired results and develop a product that fulfils you company's needs. In Green Technologies we have a personalised solution for every client.



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