



# FOOD Sector



**T** | **tierratech**®  
ULTRASONIC CLEANING SYSTEMS



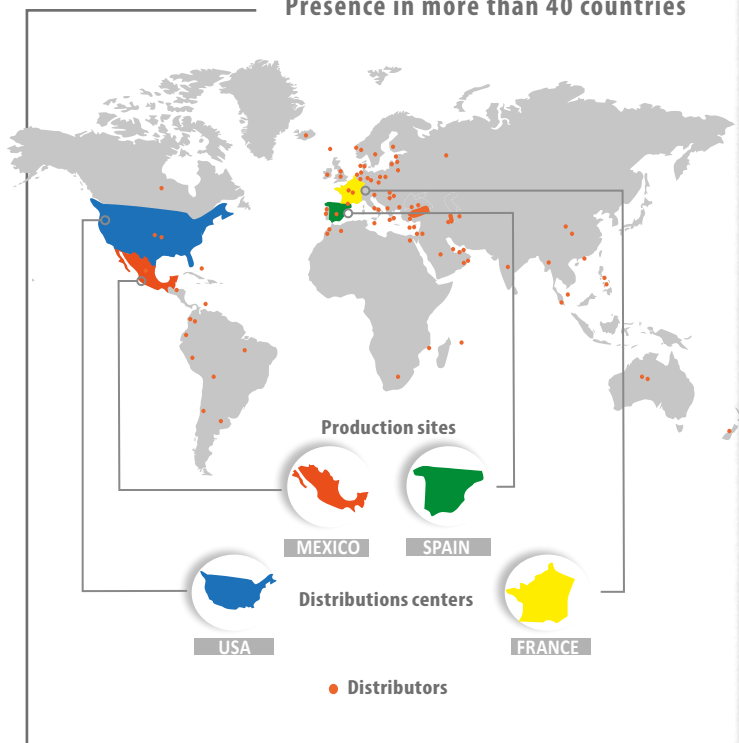
IMPLEMENTATION OF ULTRASONIC CLEANING SYSTEMS IN THE  
FOOD INDUSTRY

## COMPANY

### tierratech



#### Presence in more than 40 countries



TierraTech® is a leading company in the manufacturing and commercialization of ultrasonic cleaning systems and equipment with over 18 years of experience in ultrasonic technology.

Our highly qualified technical and sales team provides personalized service and advising according to the needs of each customer. You will get the most advanced and efficient ultrasonic cleaning technology at your facility with immediate delivery for our standard range.

We provide solutions thanks to the permanent work of our efficient R+D+I team on new technologies and applications around the ultrasonic cleaning, they incorporate state-of-the-art components and materials with an agile design for the realization of custom-made projects.

TierraTech® complies with the highest quality standards in all processes, our Quality Management System was certified by TÜV Rheinland according to UNE EN ISO 9001:2008 with register number 0.04.09057.

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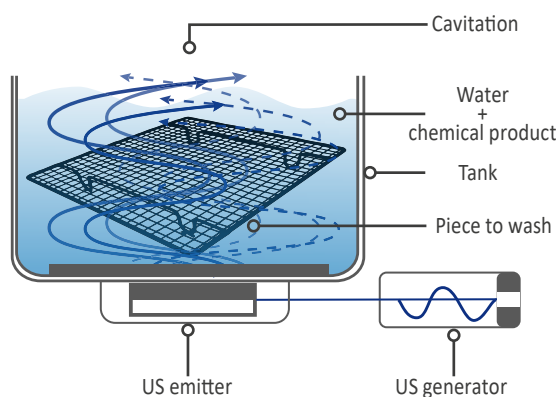


## ULTRASONIC CLEANING

Fast

Effective

Ecological



The ultrasonic cleaning system is the most efficient to achieve optimal results in cleaning food waste in all types of tools and elements of the sector such as trays, grilles, hooks, utensils..., even components of production machinery.

A generator and transformer modify the electric current in high-frequency (ultrasound) waves that generate vibrations. Due to the working frequency and density of the liquid, continuous depressions and overpressions form, appearing and disappearing in a matter of microseconds throughout the liquid producing a micro brushing that acts around any element that is introduced.

Dirt is removed from the surface of submerged parts, even at the hardest-to-reach points. Ultrasonic cleaning, degreasing and descaling offers cleaning quality as advantages, especially with delicate or difficult parts and lower costs, due to savings in washing times.



## INTEGRATION OF ULTRASONIC EQUIPMENT INTO THE FOOD

# INDUSTRY



TT-4x2500



TierraTech®  
Warranty



Technology respectful  
to the environment



Water and  
chemical saving

## ADVANTAGES

Maximum  
quality cleaning



80% reduction of  
cleaning time



Energy  
cost reduction



Ultrasonic cleaning has been established over the last few years as the best cleaning system in the field of the food industry comprising the production, renovation and maintenance of utensils and machinery, eliminating any dirt and inlays in tools and productive lines. Ultrasonic cleaning systems are used both for cleaning grilles, burners, hooks, molds, baking trays, production tapes, filters, machinery components and other elements of the food sector, as well as for even certain foods (snails, tiger nuts, truffles...).

TierraTech® offers ultrasonic cleaning systems with a wide variety of capacities, specially designed for cleaning parts of any size and weight. These parts are thoroughly cleaned of oil residues, greased dirt, traces and limestone inlays among others, using a combination of ultrasound and a proportion of non-harmful detergent.

With the ultrasonic cleaning system we completely remove dirt **without accommodating the possibility of microbial contamination** within the processes or utensils implemented in the food industry. A cleaning is achieved far superior to traditional methods, being a guarantee in the maintenance of equipment and tools in an industry with such high hygiene requirements.



## SOME OF OUR CUSTOMERS





The food sector finds in our ultrasonic cleaning equipment the most suitable option for the maintenance and improvement of the food production process and, in turn, saving large amounts of uptime achieving the best hygiene and food safety on the market.



## STANDARD EQUIPMENT

The wide range of standard TierraTech® equipment has a wide variety of equipment of different capacities that perfectly adapt to the demands of the food sector and its parts to be cleaned. They can be complemented with pneumatic lifting platform to facilitate loading and unloading, filtration systems, oil separation and water treatment, among others.



## SPECIAL EQUIPMENT

TierraTech® can meet the special needs of its customers by manufacturing customized equipment, special measures, with different number of vats (or one, or more vats) depending on the treatments that are necessary. Loading/unloading and transport systems can be both manual and automatic, porch carts or x/y transfers.

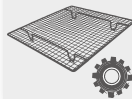


Proper  
cleaning

We design to suit each customer the support structures for washing parts, which can be available in baskets, special racks and racks with the possibility of batting, tilting or rotating systems.

## WHAT CLEANING EQUIPMENT DO I NEED?

PIECE TO CLEAN  
+  
TYPE OF DIRT



WATER  
+  
CHEMICAL  
(2-10%  
CONCENTRATION)



PROPER  
EQUIPMENT



DELIVERY



COMMISSIONING



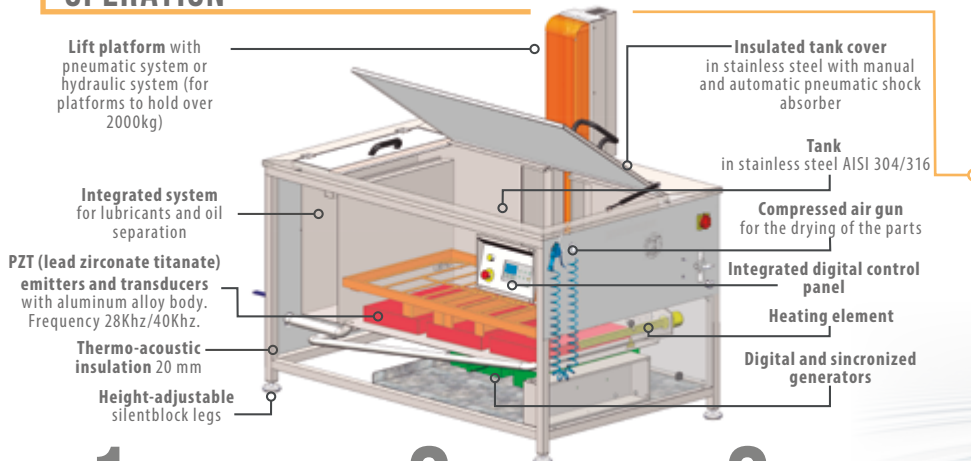
## STANDARD EQUIPMENT FOOD SECTOR

TierraTech® standard equipment is designed to provide the most efficient ultrasonic cleaning with the lowest operating costs. We apply in our standard machines the technical solutions developed in our large projects guaranteeing the best cleaning result.



| MODEL    | VOLUME       | INTERNAL DIMENSIONS | USABLE DIMENSIONS | EXTERNAL DIMENSIONS | WEIGHT  | ULTRASONIC PEAK POWER  | MAX. LOAD LIFT-PLATFORM |
|----------|--------------|---------------------|-------------------|---------------------|---------|------------------------|-------------------------|
| TT-30    | 30 liters    | 550x300x250 mm      | 500x250x175 mm    | 730x420 mm          | 34 kg   | 600Wp (1.200 Wp-p)     |                         |
| TT-50    | 50 liters    | 600x300x300 mm      | 550x250x225 mm    | 790x420 mm          | 40 kg   | 700Wp (1.400 Wp-p)     |                         |
| TT-75    | 75 liters    | 700x350x400 mm      | 650x300x290 mm    | 960x550 mm          | 71 kg   | 800Wp (1.600 Wp-p)     |                         |
| TT-75N   | 75 liters    | 650x390x470 mm      | 620x325x270 mm    | 1170x735 mm         | 130 kg  | 800Wp (1.600 Wp-p)     | 30 kg                   |
| TT-150N  | 150 liters   | 700x480x540 mm      | 670x420x345 mm    | 1260x825 mm         | 175 kg  | 1700Wp (3.400Wp-p)     | 60 kg                   |
| TT-300N  | 300 liters   | 900x615x640 mm      | 860x525x390 mm    | 1520x1020 mm        | 275 kg  | 3.400Wp (6.800 Wp-p)   | 250 kg                  |
| TT-400N  | 400 liters   | 1100x615x690 mm     | 1060x525x440 mm   | 1720x1020 mm        | 320 kg  | 3.400Wp (6.800 Wp-p)   | 250 kg                  |
| TT-600N  | 600 liters   | 1300x735x665 mm     | 1230x650x430 mm   | 1940x1200 mm        | 350 kg  | 5.100Wp (10.200 Wp-p)  | 350 kg                  |
| TT-1000N | 1.000 liters | 1500x810x875 mm     | 1410x720x585 mm   | 2810x1395 mm        | 550 kg  | 6.800Wp (13.600Wp-p)   | 500 kg                  |
| TT-2000N | 1.250 liters | 1750x1010x1080 mm   | 1650x910x790 mm   | 3165x1675 mm        | 3500 kg | 10.200Wp (20.400 Wp-p) | 1000 kg                 |
| TT-3000N | 3.000 liters | 2050x1200x1205 mm   | 1930x1080x900 mm  | 3600x1795 mm        | 1850 kg | 13.600Wp (27.200 Wp-p) | 1500 kg                 |
| TT-4000N | 4.000 liters | 2400x1500x1260 mm   | 2280x1380x900 mm  | 4090x2260 mm        | 2800 kg | 20.400Wp (40.800 Wp-p) | 1500 kg                 |
| TT-8000N | 8.000 liters | 3000x2000x1495 mm   | 2800x1800x1175 mm | 3910x2570 mm        | 3500 kg | 34.000Wp (68.000 Wp-p) |                         |

## OPERATION



1

The tank is filled with water and chemical product (standard concentration of 2-10%) and heated to 70-85°C

2

The parts are placed on the lift-platform or on the grid at the bottom of the tank. They are submerged into the bath.

3

This automatic cleaning process can take from some minutes to some hours depending on the cleaning application.

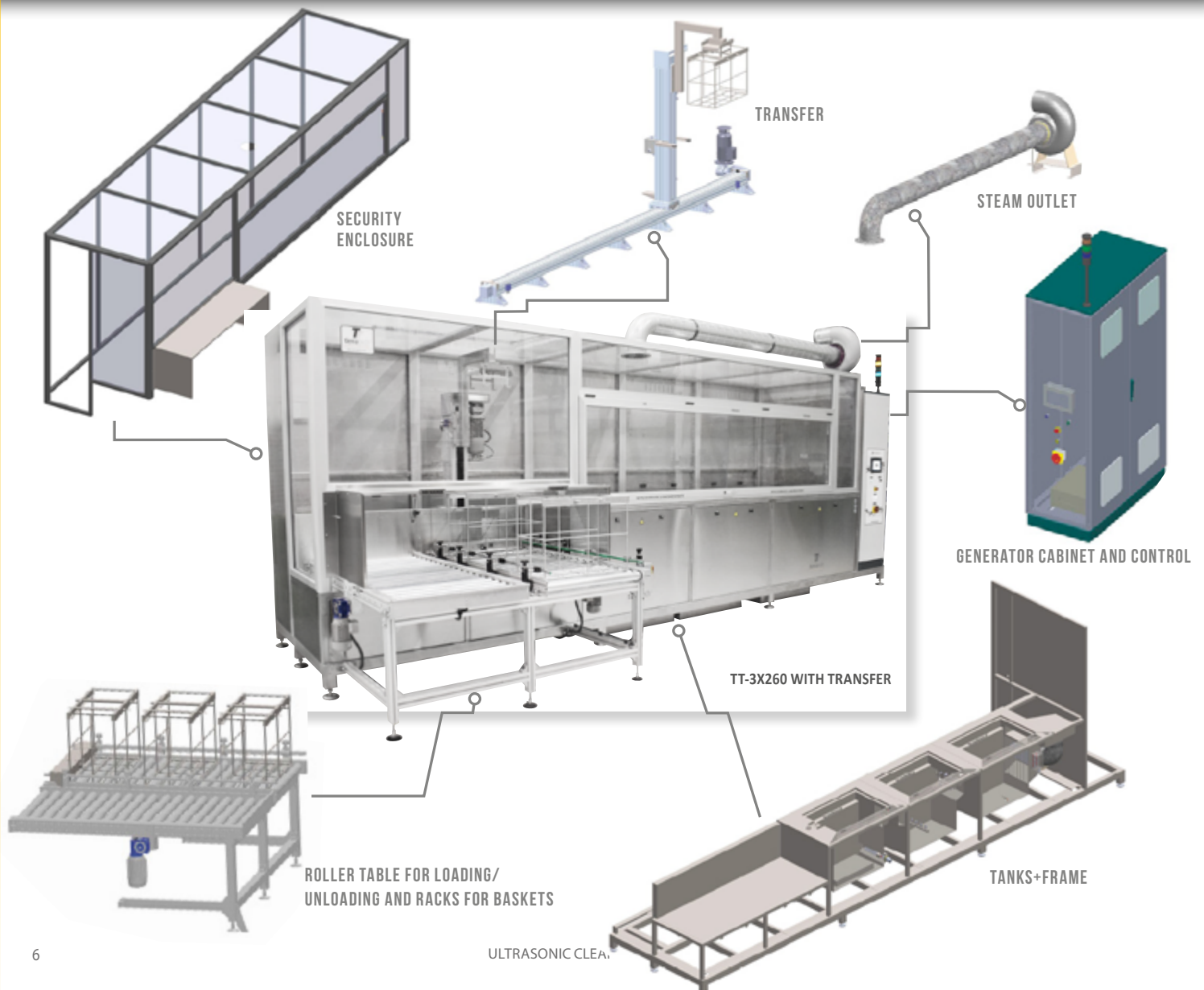
4

Finally, the parts are taken out of the bath.



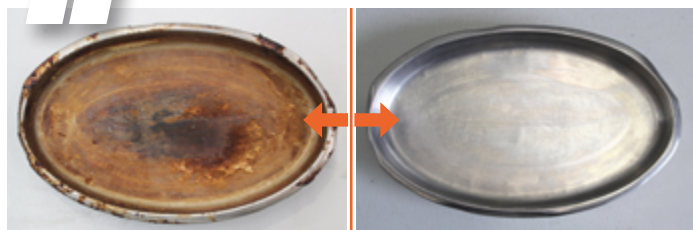
## SPECIAL EQUIPMENT FOOD SECTOR

TierraTech® has custom-made equipment aimed at special cleaning needs, either because of the characteristics of the parts or by the requirements in their manufacturing process

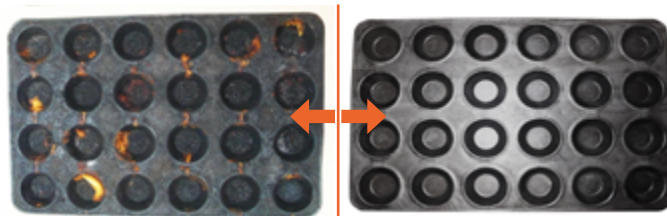




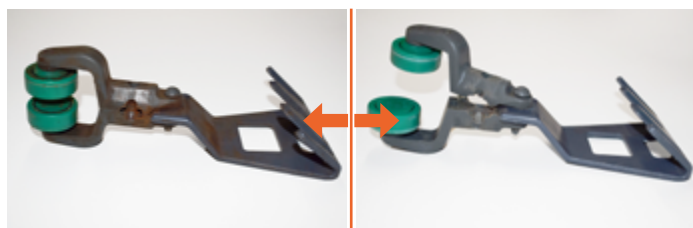
## ULTRASONIC CLEANING: BEFORE & AFTER



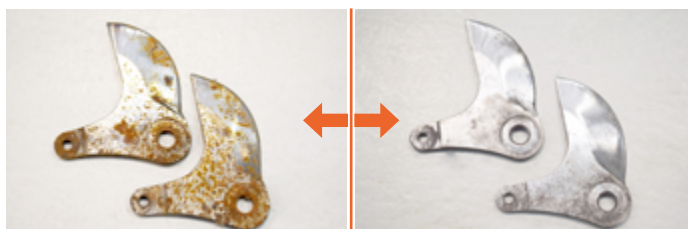
METAL BAKING TRAY



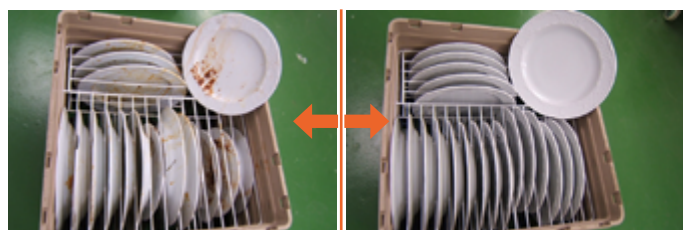
BAKERY MOLDS



MEAT SECTOR HOOKS



CUTTING BLADES



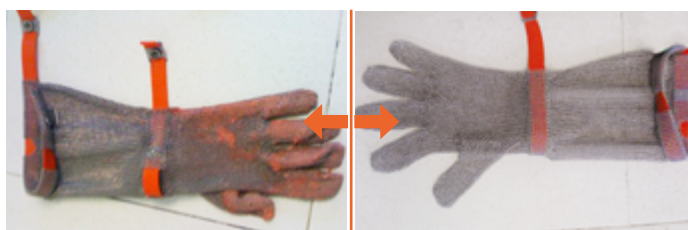
CONTAINER WITH CATERING CROCKERY



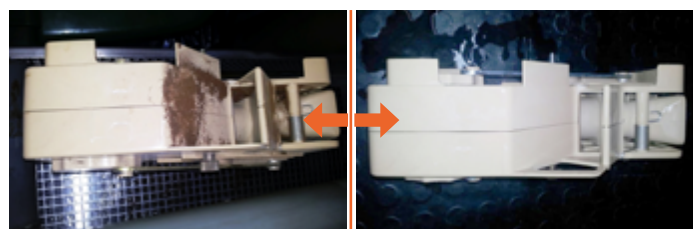
HAM SAUSAGE MOLDS



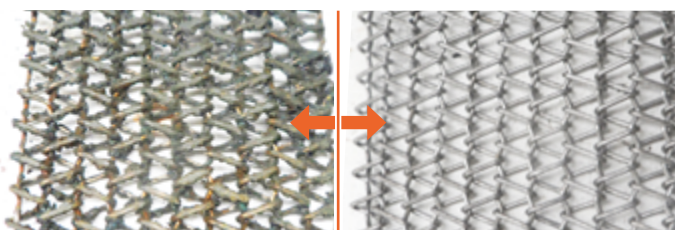
SNAILS



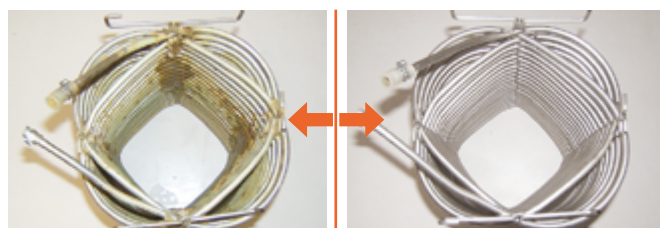
SLAUGHTERHOUSE GLOVES



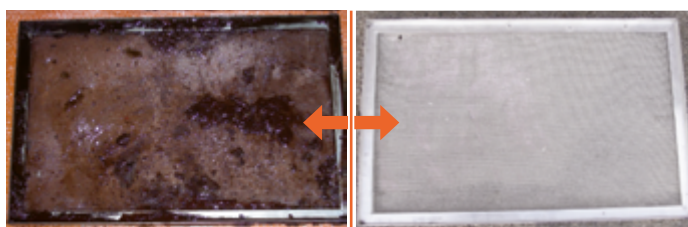
VENDING MACHINE PART



CONVEYOR BELT



COOLERS BREWING INDUSTRY



FILTERS

*Check your cleaning requirements with us*

## TIERRATECH® ULTRASONIC CLEANING SYSTEMS



[www.tierratech.com](http://www.tierratech.com)



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