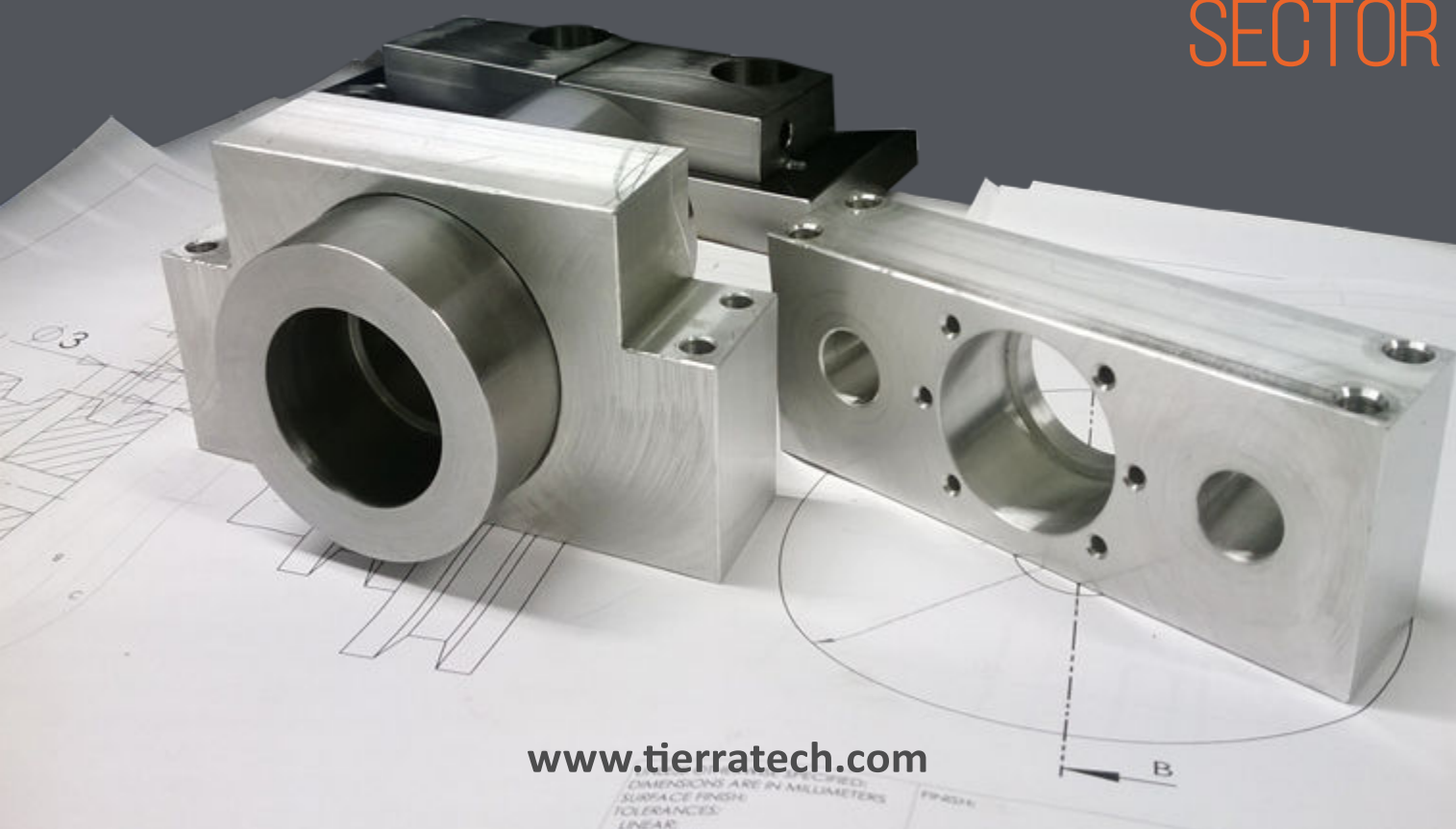




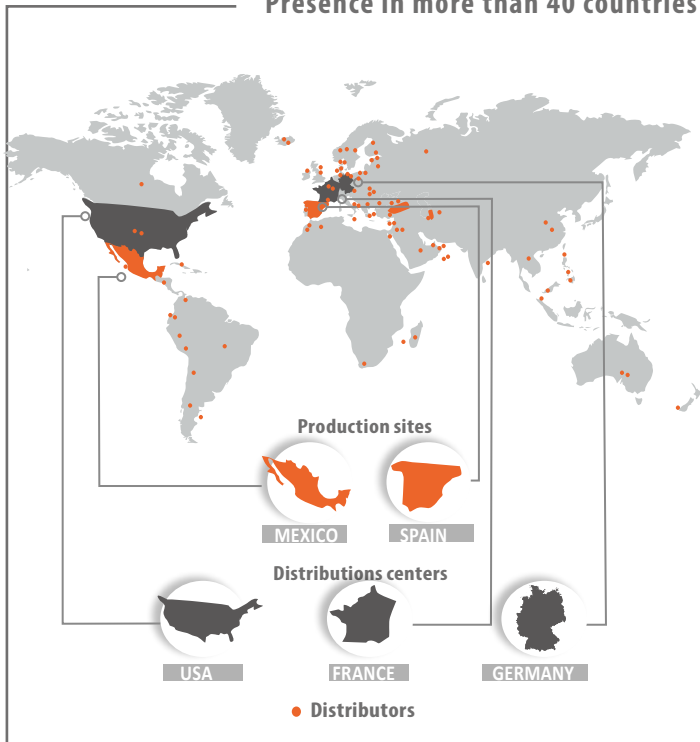
# MOULD SECTOR



## 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 20 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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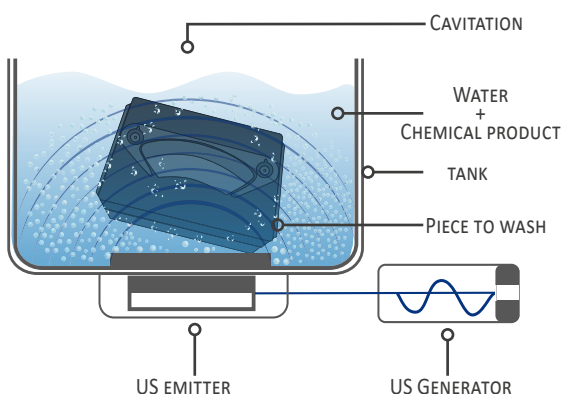


## ULTRASONIC CLEANING

Fast

Effective

Ecological



The ultrasonic cleaning system is the most efficient to achieve optimal results in cleaning all types of tools and elements of the mould sector.

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 MOULD SECTOR



MAXIMUM QUALITY  
CLEANING



80% REDUCTION OF  
CLEANING TIME



ENERGY  
COST REDUCTION



## ADVANTAGES



TECHNOLOGY RESPECTFUL TO  
THE ENVIRONMENT



WATER AND CHEMICAL SAVING

Ultrasonic cleaning has been established over the last few years as the best cleaning system in the field of the mould industry comprising the production, renovation and maintenance of utensils and machinery, eliminating any dirt and inlays in tools and productive lines.

Residues adhering to the moulds and tools affect the quality of the final product, make it difficult to extract and maintain tolerances in the parts, and thus increase production waste.

Ultrasonic cleaning systems are used for cleaning injection moulds, injectors and manufactured components. With this method, the dirt that is agglutinated by the surfaces and mould hollows where we can find, oils, dust, waste gases, etc., including rust and residues of material such as zamak, aluminum, brass and all kinds of plastics and rubbers is completely removed.

TierraTech® offers ultrasonic cleaning equipment with a wide variety of capacities, specially designed for cleaning moulds of any size and weight using a combination of ultrasonics and a proportion of detergent.

Cleaning is much superior to traditional methods (manual scraping, chemical agents, cryogenic cleaning, pressure water, laser ...), being a guarantee in maintenance of equipment and tools in an industry with such high precision requirements.



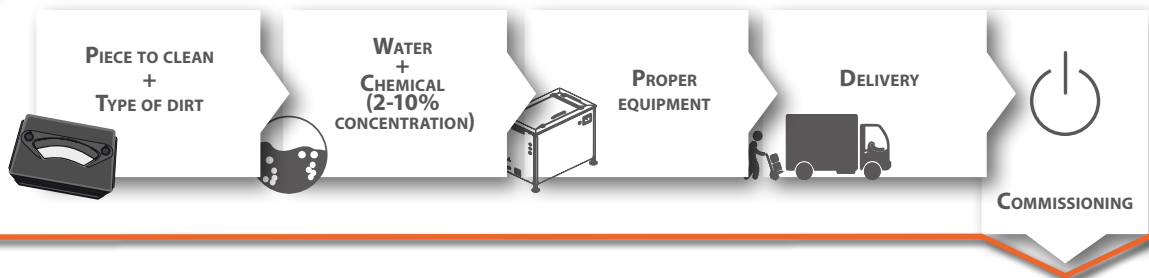
## SOME OF OUR CUSTOMERS





THE MOULD SECTOR FINDS IN OUR ULTRASONIC CLEANING EQUIPMENT THE MOST CONVENIENT OPTION FOR MAINTENANCE AND IMPROVEMENT IN ANY PRODUCTION PROCESS AND, AT THE SAME TIME, SAVING LARGE AMOUNTS OF PRODUCTIVE TIME ACHIEVING THE BEST RESULT.

## WHAT CLEANING EQUIPMENT DO I NEED?



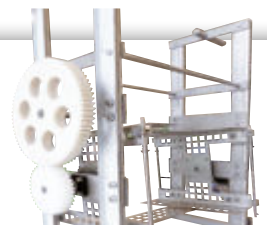
### STANDARD EQUIPMENT

The wide range of standard TierraTech® equipment has a wide variety of equipment of different capacities that perfectly adapt to the demands of the mould 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.



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.



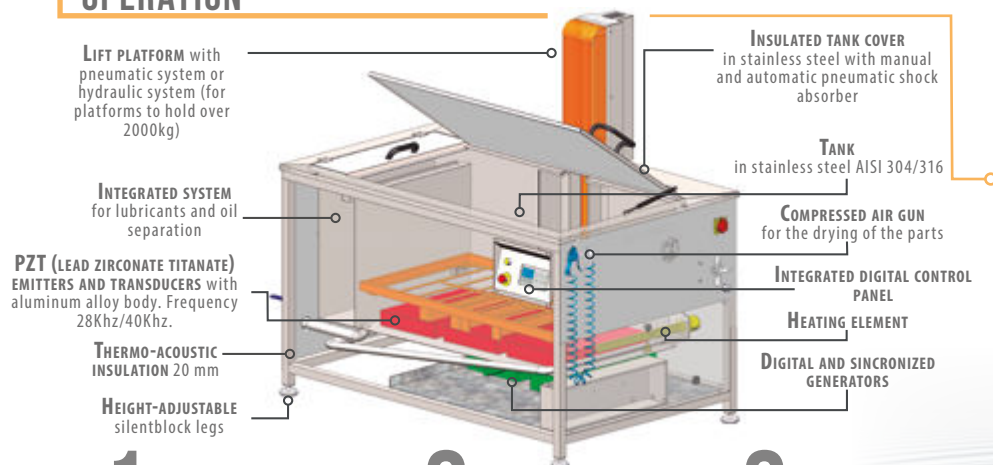
## STANDARD EQUIPMENT MOULD SECTOR

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    | 720x420 mm          | 34 kg   | 600Wp (1.200 Wp-p)     |                         |
| TT-50    | 50 liters    | 600x300x300 mm      | 550x250x225 mm    | 775x420 mm          | 40 kg   | 700Wp (1.400 Wp-p)     |                         |
| TT-75    | 75 liters    | 700x350x400 mm      | 650x300x290 mm    | 1075x575 mm         | 71 kg   | 800Wp (1.600 Wp-p)     |                         |
| TT-75N   | 75 liters    | 650x390x470 mm      | 620x325x270 mm    | 1260x730 mm         | 130 kg  | 800Wp (1.600 Wp-p)     | 30 kg                   |
| TT-150N  | 150 liters   | 700x480x540 mm      | 670x415x345 mm    | 1355x825 mm         | 175 kg  | 1700Wp (3.400Wp-p)     | 60 kg                   |
| TT-300N  | 300 liters   | 900x615x640 mm      | 860x525x390 mm    | 1620x1020 mm        | 275 kg  | 3.400Wp (6.800 Wp-p)   | 250 kg                  |
| TT-400N  | 400 liters   | 1100x615x690 mm     | 1060x525x440 mm   | 1820x1020 mm        | 320 kg  | 3.400Wp (6.800 Wp-p)   | 250 kg                  |
| TT-600N  | 600 liters   | 1300x735x665 mm     | 1230x650x430 mm   | 2050x1200 mm        | 350 kg  | 5.100Wp (10.200 Wp-p)  | 350 kg                  |
| TT-1000N | 1.000 liters | 1500x810x875 mm     | 1410x720x580 mm   | 2915x1395 mm        | 500kg   | 6.800Wp (13.600Wp-p)   | 500 kg                  |
| TT-2000N | 1.250 liters | 1750x1010x1080 mm   | 1650x910x790 mm   | 3300x1660 mm        | 3500 kg | 10.200Wp (20.400 Wp-p) | 1000 kg                 |
| TT-3000N | 3.000 liters | 2050x1200x1205 mm   | 1930x1080x900 mm  | 3675x1800 mm        | 1850 kg | 13.600Wp (27.200 Wp-p) | 1500 kg                 |
| TT-4000N | 4.000 liters | 2400x1500x1260 mm   | 2280x1380x900 mm  | 4165x2260 mm        | 2800 kg | 20.400Wp (40.800 Wp-p) | 1500 kg                 |
| TT-8000N | 8.000 liters | 3000x2000x1495 mm   | 2800x1800x1175 mm | 4000x2640 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

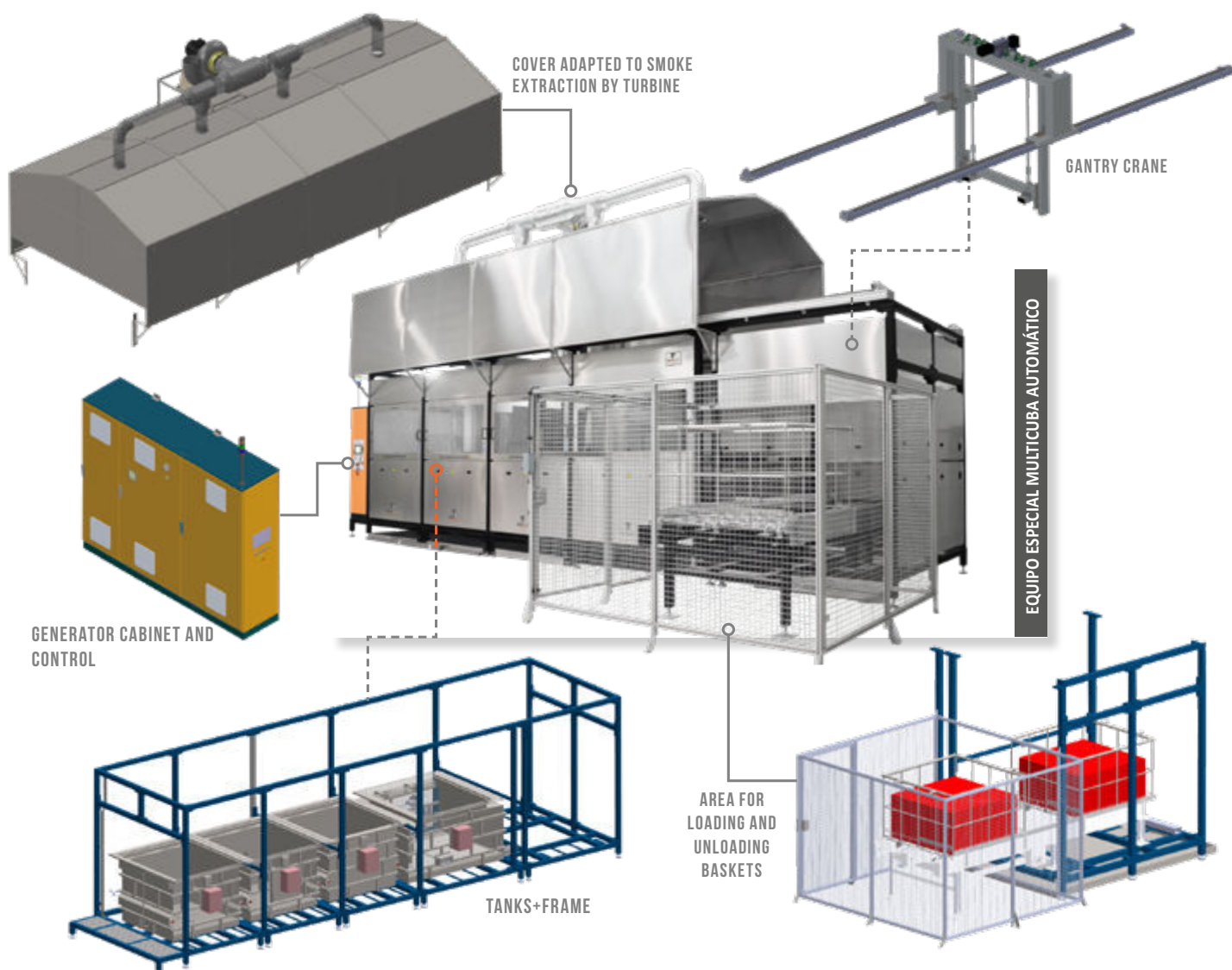
This automatic cleaning process can take from some minutes to some hours depending on the cleaning application.

4

Finally, the parts are taken out of the bath.

## SPECIAL EQUIPMENT MOULD 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

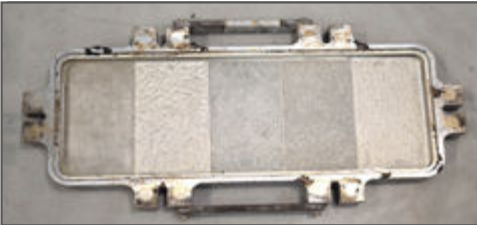


ULTRASONIC CLEANING SYSTEM

## ULTRASONIC CLEANING



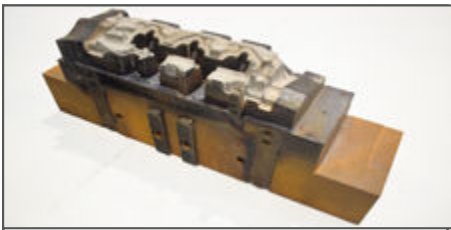
Railway sector mould



Mould for plastic parts



Mould for paper, food sector



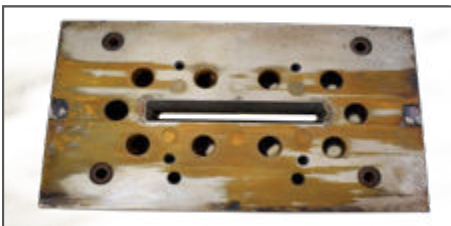
Automotive sector mould



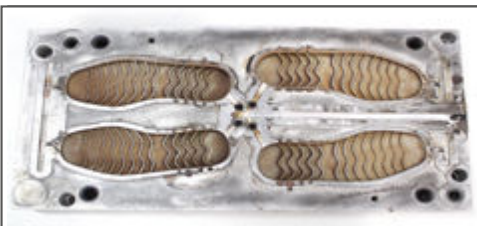
Plastic moulds for cosmetic sector



Plastic mould Bush



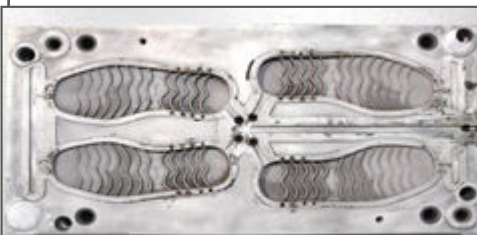
Industrial steel mould



Rubber parts mould



Mould metallurgy parts



*Contact and tell us your cleaning needs*

## TIERRATECH® ULTRASONIC CLEANING SYSTEMS

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



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