

## MODULAR ULTRASONIC WASHING SYSTEMS for INDUSTRY

Ultrasounds specialists

## US ► RALmodsys

Immersible ultrasonic radiant plates and generators to transform any washing tank into an efficient cleaning machine.

We are specialists in the production of professional ultrasonic cleaning systems for industry and laboratories.

**We desing and create modular systems that can be assembled for every need.**

Modular and configurable industrial ultrasonic washing systems for any application.



## Ultrasonic cleaning is the most advanced and efficient cleaning technique

The ultrasonic power (vibrational cavitation mechanical energy) is generated by a group of submersible radiant plates made of AISI 316 stainless steel, each powered by its own generator, strategically positioned inside the tanks used for washing. The tanks can be made of any material and are already available.

The system generates millions of microscopic bubbles under vacuum in the cleaning liquid that implode due to the pressure variations generated by ultrasound, removing dirt particles. An adequately powerful ultrasonic cavitation that propagates within a fluid is the only way to meet the most demanding cleaning requirements for a wide range of materials.

**Modular, flexible and scalable system:** The number of radiant plates and generators is determined by the capacity of the tank and by the washing requirements, as well as the operational parameters of the system, which will be optimized for specific application.

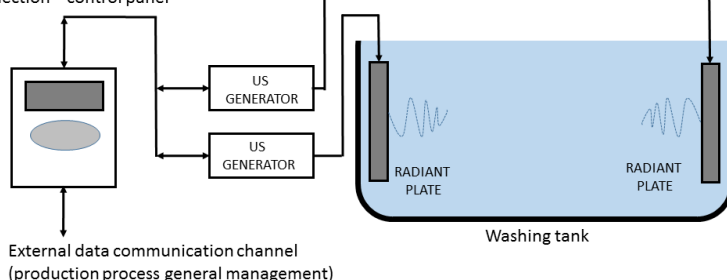
**Power and efficiency in ultrasonic treatment with high-performance piezoelectric transducers.**

A sophisticated microprocessor control electronic system manages the operation of the machine: precision, reliability and durability.



Internal serial communication bus  
(US generator connection – control panel)

Control panel

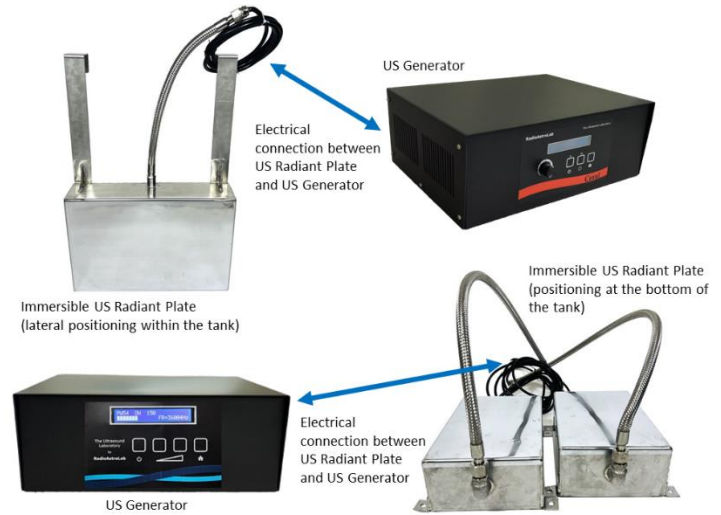


Washing tank

### MODULAR ULTRASONIC WASHING SYSTEMS for INDUSTRY and PROFESSIONAL LABORATORIES

Our systems, combined with our range of detergents, allow for perfect cleaning treatment of the immersed parts, removing any dirt residue.

An optimal combination of ultrasonic generator parameters (power, frequency and modulation), treatment time and temperature provides results that would otherwise be impossible with traditional washing systems.



#### US►RALmodsys system's advantages:

- **Flexibility:** the ultrasonic power is adapted to the size of the load and the type of material to be treated, and multiple configurations can be implemented based on the type of product and the dirt to be removed. Existing tanks of any material can be used.
- **Reliability and simplified maintenance:** if a module fails, it is easy to isolate and replace it without compromising the operation of the entire system.
- **Scalability:** it starts with a basic setup that will be easily expandable or modifiable as production needs increase.
- **Efficiency, energy savings and functions customization** due to the digital and programmable control of each module.

Our modular systems, robust and sophisticated, are built according to the clients' needs starting from a standardized and established structure. A control panel synchronizes and coordinates the functions of the individual components (radiant plates + generators) belonging to the same process island and is equipped with two data communications channels: an internal bus that connects all the generators belonging to the same washing tank and a channel dedicated to potential communication with an external host device.

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##### THE ULTRASOUND LABORATORY

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