RadioAstroLab

PROFESSIONAL ULTRASONIC CLEANING SYSTEMS



T-25

Ultrasonic cleaning for professional applications.

The perfect tool that optimizes the cleaning process:

- High efficiency
- Reduced treatment times
- Minimum electricity consumption
- Environmental sustainability

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

The T-25 tank, combined with our range of detergents, allows a perfect cleaning treatment of the immersed parts, removing any residual dirt. An optimal combination of the ultrasonic generator parameters (power, frequency and modulations), treatment time and temperature deliver results that would otherwise be impossible with conventional washing systems.

Ultrasonic cleaning is the most advanced cleaning technique. An ultrasonic cavitation of adequate power that propagates inside a fluid is the only way to satisfy the most demanding and sophisticated requests for washing and cleaning of mechanical parts, objects of complex shape and instruments in the professional, industrial and medical sectors. The ultrasonic power is generated by a group of piezoelectric transducers that, powered by electrical energy with appropriate power and frequency, convert it into vibrational mechanical energy. In this way, millions of microscopic bubbles are generated under vacuum that implode in a targeted way due to the pressure variations generated by the ultrasound, removing the dirt particles





Power and efficiency in ultrasonic treatment with high-performance piezoelectric transducers. A sophisticated electronic microprocessor control system manages the operation of the machine: precision, reliability and robustness. A display shows the operating parameters.

RadioAstroLab

PROFESSIONAL ULTRASONIC CLEANING SYSTEMS

T-25 Tank: Technical Features

- Machine made in stainless steel, robust and easy to clean.
- Capacity: 25-28 liters.
- External dimensions: (720 x 430 x 330h) mm.
- Internal dimensions of the tank: (450 x 350 x 200h) mm.
- Weight (without liquid): approximately 25 Kg.
- Single-phase power supply: 230 Vac 50/60 Hz.
- Electric power of the US generator: 700 W_{RMS} (nom. value).
- Electric power of the liquid heating system: 900 W_{RMS} (nom. value).
- Central frequency of the US generator (programmable): 23.5 kHz 25.5 kHz.
- Continuous variation of the US power supplied with potentiometer.
- Treatment time programming from 1 to 60 minutes.
- Real-time measurement of the temperature of the washing liquid.
- Washing liquid heating (programmable from 20°C to 80°C).
- Automatic modulation of the operating frequency (SWEEP) for optimal distribution of the ultrasonic field inside the tank.
- No. 7 high-performance piezoelectric transducers: maximum US power density inside the tank.
- Backlit LCD display for viewing the status and operating parameters, keyboard for commands and parameter programming.
- High-performance electronic generator suitable for intensive use.
- Automatic forced ventilation system for the US generator.
- Liquid drain tap.
- Stainless steel object holder basket.
- Supply of specific detergent for the customer's application.

Our laboratories are available for tests on the parts you are interested in: contact us to organize a demonstration!

Our robust and sophisticated electronic generators are equipped with microprocessors dedicated to managing the operating functions and programming the parameters. A control system continuously checks the operating conditions of the generator and the washing tank, blocking the operation of the machine (with acoustic alarm signal and on the display) if anomalies occur. Regardless of the conditions of use, the maximum power that can be supplied by the US generator is automatically limited to a value established by the manufacturer. **Upon request, the T-25 washing systems can be controlled remotely via serial commands (via Ethernet interface) in accordance with Industry 4.0 requirements.**

THE ULTRASOUND LABORATORY

Strada della Marina 9/6, 60019 Senigallia (AN) **t.** 071 6608166 @ <u>commerciale@radioastrolab.it</u> www.radioastrolab.it