

HIGH POWER ULTRASONIC CLEANING EQUIPMENT

THE MOST POWERFUL CLEANING SOLUTION ON THE MARKET

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HOW ULTRASONIC CLEANING WORKS

COMPLEX CLEANING MADE EASY

INNOVATION + SCIENCE = ULTRATECNO TECHNOLOGY

Ultrasonic cleaning systems are based on high-frequency sonic waves that induce a phenomenon called cavitation.

Millions of tiny air bubbles are generated and compressed until they implode, releasing huge amounts of energy and heat. This energy reaches the most stubborn encrusted dirt and removes it without causing any damage at all to the part or equipment in question.

Thanks to the microscopic air bubbles created by cavitation, no orifice or area is left uncleaned, meaning that ultrasonic cleaning machines are the best alternative for treating highly complex components in any type of material.

- The process takes between 10 and 45 minutes.
- ► No operator intervention required. Substantial savings in workforce.
- Micro-brushing enables the cleaning of holes and orifices smaller than 10 um.

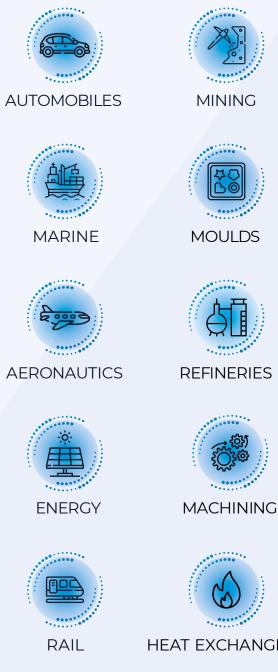


INDUSTRIAL APPLICATIONS

DESIGN AND MANUFACTURE OF HEAVY-DUTY EQUIPMENT FOR DAILY INDUSTRIAL USE.

IT ISN'T MAGIC, IT'S ADVANCED TECHNOLOGY

The standard equipment available on the market uses frequency levels of between 40 and 90 kHz. UltraTecno ultrasonic machines use 28 kHz low-frequency technology, which is much more powerful, and they offer many different industries more effective, quicker cleaning, with less noise, even in the most complex cleaning processes such as decarbonising or pickling (metal surface treatment) thanks to our patented ARF system.







SAWMILLS





PRINTING





MANUFACTURING





FOOD INDUSTRY





ULTRASONIC CLEANING SOLUTIONS

A WORLD LEADER IN MANUFACTURING HIGH POWER EQUIPMENT FOR INDUSTRY

- Low frequency (25-28 kHz): This is needed to produce larger and more powerful cavitation bubbles. Top technical solutions are required for noise reduction, as well as a robust construction to prevent damage to the tank due to the exposure to cavitation.
- Oscillation platforms: The combined action of ultrasound and continuous oscillating extracts the hardest to reach dirt inside the parts.
- ► **High-Efficiency Transducers:** The highest quality ceramics and transducers are bonded to the ultrasonic plate to ensure maximum energy transfer.
- Synchronised Digital Generators: To avoid absorption between the emitter plates and provide maximum excitation to each transducer with a frequency sweep.
- High temperatures (up to 90°C): This improves the chemical reaction and ultrasonic cavitation. This can only be achieved safely if the curing process of the transducers is carried out in high-temperature ovens (180°C) with aeronautical technology.
- ► Specific high-performance detergents: Specifically designed for each cleaning application and type of material.



ACM & ICM SERIES



Our successful ACM Series (with loading and oscillation platform) and ICM Series (no platform) are the result of UltraTecno's innovation and development efforts for over 50 years. Their mass production allows us to offer the most advanced ultrasonic cleaning equipment in the world, at a very competitive price.

- New loading and oscillation platform (up to 2 Tm) with low maintenance and useful life.
- Oil Separation Tank (LFS) for quick and easy oil removal with recirculation pump and automatic oil extractor (FOE).
- Bolt-on flange type ultrasonic plates for better cavitation performance and easier future replacement. Transducers located on the side walls of the tank to ensure 100% cleaning power every time.
- Exclusive and Patented ARF Technology: Full cleaning power while keeping the sound level below 78 dB (A).
- Heating resistors protected by stainless steel casing to ensure long service life.
- Triple Layer Thermal Insulation (including top lid) to prevent heat loss.
- Multilingual 7" color touch screen for easy and intuitive operation by the user. The user can set all machine parameters for optimal performance, Automatic System, Programmable Heating and Ultrasonic Timer, Power Consumption Monitoring, Preventive Maintenance Program, Detergent Dosage Calculator.
- Fully 100% stainless steel construction with 50% extra thickness (3mm), guaranteeing greater durability and reliability of the equipment.

OPTIONAL EQUIPMENT

REUSABLE TANK FILLER

AUTOMATIC WATER FILLER HYBRID HEATING STEAM + POWER AUTOMATIC OPENING LID STEAM



ACM-N SERIES PREMIUM

MODEL	MAIN TANK (LT)	ULTRASONIC POWER (KW)	HEATING CAPACITY	MAIN TANK INTERNAL DIMMENSIONS (MM)	AUMATOMATIC LID	LIFTING TRAY DIMMENSIONS (MM)	LIFTING PLATFORM MAXIMUM LOAD	OIL SEPARATION TANK CAPACITY
ACM-350N	403 lt	3 kW	11 kW	1000 x 650 x 620	Optional	950 x 527	250 kg	50 lt
ACM-500N	587 lt	4 kW	11 kW	1200 x 670 x 730	Optional	1090 x 544	350 kg	85 lt
ACM-750N	840 lt	5 kW	11 kW	1400 x 800 x 750	Optional	1280 x 670	500 kg	130 lt
ACM-1000N	1.224 lt	7 kW	15 kW	1600 x 900 x 850	YES	1480 x 760	800 kg	168 lt
ACM-2000N	2.178 lt	9 kW	22kW	1800 x 1100 x 1100	YES	1750 x 900	1000 kg	275 lt
ACM-3000NW	3.025 lt	10 kW	30 kW	1700 x 1590 x 1230	YES	1560 x 1400	1000 kg	340 lt
ACM-3000N	3.276 lt	12 kW	30 kW	2100 x 1300 x 1200	YES	2000 x 1110	1000 kg	360 lt
ACM-4500N	4.846 lt	15 kW	37,5 kW	2400 x 1590 x 1270	YES	2300 x 1400	1800 kg	710 lt
ACM-5500N	6.010 lt	18 kW	45 kW	2700 x 1590 x 1400	YES	2650 x 1400	1800 kg	601 lt
ICM-8000N	9.184 lt	27 kW	60 kW	3200 x 2050 x 1400	YES	N/A	N/A	827 lt
ICM-12000N	13.258 lt	36 kW	75 kW	4600 x 1950 x 1478	YES	N/A	N/A	955 lt



COMPLEMENTARY MODULAR MULTISTAGE SYSTEMS



UltraTecno offers a modular cleaning system tailored to the requirements of each individual industry. As our tanks are so flexible, we can add rinsing, filtering, passivation, corrosion protection, and drying processes to the ultrasonic tanks at a later stage.

Flexible, reliable, and solidly-built systems from a 100-litre capacity per tank up to 15,000 litres per stage. We offer a range of standar sizes, and the option to custom build, all with a wide range of optional devices.

1. ULTRASOUND CLEANING

Our powerful cavitation will remove all the dirt and grime from the parts or equipment. The cleaning is carried out with water and a specific detergent (5-15%) for each application. Heating the cleansing solution up to 90C° increases the overall performance.

2. RINSING

Rinsing is just as important as the actual cleaning. This process will remove detergent residues and any remaining dirt on the parts or equipment. The bubbling process will increase the effectiveness of the rinsing. Thee water must remain clean, which is why the carbon filter is highly recommended.

3. ADDITIONAL RINSING STEPS

The number of additional cascade rins e steps shall be determined by the level of cleaning required. The use of demineralised water in the final rinse phase will provide the best results.

4. PROTECTION OF THE PARTS AND EQUIPMENT

The passivation agents in the cleaning process will protect the parts against corrosion. A complete range of products is available, depending on the materials to be cleaned, as well as the required duration of protection.

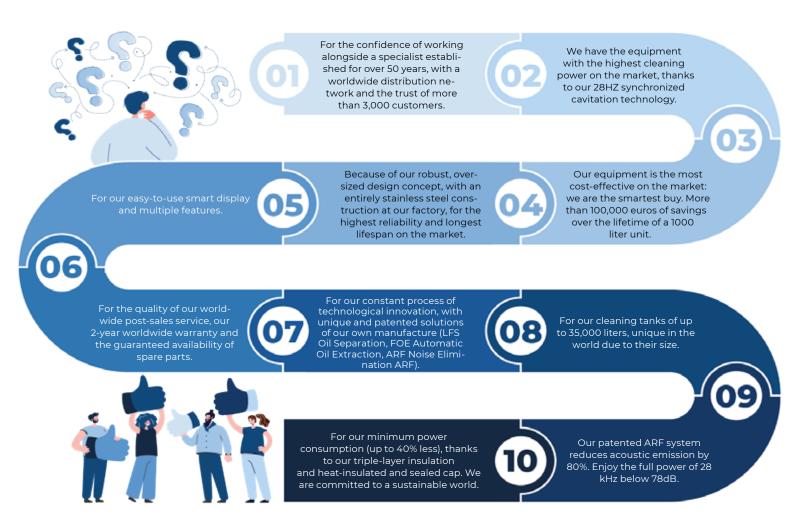
5. DRYING

The hot air cyclone dryer quickly removes the water from the freshly cleaned parts, making them available for the production process. Adequate thermal insulation ensures the lowest power consumption possible.

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WHY ULTRATECNO?





ULTRATECNO CUSTOMERS AROUND THE WORLD

NUMBER 1 CLEANING EQUIPMENT IN THE WORLD





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