

# ULTRASONIC CLEANING EQUIPMENT FOOD INDUSTRY

BRIO ultrasonics work as a micro-brushing that reaches the entire geometry of the part, achieving the best cleaning, sanitising and disinfection in a short time. **The machines can be incorporated into production lines fully automatically, without the need for an operator and use the same cleaning fluid for weeks at a time.**

The optimised design of our ultrasonic emitters makes them **three times more efficient** than standard emitters on the market. **We achieve huge savings in time, water, chemicals and energy.**



## BR-FOOD LINE

The **BR-FOOD line** has been specially designed for **maximum cleaning, sanitising and disinfection results.**

Our technology is the only one capable of meeting the industry's high safety and hygiene standards. **We manage not only to completely eliminate bacteria, but also to inhibit the growth of microorganisms.**

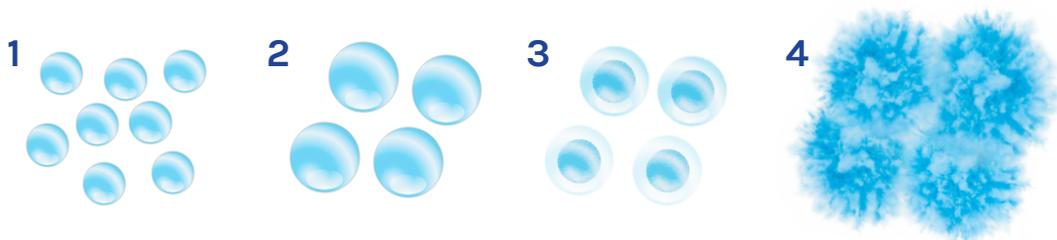
We have **continuous cleaning machines, which we adapt and integrate into the production lines of each customer.** We also manufacture **single-stage and multi-stage automatic machines.** These can be equipped with a lifting system, oil decanter, intuitive PLC control and touch screen. **All machines are manufactured in AISI 316, with maximum anti-corrosion protection for the food sector.**



## BRIO) ULTRASONICS HOW DO THEY WORK?

The ultrasonic waves generate tiny bubbles in the fluid that expand and contract until they implode. This phenomenon is known as cavitation and produces a micro-brushing that reaches 100% of the parts surface in a very short time. The implosion of the bubbles produces high shear forces, which destroy the cell walls of bacteria, fungi and other microorganisms.

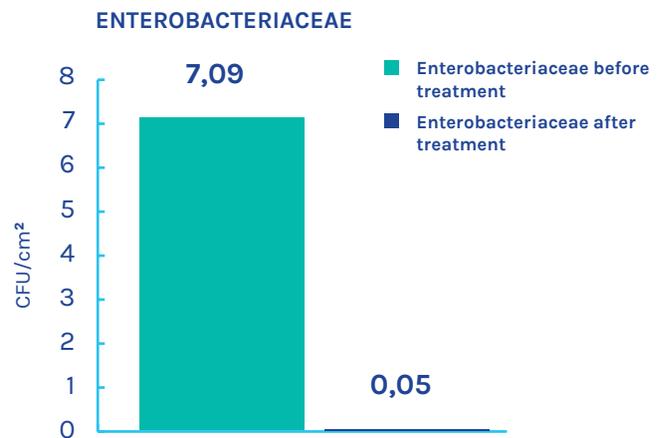
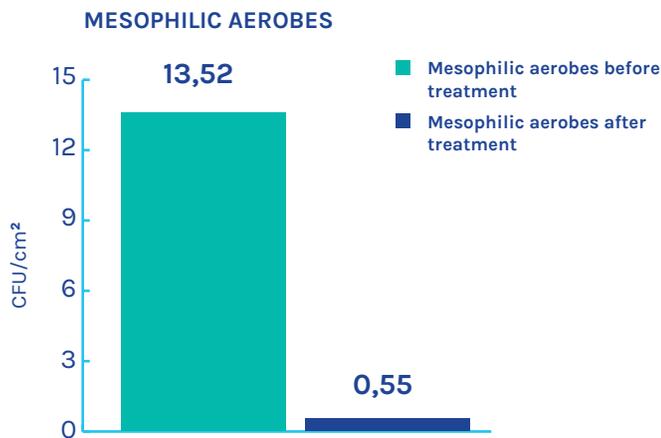
### CAVITATION



1. The pressure decreases and a large number of gas bubbles are generated.
2. The gas bubbles grow according to the frequency.
3. Pressure rises, and the gas bubbles are compressed.
4. The temperature of the contained gas increases until it implodes.

### RESULTS

Our technology is the fruit of several years of development and undergoes continuous quality and performance tests. With our specially designed chemicals for the removal and inhibition of bacteria, our average test results show that microorganisms such as mesophilic aerobes and enterobacteria are almost completely reduced.



## BRCLEAN DETERGENTS

BRCLEAN chemicals enhance the effect of ultrasound for sanitising, cleaning and disinfection applications. The following are tailor-made for all the needs of the food industry.

BRCLEAN US12	Alkaline sanitising detergent with cationic surfactant additives.
BRCLEAN US11	Alkaline sanitising detergent with fatty amines.
BRCLEAN US21	Acid sanitising detergent with organic acids and cationic surfactants.
BRCLEAN US31	Neutral sanitising detergent with non-ionic and cationic surfactants.

## PRO-FOOD SERIES EQUIPMENT

We develop standard and customized projects for sanitising, cleaning and disinfection according to customer needs. Our PRO FOOD Series of automatic machines come with cleaning cycle programming, elevator with sway function, automatic lids, exclusive OPS oil decanting system, exclusive functions that extend the useful life of the fluid and more.

Model name	Tank capacity*	Internal tank dimensions*	Useful internal dimensions*	Heating*	Ultrasonics*	Maximum load*
BR-150 PRO FOOD	192 L	710x500x540 mm	680x435x330 mm	3,75 kW	1.200 W	80 Kg
BR-300 PRO FOOD	346 L	900x600x640 mm	870x520x385 mm	7,5 kW	2.400 W	250 Kg
BR-450 PRO FOOD	480 L	1.120x660x650 mm	1.080x550x435 mm	9 kW	3.600 W	300 Kg
BR-650 PRO FOOD	680 L	1.300x780x670 mm	1.250x670x510 mm	15 kW	4.800 W	400 Kg
BR-1000 PRO FOOD	1.200 L	1.500x930x880 mm	1.470x740x670 mm	18 kW	6.000 W	800 Kg
BR-2000 PRO FOOD	2.228 L	1.730x1.120x1.150 mm	1.700x1.050x880 mm	24 kW	10.000 W	1.100 Kg
BR-3000 PRO FOOD	3.024 L	2.100x1.200x1.200 mm	2.070x1.110x1.115 mm	36 kW	14.000 W	1.500 Kg
BR-5000 PRO FOOD	5.152 L	2.300x1.600x1.400 mm	2.250x1.500x1.315 mm	48 kW	20.000 W	2.000 Kg
BR-7500 PRO FOOD	7.560 L	2.700x2.000x1.400 mm	2.650x1.900x1.315 mm	60 kW	25.000 W	2000 - 7500 Kg

\* Our continuous improvement process may cause these characteristics to vary. The final characteristics will be provided with the offer.

## BRIO) ADVANTAGES

<p><b>Ecological and efficient</b> Great savings in water and energy</p>	<p><b>Robustness and durability</b> The best INOX with high thicknesses</p>	<p><b>Optimization of costs</b> Low consumption automatic process</p>	<p><b>Fast and accurate process</b> Short cleaning times with the best finishes</p>	<p><b>Easy use and maintenance</b> Minimum training required</p>
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