DCM

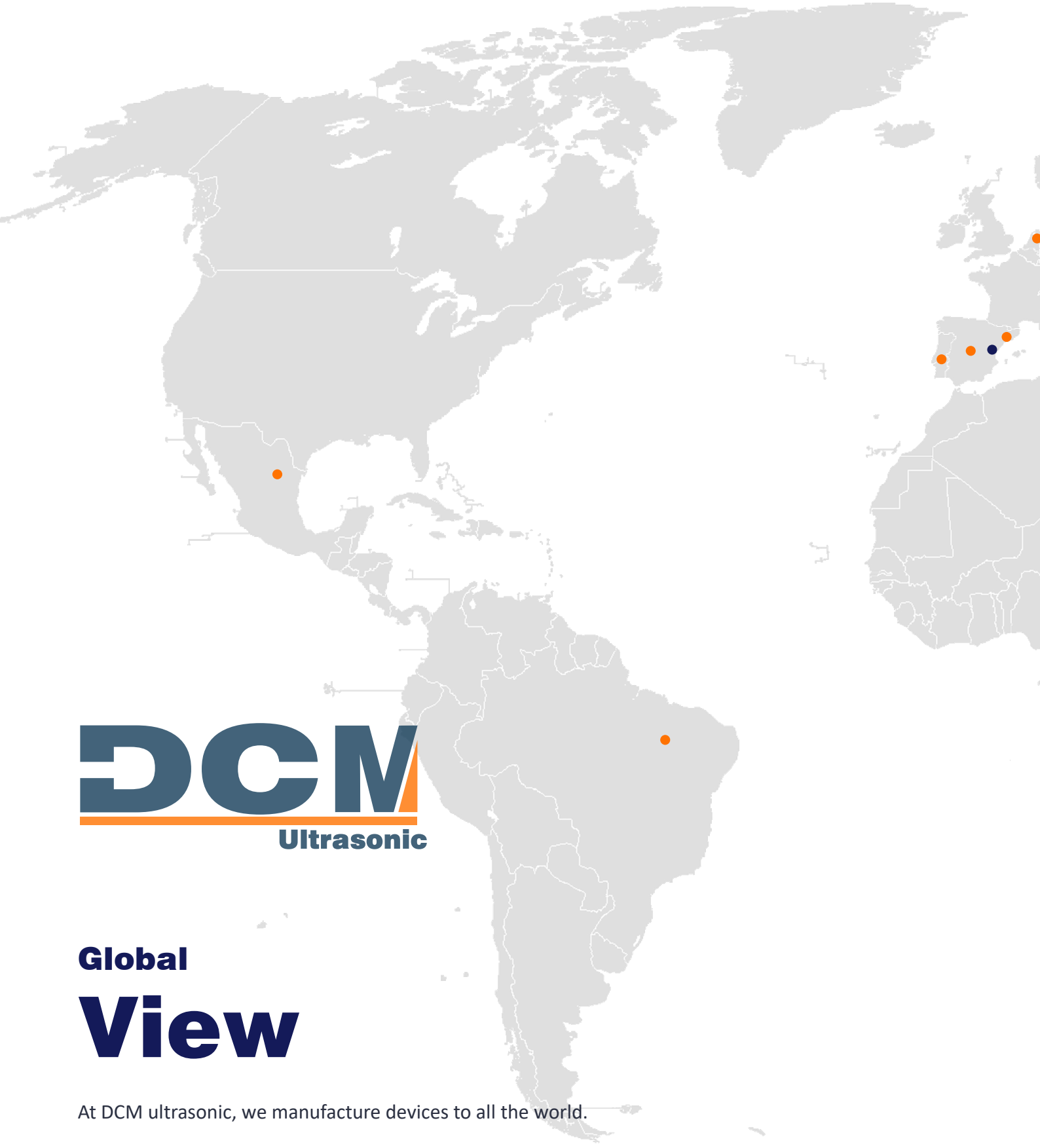
Ultrasonic

Ultrasonic

Cleaning machines

up to 1000 liters

www.dcmultrasonic.com



DCM Ultrasonic

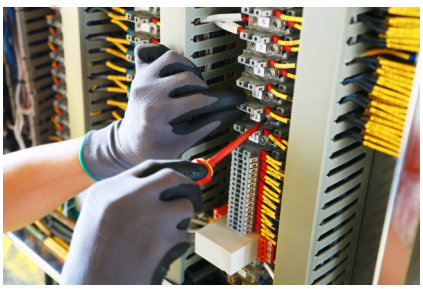
Global

View

At DCM ultrasonic, we manufacture devices to all the world.

Our goal is to satisfy the needs of our customers. To achieve this, at DCM Ultrasonic we have a wide range of high-quality and performance equipment. In our R&D&I department we have developed our own patented digital and synchronized ultrasound generator, the result of more than 10 years of experience in ultrasound generation.

All our equipment is manufactured entirely in Spain in our facilities located in Valencia.




DCM
Ingeniería Mecánica S.L.

Índex

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About US

Our experience

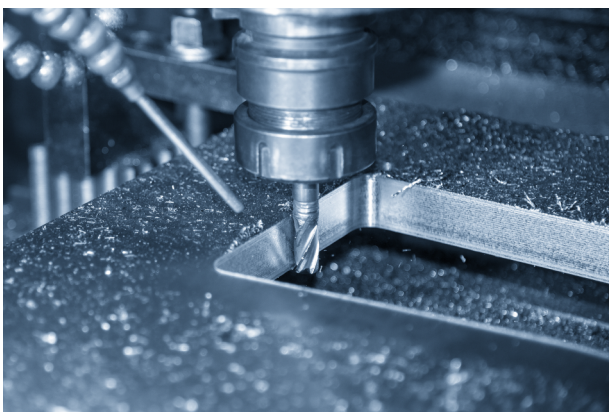
DCM ultrasonic was born in 2022 as a result of more than 10 years of experience designing and manufacturing ultrasound equipment for third parties. In 2022 we made the decision to apply all our knowledge acquired during more than 10 years designing and manufacturing machines for one of the main manufacturers in the ultrasonic cleaning machines market, to offer the market our own product implemented in it with all those functionalities that during all these years the users of this type of technology were demanding. As a result we have achieved a very competitive product line, offering high quality with exceptional performance.

Own manufacturing

At DCM we have our own workshop made up of technical professionals in each one of the manufacturing areas. This allows us total control over manufacturing and ensure maximum quality in all processes that are reviewed by our quality technicians.

Technical office

Our technical office is in charge of both the design and maintenance of all the ultrasonic equipment in our catalog as well as the study of the needs of our clients and the development of customized equipment for them, from simple single-cell equipment to fully automated and autonomous multi-cell equipment. .

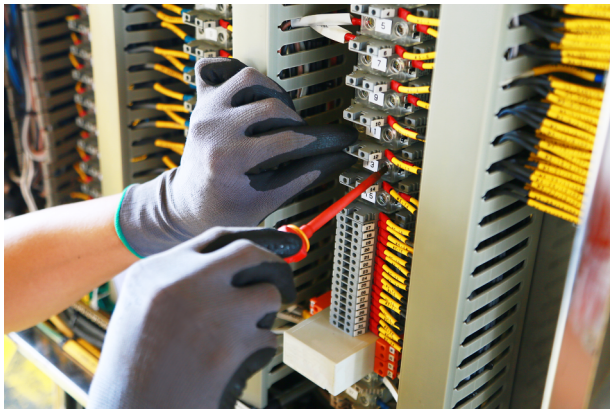


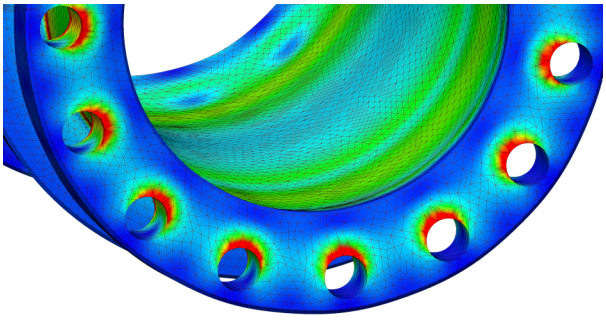
R & D & I

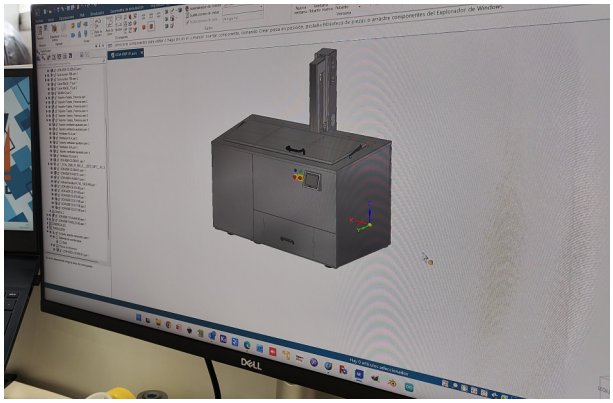
The technical R&D team is responsible for the development of the technology behind the generation of ultrasound. Unlike most manufacturers, we have developed and patented our own synchronized digital ultrasound generator which gives us total control over what happens in the ultrasound bath. We can modify an infinite number of parameters that allow us to adapt our ultrasounds to the client's needs.

Turnkey projects

Because our commitment to the customer is total, our projects are also total solutions, from putting an idea on paper to the manufacturing, commissioning and maintenance of the equipment so that the customer does not have to worry about anything, investing their time and effort. in his company.







DCM ultrasonic devices

Advantages

Thermal and acustic isolation

Prevents heat loss during the operation of our equipment, maintaining the temperature, thus avoiding unnecessary heating and cooling cycles that directly lead to lower electricity consumption and economic savings.

PLC + HMI Control System

The equipment has a PLC and an HMI color screen from where you can easily control the entire machine with a very intuitive menu. The equipment has an Ethernet communications port, thus allowing remote monitoring and management of the equipment.

Stainless Steel fully built

The equipment is built entirely in AISI 304L stainless steel, except for the ultrasonic emitters, which are made of AISI 316L stainless steel. The thickness of the tank and the ultrasonic emitters have been carefully selected to ensure a long useful life and obtain the best possible resonance of the system, thus achieving a performance close to 98%, which means that all the electrical energy used to generate the ultrasounds is delivered mechanically to the tank, thus reducing energy losses in the form of heat.

Oil Separation System

Composed of a recirculation pump with a stainless steel body and an auxiliary tank that acts as a decanter. The pump has a Roten 3 type mechanical seal made of tungsten carbide and Viton seals, thus preventing premature breakage of the seal due to the use of aggressive detergents. Oil separation extends the life of the bath and prevents parts from getting dirty when removed from the bath.

Double Welding System

DWS

All our tanks are fully welded on the perimeter, both inside and outside, thus ensuring a completely watertight joint at any point of the tank and doubling the safety against future leaks due to the continuous micro erosion produced by ultrasound in the tank, which translates into a tank life of more than 20 years.

Integrated electrical cabinet

The electrical cabinet is integrated into the interior of the tank making it very compact. The electrical panel is easily accessible from the outside through the front using removable guides, thus facilitating maintenance operations and allowing the tank to be installed very close to the walls.

Noise Reduction System

Thanks to our noise reduction system, the sound pressure level is reduced below 78db even at high frequencies such as 28kHz, allowing the use of the machine without the need for personal hearing protection equipment.

ECO Daily Mode

The daily ECO mode allows you to save energy by keeping the machine at the desired temperature at night or on weekends, thus avoiding a drop in temperature and subsequent energy expenditure to once again reach the desired working temperature.

V-Shape bottom tank

All tanks have a V-shaped tank bottom that make easy cleaning the tank and prevents the accumulation of sludge at the bottom that causes premature deterioration of the tank.

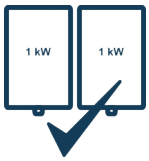
Electric heatars assembled on the tank walls

The electrical heaters are located on the side of the tank at a sufficient height to prevent the sludge that accumulates at the bottom from coming into contact with them, thus avoiding their deterioration, increasing their useful life and performance.

Integrated light beacon

All our equipment has a configurable and integrated light beacon, making it easier for the user to know the status of the machine from a distance with a simple glance. We can quickly identify the states of ready, attention, locked or emergency through their color code.

Modular emitters



Our equipment has a modular system of ultrasonic emitters, so that unlike other manufacturers, if a module breaks, the machine continues to maintain its functionality until said module is replaced.

Own technical service

At DCM ultrasonic we have our own technical service, capable of resolving any incident with a response time of maximum 48 hours. Thanks to our technical service, our customers production chain is minimally affected by a breakdown. We have any spare part for our equipment in permanent stock.

Heavy Duty design

Our largest capacity tanks are specially built for Heavy Duty industrial use, being the tanks with the highest load capacity on the market, satisfying the extreme needs of our customers.

Adaptable frequency

Our synchronized digital generators can work at different frequencies such as 24kHz, 25kHz, 28kHz, 33kHz, 38kHz and 40kHz as standard and higher frequencies at the request of our customers, this allows you to select the most optimal frequency according to your application, High power for cleaning and degreasing (24kHz to 28kHz) and low power for disinfection applications (33kHz to 40kHz)

Desing and manufacturing 100% Spanish

All DCM ultrasonic equipment is designed and manufactured entirely in Spain in our facilities, which allows us exhaustive control of the manufacturing process and thus achieve our commitment to total quality. All equipment is tested in our facilities for a minimum of 48 hours uninterrupted, during which the last quality checks are carried out.

Custom design

At DCM ultrasonic, we are experts in the manufacture of special turnkey equipment and applications for our customers, so if our standard equipment does not adapt to the needs of our customer or a special application is necessary, our technical team is in charge of developing the process, from the conceptual design of the system to its implementation and subsequent maintenance.

Campact size

Our designs are characterized by having a compact size that allows our customers to install the equipment in small cornered areas. Access to maintenance from the front and a single side allows the installation of the equipment in corners and very close to the walls, thus minimally invading the useful space of our customers' facilities.

Digital Generator PATENTED (ES 1 304 918 U)

Thanks to our experience in ultrasound generation, we have developed our own digital and synchronized generator entirely designed and built in Spain. Due to we have full control over the ultrasound generation, this allows us to have a good understanding of the cavitation phenomena that occur in the bath and even modify the waveform to adapt to the special needs of our customeres.

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How the ultrasonic cleaning works

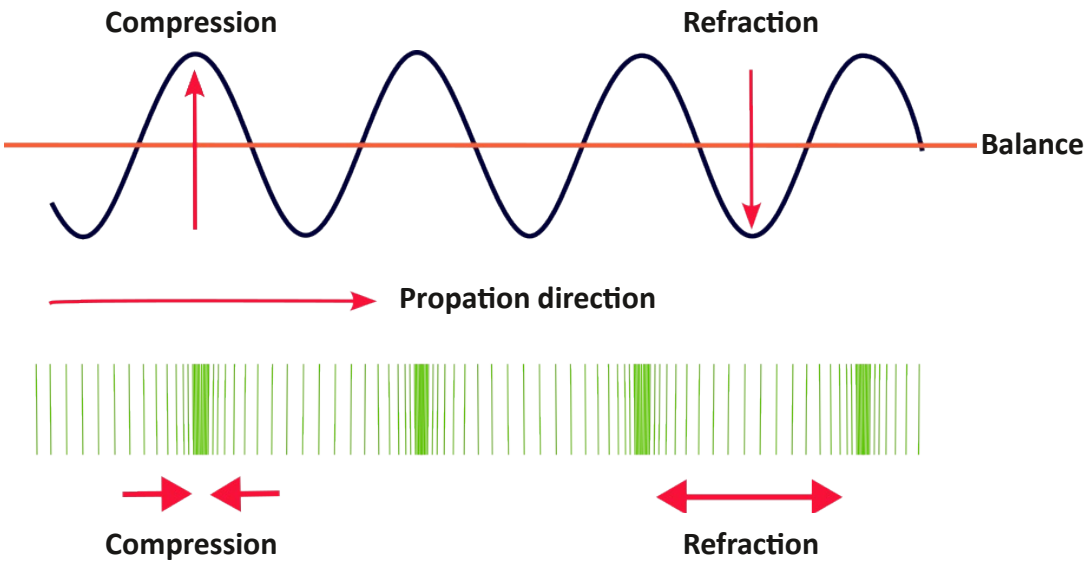
Surface cleaning is probably one of the most successful applications of high-power ultrasound. The technique is simple, submerge the object to be cleaned in a vat filled with a cleaning solution and expose it to an intense ultrasonic field. The basic cleaning system consists of, at a minimum, a tank containing the cleaning solution, which It also acts as a means to transport ultrasonic energy, equipped with one or more ultrasonic transducers that are powered by a generator. Based on this basic model, there are more complex installations that incorporate conveyors, mechanical pre-washing devices for filtering the used cleaning liquid and for drying the cleaned parts, etc...

In any cleaning process in a liquid medium, a mechanical force is required to facilitates after partial dissolution in the fluid, the complete removal of the dirt. In conventional cleaning this force is produced by friction, both internal and external, either by treating contaminated surfaces with brushes or by applying jets of cleaning solution. These techniques involve the application of new cleaning solution in each process and the removal of the cleaning liquid, which becomes saturated with contaminants, after each wash.

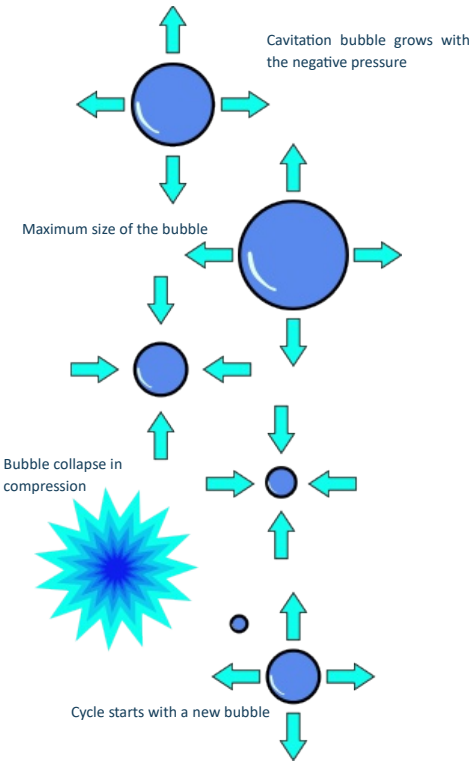
In ultrasonic cleaning, the cavitation phenomenon carries out both the application of mechanical forces on the surface to be cleaned and the agitation of the cleaning liquid.

The cavitation.

Imaging the green lines represent a spring coil, In the figure below the green lines represent the individual molecules of the medium through which a sound wave is transmitted. The molecules in the medium are influenced by the adjacent molecules as we can see in the green lines. When a sound wave propagates, the compression generated by the source moves through the coil because each adjacent coil pushes the next. It should be noted that although the wave moves from one end of the spring to the other, the relative position of the coils does not change, moving when the wave passes and returning to their original position afterwards. Therefore, each loop goes from being the first in the compression, when it is pushed towards the next, to becoming part of the rarefaction as the wave moves away from the adjacent loop..



In the same way, any point in the medium through which an acoustic wave propagates is alternately subjected to compression and rarefaction. When it is under compression the pressure in the medium is positive, while during rarefaction the pressure is negative.



In elastic media, such as air and most solids, when a sound wave propagates, the disturbance of its molecules occurs continuously, returning to their equilibrium position when the sound stops. In non-elastic media, such as water and most liquids, propagation occurs continuously as long as the intensity (amplitude) of the sound is relatively low. As the amplitude increases, the magnitude of the negative pressure in the rarefaction areas may be sufficient to cause the "rupture" of the liquid, causing the phenomenon known as cavitation. As a consequence of these cracks in the medium, in the rarefaction zones, the well-known cavitation bubbles are generated.

When the wave fronts move, the bubbles oscillate, under the influence of positive pressure, growing until they reach an unstable size. Finally, there is a violent collapse of the bubbles that end up imploding, causing shock waves that are radiated from the areas where the implosion occurs. It has been calculated that, in the areas where implosion occurs, temperatures of more than 10,000ºF are reached and pressures exceed 10 KPa.

Advantages

Cleaning, in most cases, seeks the dissolution of the contaminant on the surface to be treated (in the case of soluble waste) or the displacement of the contaminant (in the case of insoluble waste) even, in some cases, both the dissolution such as displacement (when insoluble dirt particles are covered with a soluble layer). The mechanical effect of ultrasonic energy facilitates both processes, accelerating the dissolution and displacement of the particles. In addition to the cleaning process, ultrasonic energy is also useful in the rinsing process to completely remove the chemical residues generated in the cleaning process.

In the removal of contaminants by dissolution, the solvent comes into contact with the contaminant and dissolves it, which is why the cleaning process is carried out only at the interface between the cleaning solution and the contaminant. (Fig. 1)

As the contaminant dissolves, a saturation layer is created between the interface of the cleaning solution and the contaminant, making it impossible for the "useful" cleaning liquid to reach the contaminant, at which point the cleaning action stops since the saturated layer prevents attacking the contaminant. (Fig. 2)

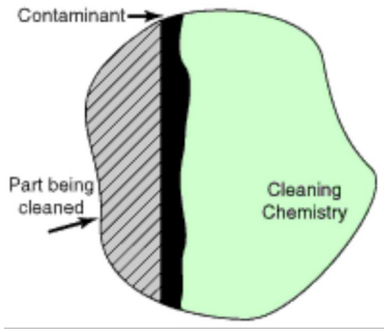


Fig.1

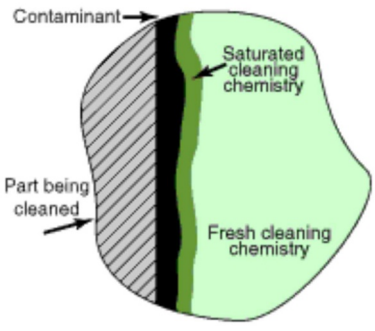


Fig.2

En algunos casos los contaminantes están compuestos por partículas insolubles fuertemente unidas por fuerzas de cohesión. En estos casos las partículas deben ser desplazadas lo suficiente para poder romper las fuerzas de atracción que la mantienen fuertemente unidas. (Fig. 3)

La cavitación y la implosión generadas como resultado de la actividad ultrasónica desplazan y eliminan contaminantes como el polvo de las superficies. Para que la limpieza sea efectiva es necesario que el medio de acoplamiento sea capaz de humedecer las partículas que deben eliminarse. (Fig. 5)

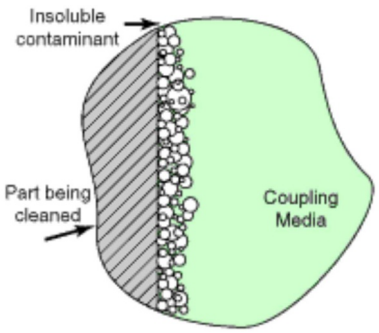


Fig.3

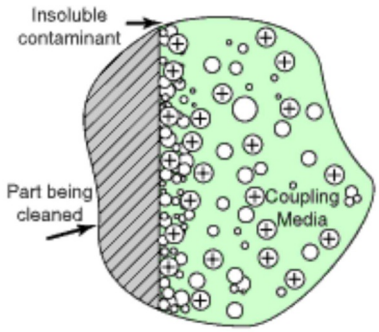


Fig.4

Los líquidos de Limpieza

Un prerrequisito necesario para una limpieza eficiente es que se produzca una fuerte cavitación. Para obtenerla dentro del tanque de limpieza el líquido a utilizar no debe contener demasiado gas disuelto, ya que podría penetrar en las burbujas de cavitación y evitar que se colapsen rápidamente. Una forma de disminuir la cantidad de gas es calentar el líquido ya que la solubilidad del mismo decrece con el aumento de temperatura.

La elección del tipo de líquido de limpieza dependerá en primer del tipo de contaminante a tratar y del material a tratar ya que se debe evitar cualquier agresión química. Se distingue principalmente entre fluidos acuosos y orgánicos. Los acuosos resultan útiles si los objetos húmedos van a ser procesados después, por ejemplo en galvanoplastia. Además la conductividad eléctrica del detergente a menudo es una ventaja ya que evita la carga electrostática de las partículas de suciedad insolubles y así acaba con la atracción eléctrica entre éstas y la superficie tratada. Por otro lado, los fluidos orgánicos tienen la ventaja las zonas tratadas pueden ser secadas más rápidamente después del proceso de limpieza. Ambos fluidos pueden ser reutilizados tras filtración, únicamente los orgánicos pueden ser regenerados además mediante destilación.

Series DL

The DL (Dinamic Loading) series cleaning equipment ranges from 100 to 12000 liters of capacity. They are designed for cleaning, degreasing, stripping, disinfecting and descaling all types of materials. All are equipped with a pneumatic lifting system up to 1500 kg and a hydraulic lifting system from 1500 kg. Furthermore, all our equipment can duplicate this load in static mode when the basket rests at the bottom of the tank. From 1000L all units have automatic opening and closing lid. For smaller capacity equipment, it is possible to install an automatic lid as an optional. The entire DL series can be optionally equipped with: automatic lid, steam extraction, automatic water filling, automatic detergent (liquid) dispenser, filtration unit that extends the life of the bath, automatic oil extraction, tank construction and parts in contact with the chemical product in AISI 316 stainless steel.

Noise Reduction System

Worktop equiped with a noise reuction system up to 78db at 28kHz

Integrated light beacon

Light beacon to indicate the status of the machine

Overflow

To avoid overflows at the tank when introducing big parts. 3/4 " valve ready.

Auxiliary tank drain

At the bottom of the tank, used to empty it easilly. 3/4" valve.

Oil extraction

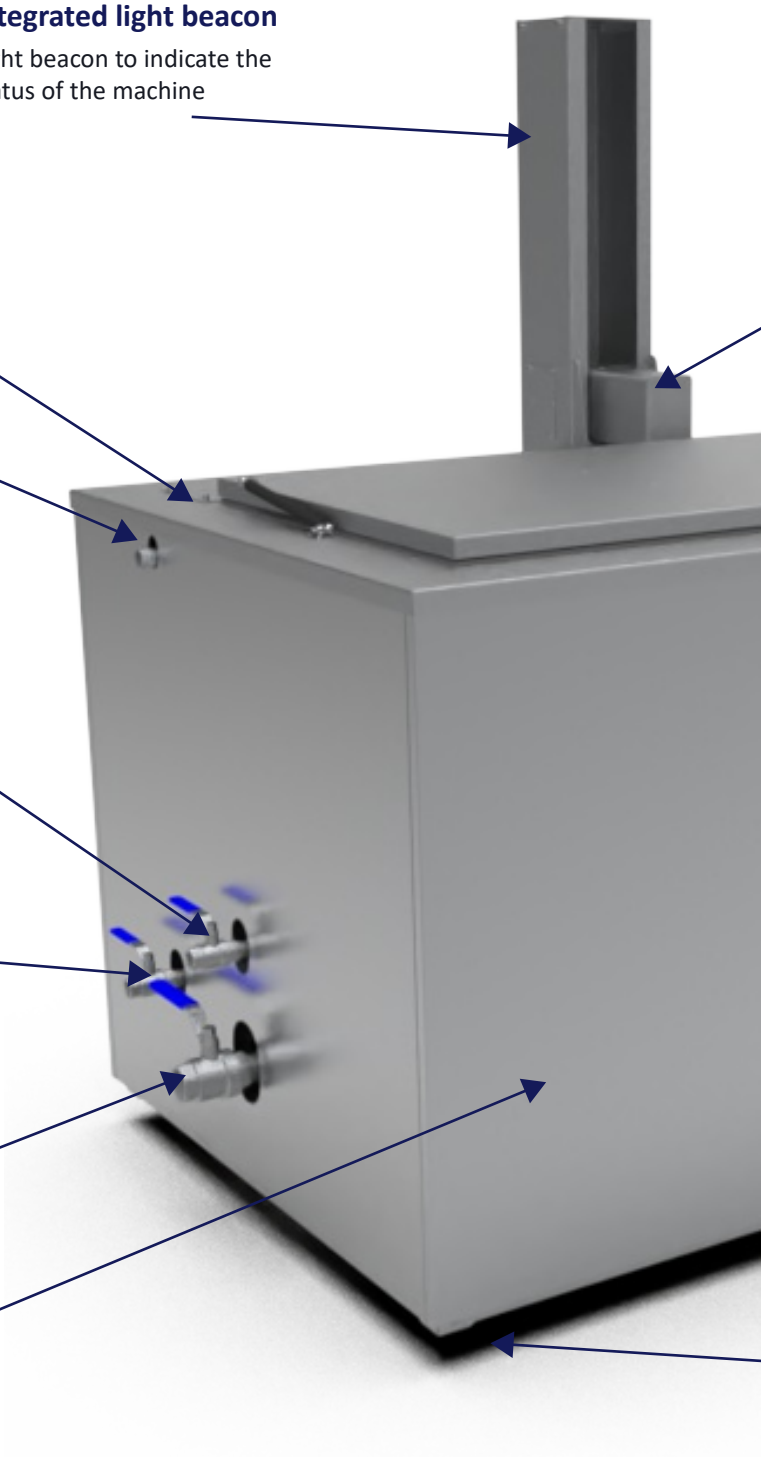
Used to remove the surface layer of oil from the auxiliary tank after its separation. 3/4" valve.

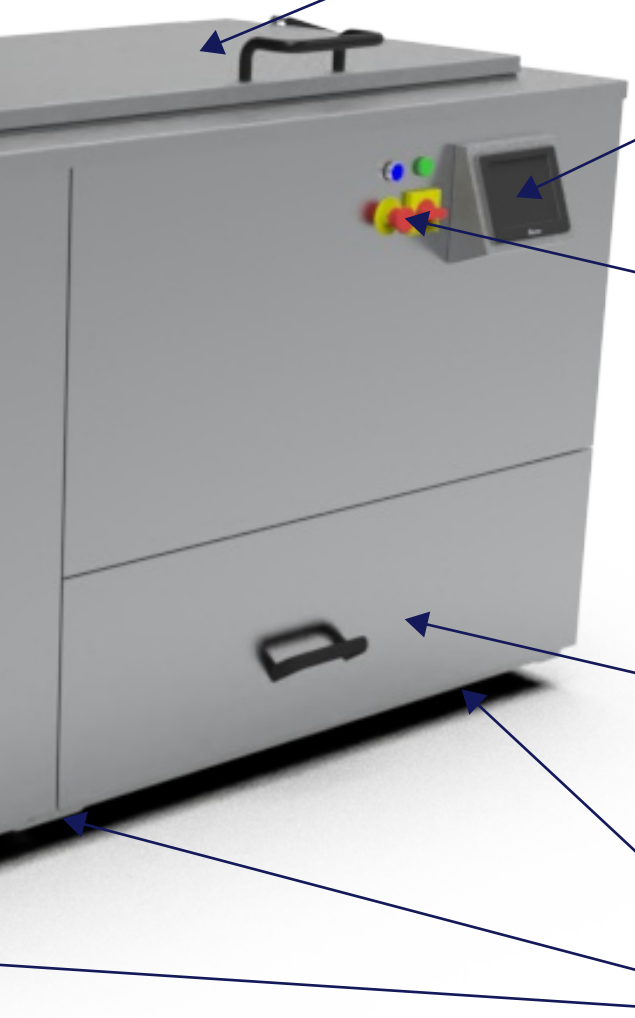
Main tank drain

At the bottom of the main tank is used to empty it. 1" 1/2 valve

Stainless steel AISI 304 panels

Stainless steel AISI 304 satin panels





Pneumatic elevator up to 1500Kg

Pneumatic elevator up to 1500kg for dynamics loads and 3000 kg for static loads. For more than 2000kg the system is hydraulic

Heat-isolated lid manual / automática

Heat-insulated manual lid, maintains the temperature and reduces noise emissions. Automatic as standard from 1000L. Optional on the rest of the models.

HMI 7" Color IP67

7" color HMI touch screen with intuitive interface and integrated help. Available in the customer's language.

IP67 grade

IP67 buttons prepared to be able to clean the surface of the machine easily and without risk of short circuits.

Integrated electrical cabinet

Integrated removable electrical panel that facilitates maintenance and reduces the free space left between the tank and the wall.

Regulable feet

Height-adjustable non-slip feet. They allow easy leveling of the machine.

Technical characteristics

UCM 100DL

Ultrasonic power (W)	1000
Heating system power (W)	3750
Tank capacity (liters)	100
Inner measures LxWxH (mm)	600 x 395 x 465
Usefull measures LxWxH (mm)	570 x 325 x 400
External measures LxWxH (mm)	1150 x 745 x 1500
Dinamic maximum loading (kg)	60
Static maximum loading (kg)	125

UCM 200DL

Ultrasonic power (W)	2000
Heating system power (W)	3750
Tank capacity (liters)	230
Inner measures LxWxH (mm)	675 x 600 x 575
Usefull measures LxWxH (mm)	655 x 530 x 475
External measures LxWxH (mm)	1250 x 950 x 1675
Dinamic maximum loading (kg)	80
Static maximum loading (kg)	175

UCM 350DL

Ultrasonic power (W)	3000
Heating system power (W)	7500
Tank capacity (liters)	400
Inner measures LxWxH (mm)	1010 x 660 x 600
Usefull measures LxWxH (mm)	980 x 510 x 500
External measures LxWxH (mm)	1610 x 1060 x 1700
Dinamic maximum loading (kg)	275
Static maximum loading (kg)	550

UCM 500DL

Ultrasonic power (W)	4000
Heating system power (W)	11.250
Tank capacity (liters)	546
Inner measures LxWxH (mm)	1400 x 600 x 650
Usefull measures LxWxH (mm)	1350 x 500 x 475
External measures LxWxH (mm)	1930 x 1043 x 1760
Dinamic maximum loading (kg)	525
Static maximum loading (kg)	1050

UCM 750DL

Ultrasonic power (W)	6000
Heating system power (W)	11250
Tank capacity (liters)	790
Inner measures LxWxH (mm)	1370 x 800 x 720
Usefull measures LxWxH (mm)	1317 x 650 x 600
External measures LxWxH (mm)	1955 x 1240 x 1910
Dinamic maximum loading (kg)	525
Static maximum loading (kg)	1050

UCM 1000DL

Ultrasonic power (W)	8000
Heating system power (W)	15000
Tank capacity (liters)	1215
Inner measures LxWxH (mm)	1700 x 1100 x 650
Usefull measures LxWxH (mm)	1560 x 1000 x 570
External measures LxWxH (mm)	2135 x 1365 x 2200
Dinamic maximum loading (kg)	825
Static maximum loading (kg)	1650

Series SL

The SL series (Static Loading) of cleaning equipment ranges from 100 to 12,000 liters of capacity. They are designed for cleaning, degreasing, stripping, disinfecting and descaling all types of materials. All are equipped with a removable static platform at the bottom of the tank designed and built to withstand the maximum static load indicated in its characteristics table. From 1000L all units have automatic lid opening and closing. For smaller capacity equipment, it is possible to install an automatic lid as an optional. The entire SL series can be optionally equipped with: automatic lid, steam extraction, automatic water filling, automatic detergent (liquid) dispenser, filtration unit that extends the life of the bath, automatic oil separation, tank construction and parts in contact with the chemical product in AISI 316 stainless steel.

Noise Reduction System

Worktop equiped with a noise reuction system up to 78db at 28kHz

Integrated lighting beac

Light beacon to indicate the status of the machine

Overflow

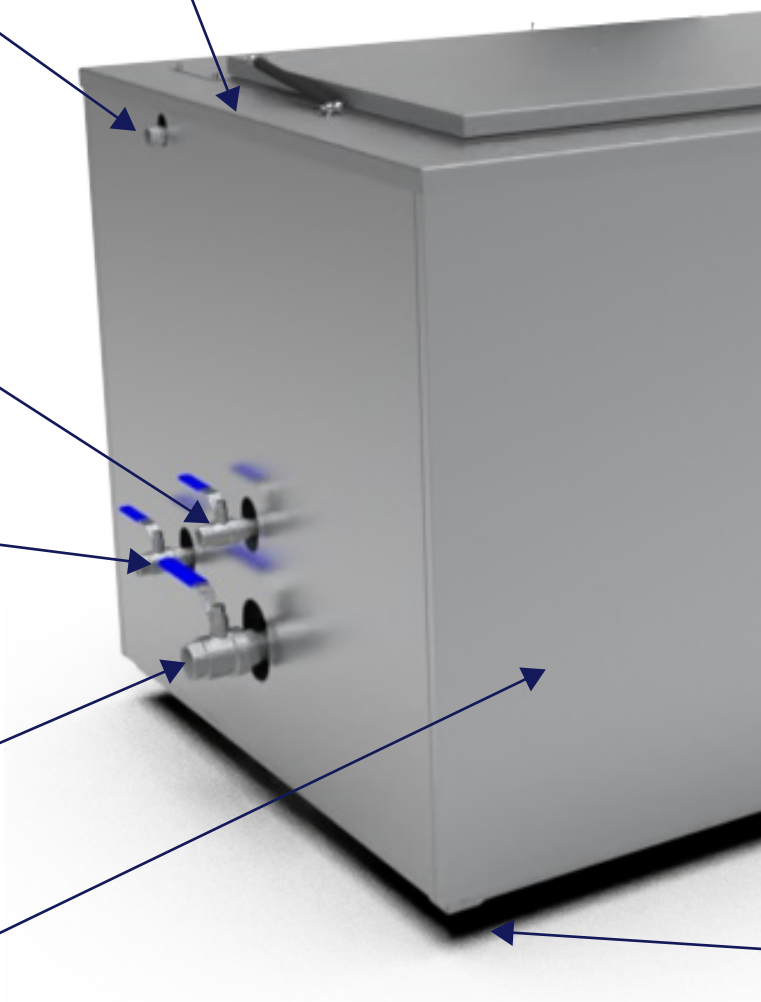
To avoid overflows at the tank when introducing big parts. 3/4 " valve ready.

Auxiliary tank drain

At the bottom of the tank, used to empty it easilly. 3/4" valve.

Oil extraction

Used to remove the surface layer of oil from the auxiliary tank after its separation. 3/4" valve.

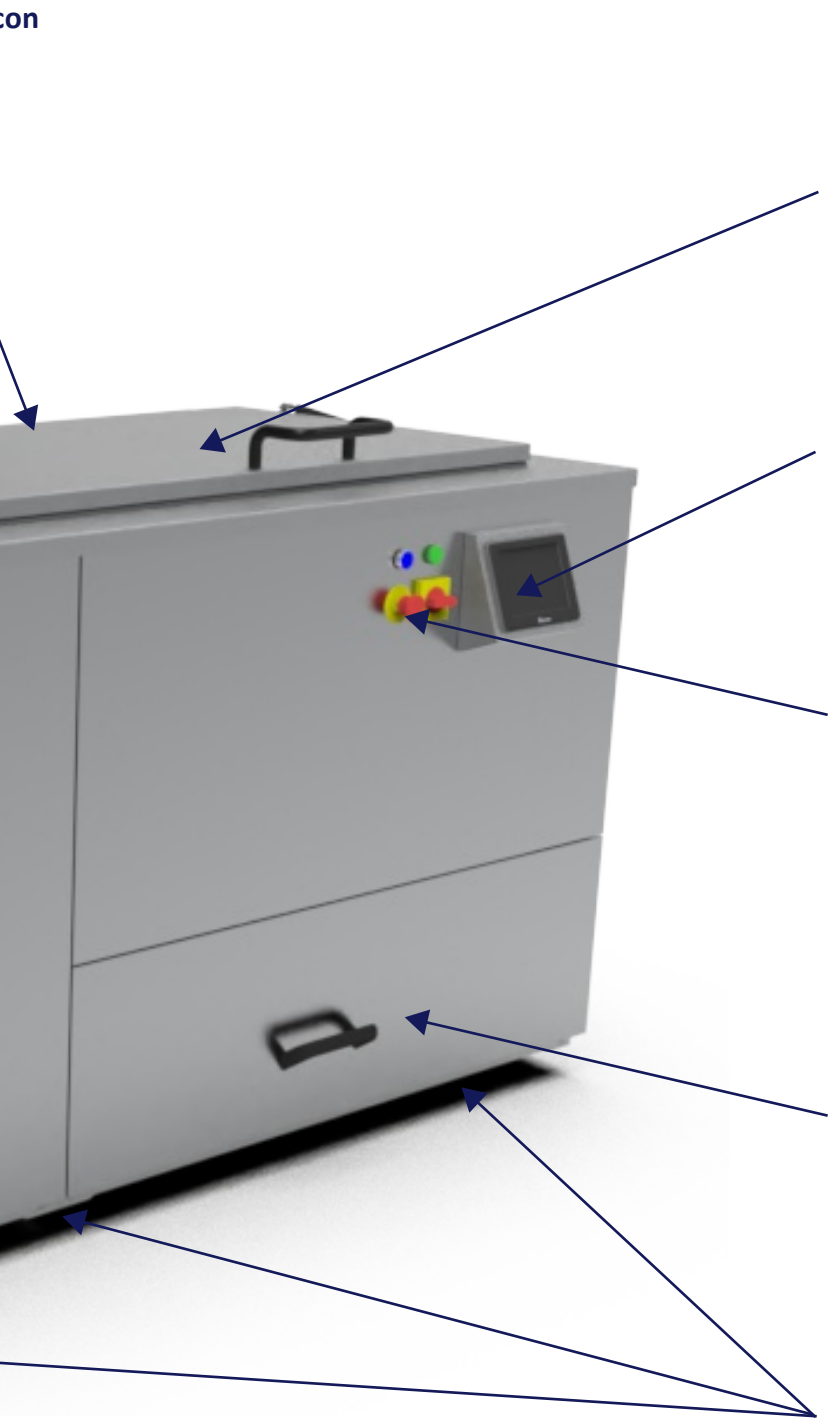


Main tank drain

At the bottom of the main tank is used to empty it. 1" 1/2 valve

Stainless stell AISI 304 panels

Stainless steel AISI 304 satin panels



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Heat-isolated lid manual / automatic

Heat-insulated manual lid, maintains the temperature and reduces noise emissions. Automatic as standard from 1000L. Optional on the rest of the models.

HMI 7" Color IP67

7" color HMI touch screen with intuitive interface and integrated help. Available in the customer's language.

IP67 Grade

IP67 buttons prepared to be able to clean the surface of the machine easily and without risk of short circuits.

Integrated electrical cabinet

Integrated removable electrical panel that facilitates maintenance and reduces the free space left between the tank and the wall.

Regulable feet

Height-adjustable non-slip feet. They allow easy leveling of the machine.

Technical characteristics

UCM 100SL

Ultrasonic power (W)	1000
Heating system power (W)	3750
Tank capacity (liters)	100
Inner measures LxWxH (mm)	675 x 600 x 575
Usefull dimensions LxWxH (mm)	570 x 365 x 435
External measures LxWxH (mm)	1150 x 745 x 925
Static maximum load (kg)	125

UCM 200SL

Ultrasonic power (W)	2000
Heating system power (W)	3750
Tank capacity (liters)	211
Inner measures LxWxH (mm)	700 x 550 x 550
Usefull dimensions LxWxH (mm)	670 x 365 x 475
External measures LxWxH (mm)	1250 x 950 x 1100
Static maximum load (kg)	175

UCM 350SL

Ultrasonic power (W)	3000
Heating system power (W)	7500
Tank capacity (liters)	400
Inner measures LxWxH (mm)	1010 x 660 x 600
Usefull dimensions LxWxH (mm)	980 x 510 x 500
External measures LxWxH (mm)	1610 x 1060 x 1125
Static maximum load (kg)	550

UCM 500SL

Ultrasonic power (W)	4000
Heating system power (W)	11250
Tank capacity (liters)	546
Inner measures LxWxH (mm)	1400 x 600 x 650
Usefull dimensions LxWxH (mm)	1360 x 680 x 550
External measures LxWxH (mm)	1930 x 910 x 1200
Static maximum load (kg)	1050

UCM 750SL

Ultrasonic power (W)	6000
Heating system power (W)	11250
Tank capacity (liters)	790
Inner measures LxWxH (mm)	1370 x 800 x 720
Usefull dimensions LxWxH (mm)	1320 x 750 x 620
External measures LxWxH (mm)	1955 x 1100 x 1225
Static maximum load (kg)	1050

UCM 1000SL

Ultrasonic power (W)	8000
Heating system power (W)	15000
Tank capacity (liters)	1120
Inner measures LxWxH (mm)	1550 x 850 x 850
Usefull dimensions LxWxH (mm)	1500 x 800 x 750
External measures LxWxH (mm)	2135 x 1365 x 1300
Static maximum load (kg)	1650

Series RL

The RL series of cleaning equipment is specially designed for cleaning parts that require continuous rotary movement for effective cleaning. Within this series, we can find multistage automatic machines for mass production with a working capacity of up to 5 baskets simultaneously and machines specifically designed for cleaning ALINOX rollers with capacity for rollers weighing up to 500kg and simultaneous rotation and vertical movement that allows both traditional surface cleaning and submerged roller cleaning, always in combination with the rotation movement to obtain a completely homogeneous cleaning.

Noise Reduction System

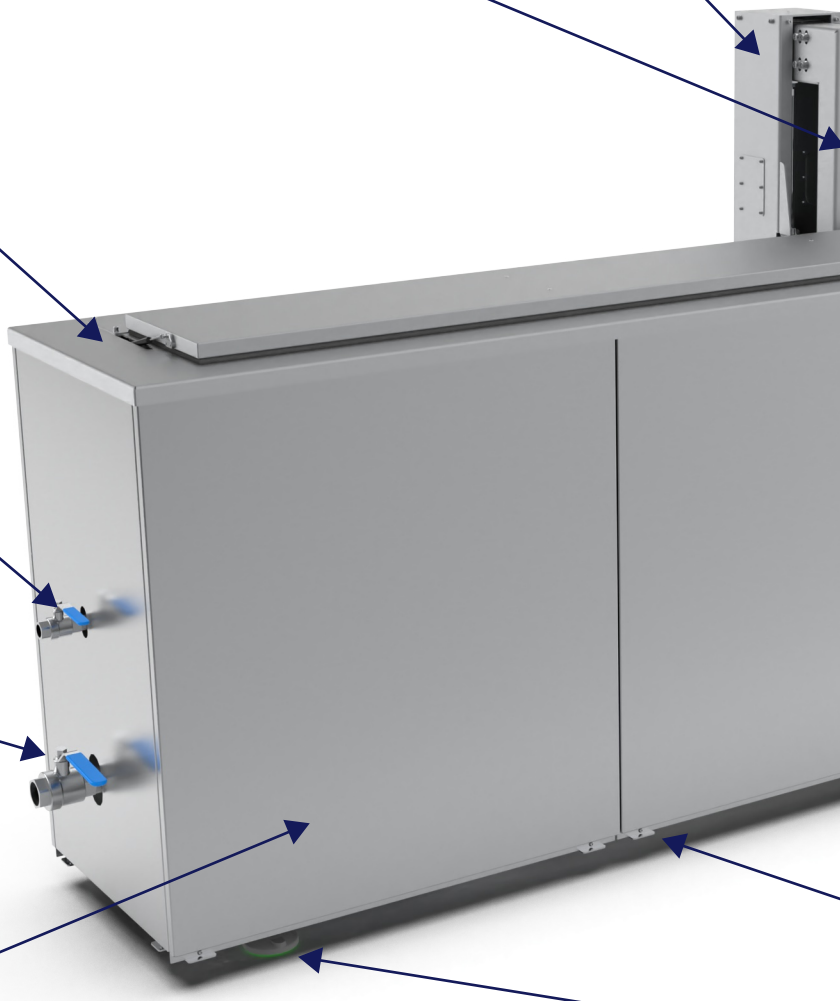
Worktop equiped with a noise reuction system up to 78db at 28kHz

Pneumatic elevator up to 500Kg

Pneumatic elevator up to 500kg for dynamics loads.

Integrated lighting beacon

Light beacon to indicate the status of t machine.



Auxiliary tank drain

At the bottom of the tank, used to empty it easilly. 3/4" valve.

Main tank drain

At the bottom of the main tank is used to empty it. 1" 1/2 valve

Stainless steel AISI 304 satin panels

Stainless steel AISI 304 satin panels

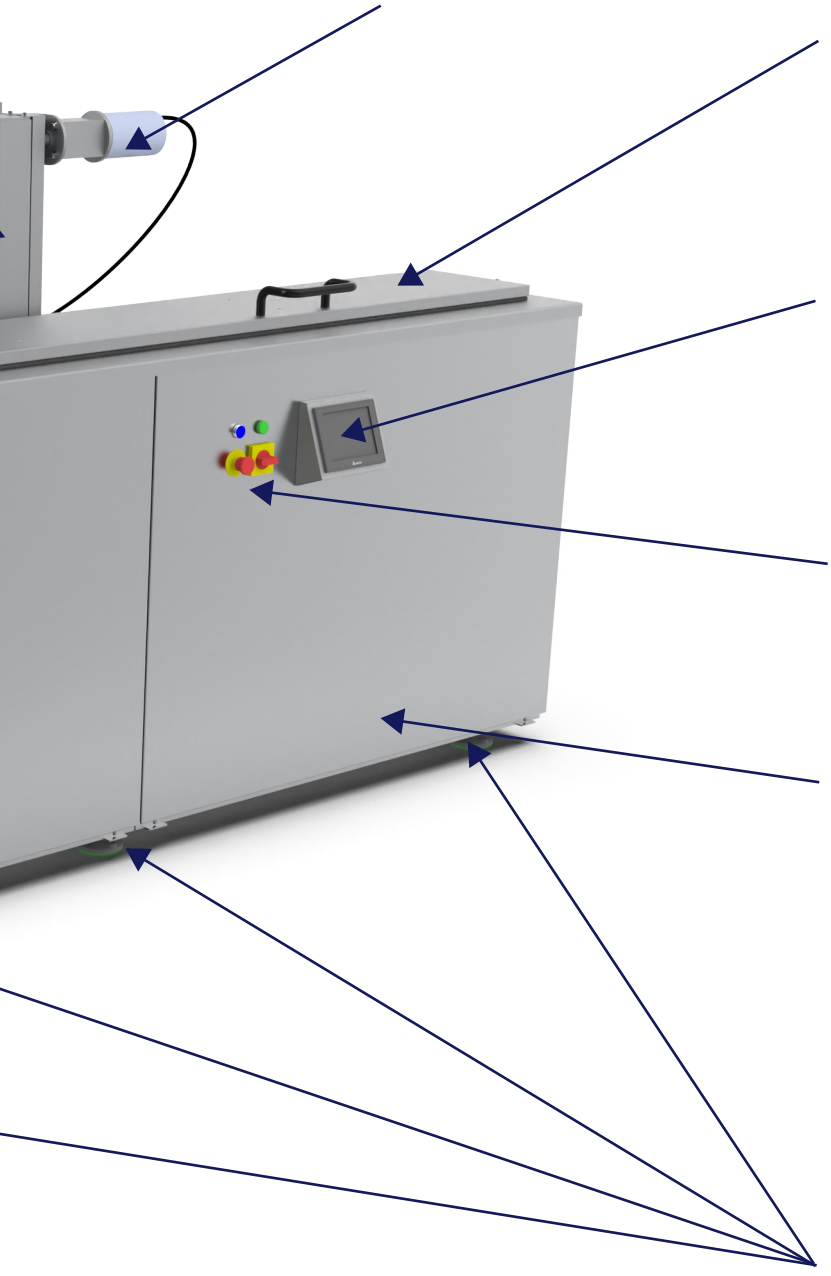
he

Rotation system

Rotarion system in combiantion with the elevation system. Both system ca be used at the same time.

Heat-isolated lid manual / automatic

Heat-insulated manual lid, maintains the temperature and reduces noise emissions. Automatic as standard from 1000L. Optional on the rest of the models.



HMI 7" Color IP67

7" color HMI touch screen with intuitive interface and integrated help. Available in the customer's language.

IP67 Grade

IP67 buttons prepared to be able to clean the surface of the machine easily and without risk of short circuits

Integrated electrical cabinet

Height-adjustable non-slip feet. They allow easy leveling of the machine..

Regulable feet

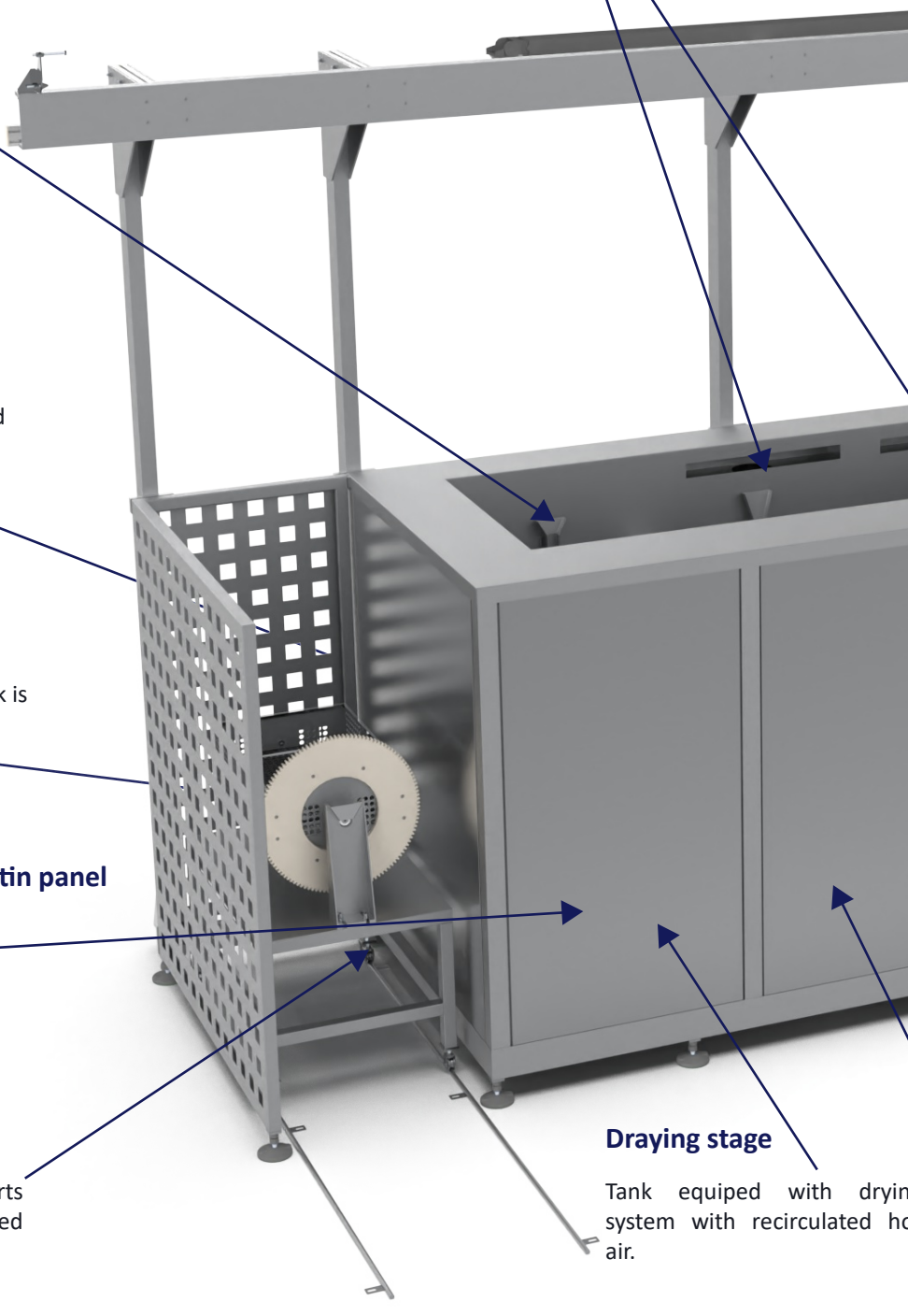
Height-adjustable non-slip feet. They allow easy leveling of the machine.

Steam extraction

Connected to the customer's steam extraction system, avoid vapour dispersion to the ambient.

Basket guiding

Vertical guiding system for the basket from to the rotating mechanism.



Auxiliary tank drain

At the bottom of the tank, used to empty it easilly. 3/4" valve.

Main tank drain

At the bottom of the main tank is used to empty it. 1" 1/2 valve

Stainless steel AISI 304 satin panel

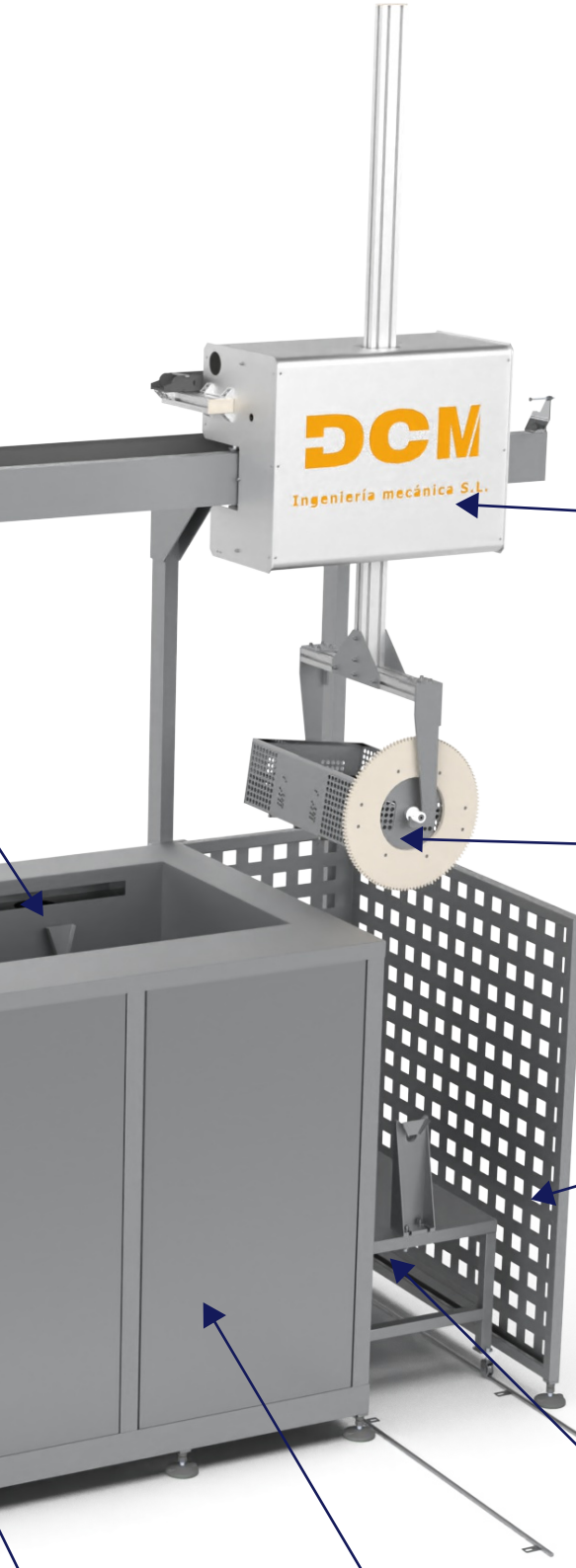
Stainless steel AISI 304 satin panels

Unloading stage

Unloading stage of cleaned parts with removable basket guided system

Draying stage

Tank equiped with dryin system with recirculated ho air.



V-shape

DWS

304 / 316 Stainless Steel

X Y Z loading robot
Max load 100 KG

3 axis robot (X,Y,Z) to move the load between the different stages totally automated

Rotatory baskets

Equiped with 5 rotatory baskets that work in continuosly mode.

Fences with photoelectric barrier

Anti intrusion system made of a physical barrier and photoelectric sensor that stops the machine immediately if detects an intrusion.

Guides for load extraction

Removable basket guiding system that makes easier the loading and unloading tasks and keeps the working position.

Rinsing stage

Rinsing tank to remove the rest of chemical before the drying stage.

Ultrasonic stage

Ultrasonic cleaning tank.

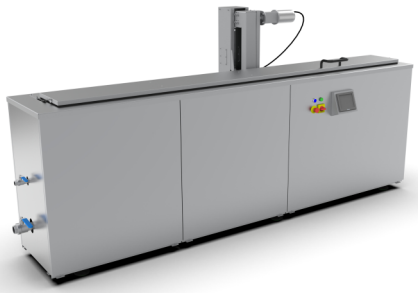
Loading stage

Loading stage of cleaned parts with removable basket guided system.

Technical characteristics

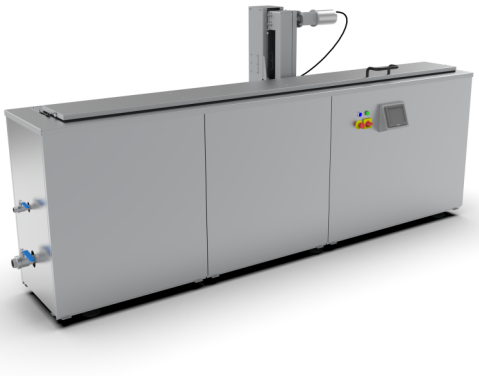
UCM 500RL

Ultrasound power (W)	4000
Heating system power (W)	12000
Tank capacity (liters)	510
Inner measures LxWxH (mm)	2548 x 400 x 500
Usefull measures LxWxH (mm)	Rodillo L2400 x Ø215
External measures LxWxH (mm)	3080 x 790 x 1600
Dynamic maximum load (kg)	500
Static maximum load (kg)	500



UCM 700RL

Ultrasound power (W)	6000
Heating system power (W)	11000
Tank capacity (liters)	764
Inner measures LxWxH (mm)	2548 x 600 x 500
Usefull measures LxWxH (mm)	Roller L2400 x Ø250
External measures LxWxH (mm)	3080 x 990 x 1600
Dynamic maximum load (kg)	500
Static maximum load (kg)	500



5S UCM 250RT

Ultrasound power (W)	2000
Heating system power (W)	7500
Tank capacity (liters)	250
Inner measures LxWxH (mm)	826 x 732 x 456
Usefull measures LxWxH (mm)	Custom made
External measures LxWxH (mm)	4800 x 1404 x 4300
Dynamic maximum load (kg)	100
Static maximum load (kg)	100

Series LAB

The LAB series of cleaning equipment is specially designed for cleaning delicate parts where deep cleaning is required without damaging the components to be cleaned. Their main use is intended for the medical sector, jewelry, electronics, optics... They are entirely manufactured in AISI 304 stainless steel and 30 liter models and from 30 to 75 liters can be manufactured in AISI 316 stainless steel.

All models have a synchronized ultrasound system, heating and timer for simple and intuitive use. The 6 to 30 liter models are specially designed to work on a table or laboratory bench.

28kHz and 40kHz ultrasonic tanks with capacity from 6 liters to 30 liters. The tanks have a built-in electric heating system between 200W and 500W depending on the model and ultrasonic powers between 200W and 400W. All tanks come with a 3/8" drain valve.

28kHz and 40kHz ultrasonic tanks with capacities from 50 liters and 75 liters. The tanks have a built-in electric heating system between 1500W and 2250W depending on the model and ultrasonic powers between 500W and 800W. All tanks come with a 1/2" drain valve.

UCM 6SL

Ultrasonic power (W)	**200**
Hrating system power (W)	**200**
tank capacity (liters)	**6,5**
Inner measures LxWxH (mm)	**300 x 150 x 150**
Maximum load (kg)	**15**

UCM 15SL

Ultrasonic power (W)	300
Hrating system power (W)	300
tank capacity (liters)	15
Inner measures LxWxH (mm)	330 x 350 x 280
Maximum load (kg)	25

UCM 30SL

Ultrasonic power (W)	400
Hrating system power (W)	500
tank capacity (liters)	30
Inner measures LxWxH (mm)	500 x 300 x 250
Maximum load (kg)	35

UCM 50SL

Ultrasonic power (W)	500
Hrating system power (W)	15000
tank capacity (liters)	50
Inner measures LxWxH (mm)	450 x 400 x 280
Maximum load (kg)	50

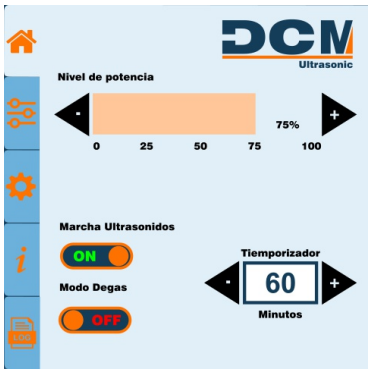
UCM 75SL

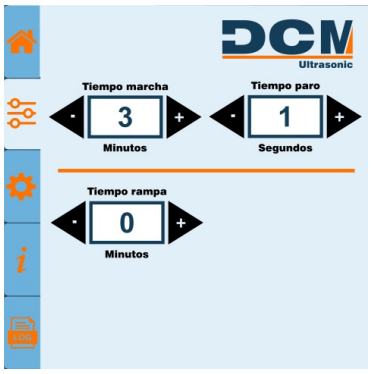
Ultrasonic power (W)	800
Hrating system power (W)	2250
tank capacity (liters)	75
Inner measures LxWxH (mm)	580 x 350 x 400
Maximum load (kg)	75

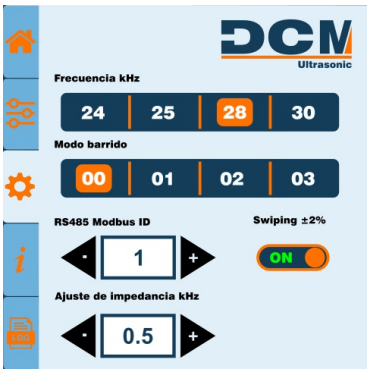
Generators

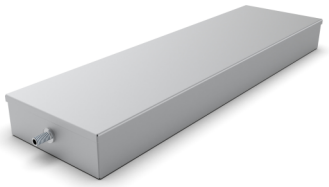
At DCM ultrasonic we have developed our own synchronized digital generator with a working frequency from 24kHz to 40kHz, thus allowing us to select the best frequency depending on the use. Our generator is the result of more than 10 years of experience in ultrasonic cleaning, seeing the needs of our clients every day. We have a high range of generators from 1000W to 300,000W.

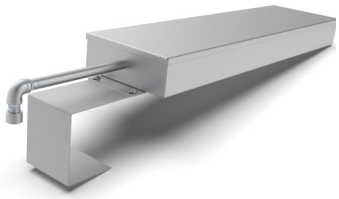
We are one of the few ultrasound machine manufacturers that have **our own patented generator.**











We can manufacture submersibles ultrasonic emiters of any size according to the client's needs, the powers are between 500W and 3000W and frequencies of 24kHz, 25kHz, 28kHz, 33kHz, 38kHz and 40kHz. For other frequencies, do Cconsult the manufacturer.