

User Guide

Ultrasonic Cleaners, Accessories & Solutions

rswww.com



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How Ultrasonics Work

Ground-In dirt and grime can be extremely tedious to remove by hand, however it becomes easy with the use of ultrasonic cleaners. Ultrasonic Cleaning is more thorough, efficient and faster than most other cleaning methods and is ideal for cleaning complex parts with hard to reach areas. Ultrasonic cleaning uses high frequency sound waves to agitate the liquid, creating microscopic cavitation bubbles. These bubbles create a gentle scrubbing action, removing dirt effectively, without the need for harsh chemicals.

As this method affects the entire bath any parts submerged will be cleaned evenly and the ultrasonic action will even reach crevices, hollows and other normally inaccessible areas with the same efficiency.

Ultrasonic cleaning is widely used in industries such as medical, science, aerospace, electronics, automotive, glass and optics, jewellers, repair, restoration and more.

Why RS Ultrasonic Cleaners

RS Ultrasonic Cleaners deliver an automated and consistent process that provides you with highly efficient cleaning without wasting time. This is because our range offers increased functionality with features such as degas, delicate and full power modes, as well as fluid temperature and cleaning cycle timer controls, included as standard.

Features



Digital Display

Easy to read display for precise settings.



Heat Selector

Control the fluid temperature depending on the application.



Time Selector

Provides an automated and consistent process.



Stainless Steel Tank

Robustly constructed with stainless steel for durability.



Wire Basket & Lid

All our tanks come with a basket & lid fitted as standard.



Energy Efficient

Reduces water consumption compared to traditional cleaning.

Cleaning Modes

In order to provide the best results, all our Ultrasonic Cleaners feature three cleaning modes; degas, delicate and full.



Degas Mode

Before cleaning it is recommended to run a degas cycle prior to placing object in the tank. Degassing removes any gas from the liquid, improving surface tension and providing a more effective clean.



Delicate Mode

In this mode the power is halved for a gentler clean, recommended for use in combination with an ultrasonic solution for sensitive materials and parts.



Full Mode

The ultrasonic cleaner delivers its maximum power, ideal for heavily soiled items. When combined with temperature control and the appropriate Solution this mode will provide a powerful clean.

Recommended Cleaning Methods



General Cleaning

For lightly soiled objects it is recommended to use warm water with the temperature set to 40°C. Run degas mode and then set a time based on the item to be cleaned, typically 2-10 minutes.



Enhanced Cleaning

If the objects require a deeper clean it is recommended to use an Ultrasonic solution mixed with the water, you can also set the temperature higher, between 40°C and 60°C. Refer to page 6 for more information on solutions.



Extensive Cleaning

For particularly heavy soiling, such as hard carbon deposits and rust on non-plated metal. Pre-soak the objects in the bath with a strong concentration of solution and then run the Ultrasonic Cleaner on full mode at a high temperature. Refer to the solutions operating instructions for recommended temperatures.

RS Ultrasonic Cleaning Tanks

All RS Ultrasonic Cleaners come with a basket fitted and include temperature control and timer functions as well as degas, delicate and full power cleaning modes. From 6 Litres and up, all tanks are fitted with drainage taps for easy maintenance.



**Ultrasonic Cleaner Tank
2 Litres - 124-9721**

124-9721 Specifications:

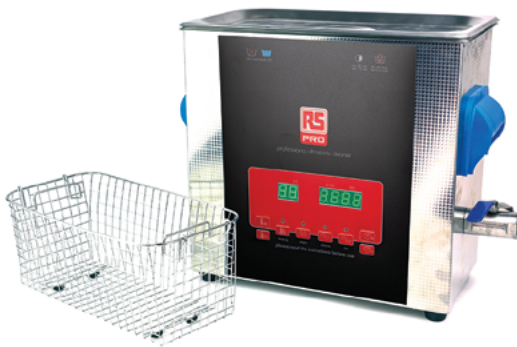
Tank Dimensions - Bath Base (mm):	138x124
Tank Dimensions (mm):	180x170x240
Frequency (KHz):	40
Heating Power (Watts):	100
Ultrasonic Power (Watts):	50 (1 Transducer)
Timer (Minutes):	1-99
Tank Capacity (Litres):	2



**Ultrasonic Cleaner Tank
3 Litres - 855-5911**

855-5911 Specifications:

Tank Dimensions - Bath Base (mm):	238x124
Tank Dimensions (mm):	265x170x240
Frequency (KHz):	40
Heating Power (Watts):	100
Ultrasonic Power (Watts):	100 (2 Transducers)
Timer (Minutes):	1-99
Tank Capacity (Litres):	3



**Ultrasonic Cleaner Tank
6 Litres - 855-5915**

855-5915 Specifications:

Tank Dimensions - Bath Base (mm):	275x130
Tank Dimensions:	370x180x315
Frequency (KHz):	40
Heating Power (Watts):	300
Ultrasonic Power (Watts):	150 (3 Transducers)
Timer (Minutes):	1-99
Tank Capacity (Litres):	6



**Ultrasonic Cleaner Tank
9 Litres - 124-9722**

124-9722 Specifications:

Tank Dimensions - Bath Base (mm):	280x220
Tank Dimensions (mm):	370x270x315
Frequency (KHz):	40
Heating Power (Watts):	300
Ultrasonic Power (Watts):	200 (4 Transducers)
Timer (Minutes):	1-99
Tank Capacity (Litres):	9

RS Ultrasonic Cleaning Tanks

Ultrasonic Cleaner Tank 10 Litres - 183-7513



183-7513 Specifications:

Tank Dimensions - Bath Base (mm):	505x135
Tank Dimensions (mm):	550x165x310
Frequency (KHz):	40
Heating Power (Watts):	400
Ultrasonic Power (Watts):	200(4 Transducers)
Timer (Minutes):	1-99
-tank Capacity (Litres):	10

Ultrasonic Cleaner Tank 27 Litres - 124-9723



124-9723 Specifications:

Tank Dimensions - Bath Base (mm):	495x295
Tank Dimensions (mm):	530x330x385
Frequency (KHz):	40
Heating Power (Watts):	500
Ultrasonic Power (Watts):	500(10 Transducers)
Timer (Minutes):	1-99
-tank Capacity (Litres):	27

Industrial Ultrasonic Cleaning Tanks

Industrial free-standing tanks begin at 36 litres and include basket, lid & drainage tap as standard. Larger sizes are available, contact us for more information.



Ultrasonic Cleaner Tank 36 Litres - 179-7571

179-7571 Specifications:

Tank Dimensions - Bath Base (mm):	N/A
Tank Dimensions (mm):	510x300x250
Frequency (KHz):	40
Heating Power (Watts):	800
Ultrasonic Power (Watts):	720 (12 Transducers)
Timer (Minutes):	1-99
Tank Capacity (Litres):	36

Cleaning Baskets

All RS Ultrasonic Cleaners come with the matching basket size, additional baskets are also available separately. It is highly recommended to use a wire mesh basket as this will help minimise and reduce ultrasonic hot spots during the cleaning process. All our baskets have convenient handles which overhang the bath lip for safe and easy repositioning during the cleaning cycle.



Cleaning Basket
for 2L Ultrasonic Tank
183-7515

140mmx118mmx75mm



Cleaning Basket
for 3L Ultrasonic Tank
183-7516

235mmx120mmx80mm



Cleaning Basket
for 6L Ultrasonic Tank
183-7517

270mmx120mmx115mm



Cleaning Basket
for 9L Ultrasonic Tank
183-7518

280mmx230mmx115mm



Cleaning Basket
for 10L Ultrasonic Tank
183-7514

470mmx110mmx100mm



Cleaning Basket
for 27L Ultrasonic Tank
183-7519

465mmx270mmx125mm



Cleaning Basket
for 36L Ultrasonic Tank
183-7520

450mmx280mmx140mm

Beaker Baskets & Racks

Beakers are ideal for small parts such as electronic components and jewellery. Beakers can be suspended in the tank using the appropriate basket, solution is only required within the beaker, the tank only need be filled with water to allow conductivity of the ultrasonic waves. Separating parts to individual beakers allows you to group components and use two different solutions simultaneously, as well as reducing the amount of solution required.



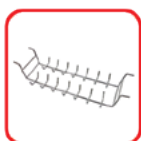
Beaker Basket
for 3L Ultrasonic Tank
183-7523

261mmx93.4mmx85mm



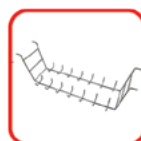
Beaker Basket
for 6L Ultrasonic Tank
183-7524

315mmx102.3mmx144mm



Cleaning Ring Rack
for 3L Ultrasonic Tank
183-7521

262mmx97mmx50mm



Cleaning Ring Rack
for 6L Ultrasonic Tank
184-0726

320mmx106.9mmx140mm

Ultrasonic Solutions

Ultrasonic solutions can be essential to achieve the desired result when working with sensitive materials or heavily soiled objects. We stock a range of cleaning solutions designed to remove grease, oils and dirt with formulas tailored to the task.



Carburettor, Machine and Engine Parts

1 Litre 194-5907

- For cleaning engine parts, carburettors, machine parts, metal units and more
- Safely removes contaminants including general soiling, carbon and grease
- Will not damage, corrode or darken metal components
- Safe for use on brass, aluminium and other sensitive metals



Oxidation and Rust Removal

1 Litre 194-5908

- A specialist acidic formulation for cleaning and removing oxidation from metals including iron, copper, tin, aluminium and stainless steel
- Also used for removing oxides from soldering and welding.
- Safely removes contaminants including general soiling, carbon and grease
- The cleaning process will not damage, corrode or darken most metal components
- Biodegradable and phosphate free



Brass, Copper and Aluminium

1 Litre 194-5909

- A concentrated cleaner and degreaser formulated to be safe to use on all metals including brass, aluminium, copper, zinc, tin and alloys.
- Quickly removes grease, oil, lubricants and grime from surfaces and emulsifies them into the solution
- The cleaning process will not damage, corrode or darken metal components.



Glass and Optical Lenses

1 Litre 194-5911

- Ideal for cleaning optical lenses, glasses, optical components, ceramic, and glass.
- Safely removes contaminants including general soiling, waxes, buffing compounds, fingerprints and grease.
- Will not damage the glass or any metal parts.
- Use to restore clarity or as a preparation of surface before applying special coatings.

Hints & Tips

Cleaning

Using the heater function to warm the water will aid the agitation and produce a better clean, if using a solution follow the instructions provided.

You can clean multiple components at once for improved energy efficiency, if cleaning delicate items it is recommended to keep enough space to avoid scratching.

When cleaning is complete, switch off the cleaner and leave objects for a few minutes, allowing dirt particles to settle to the bottom of the tank before removing.

Maintenance

Hard particles such as chips, fines, shavings and dirt fall to the bottom of the cleaning tank. These must be removed each time the solution is changed, otherwise they can damage the tank base over time.

Extra Care

Ultrasonic cleaning is suitable for a wide range of materials and components and can remove just about any type of dirt, rust, oil, grime, carbon and more.

There are a few exceptions, please check the list and tips below before cleaning, please note this list is not exhaustive, if you are unsure please contact the manufacturer of the object you wish to clean.

Jewellery

Ultrasonic Cleaning should not be used for soft gemstones and natural materials such as Hawksbill, Pearl, Emerald, Ivory, Coral & Agate.

Soldering

Ultrasonic cleaning is not suitable for objects that have been soldered as the bubbles will dislodge any unsolid soldering or bindings.

Cracked Objects

Cracks in materials such as ceramic, wood or laminated glasses may be enlarged by ultrasonic cleaning.

Other

Chromium-plated objects should not be cleaned ultrasonically. Watches should not be cleaned, unless waterproof to 30m+.