# WHAT ITEMS CAN I CLEAN IN MY ULTRASONIC?

Ultrasonic cleaners are suitable for cleaning a wide variety of materials, including metals, glass, rubber, ceramics and some hard plastics. An ultrasonic cleaner is especially useful for removing tightly-adhered contaminants from intricate items with blind holes, cracks and recesses. The following is a list of example items that are suitable for Ultrasonic Cleaning, Please note that the below list is not an exhaustive list of items that can be cleaned.

**Gold, Silver and Platinum Jewellery** Necklaces, Bracelets, Rings, Precious Stones, Watch Casings and Straps. Please seek specialist advice on some stones.

## **UNSUITABLE ITEMS**

The following is a list of items that are not suitable for Ultrasonic Cleaning:

- Soft Jewellery: Pearls, Emerald, Ivory, Coral, Agate, Sea Turtle Shells etc
- Welded, Plated and Glued Items
- Watches: Except divers watches with a depth rate of over 50m (150ft)
- Other: Porous, Ceramic items or with pre-existing cracks or damage.
- This is not an exhaustive list but an indication please exercise care and build your experience.

## ADDITIONAL NOTES

When the required temperature is reached the heater will turn off. If ultrasonic mode is still on, the temperature may rise slowly until the ultrasonic cycle is complete, this is due to additional heat from the transducers- it will be affected by the amount of material being cleaned.

At the end of the cycle turn the machine off and allow a period of 5-10 minutes before using again. The maximum period for the Usonic cycle is 60 minutes. This prolongs the working 'life' of the unit.

Using the Basket will allow a 'Gentle' cavitation cleaning action.

Suspending items in the tank without using the basket will allow a much more vigorous cleaning action BUT do not allow any item to rest on the floor of the tank as this can cause transducer damage.

Please note that the liquid capacity of the tank is to the internal line / indent on the inside of the tank wall .

The Size in the product tital indicates the overall size of the machine. Liquid capacity is indicated below.

Model	Tank Capacity	Cleaning Power	Heating Power	Frequency
2L	1500ml	60w	100w	40 kHz
3.2L	2500ml	120w	200w	40 kHz
4.5L	3500ml	180w	300w	40 kHz

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# PRO ULTRASONIC CLEANER INSTRUCTIONS

2L, 3.2L & 4.5L MODELS



# IMPORTANT INFORMATION - PLEASE READ BEFORE USE

- Ensure that you are familiar with all procedures before using your Durston Ultrasonic Cleaner. Please read all of the operating instructions in this booklet.
- Do not run continuously. Run for a maximum of 60 Minutes.
- Do not over-fill the machine, let it overflow or allow liquids to run down the side of the machine, always disconnect from the power before emptying.
- Do not turn the unit on while it is empty, this will cause damage and void your warranty.
- Ensure that the power supply is disconnected once the cleaning sequence is complete and before emptying the tank.
- Only operate in a clean and dry environment and ensure that your Ultrasonic Cleaner is on a hard, flat surface so that the air vents are not obstructed.
- Do not operate with wet hands.
- Do not put your hands into the tank while the cleaning sequence is in progress.
- Do not allow any item to rest on the floor of the tank when unit in Usonic mode.
- Only use water-based cleaning solutions in the tank, do not use anything flammable or corrosive.
- Once the cleaning sequence has been completed, always empty the tank and wipe with a clean and dry cloth.

#### **ULTRASONIC CLEANING**

Ultrasonic cleaning is based on the cavitation effect cause by high frequency ultrasonic wave vibration in the fluid. Microscopic bubbles are formed, and they implode violently causing the cavitation which creates an intense scrubbing action on the surface of the item being cleaned. The bubbles are small enough to penetrate microscopic crevices, cleaning them thoroughly and consistently.

Ultrasonic cleaning is an extremely effective way of removing dirt and grime which would normally require a longer cleaning period by hand. Small areas are easily cleaned with Ultrasonic cleaning. It can be used to clean a wide variety of instruments and mechanical parts, returning them to a bright clean condition without damage.

## **KNOWING YOUR MACHINE**

The Durston Professional Ultrasonic Cleaner has an easy-to-use Control Panel, along with an LED display for cleaning time and temperature. The heavy gauge stainless steel tank has been created to ensure long time usage.

It also features a "degas function", with the ability to activate the cleaning liquid by removing any air bubbles which will interfere with the Ultrasonic Cleaning action. The high-performance transducers create an effective Ultrasonic wave action for enhanced cleaning. The timer can be set between 1-60 minutes and the cleaning temperature range is  $0^{\circ}$ -  $80^{\circ}$ .



Do not over-fill / over flow Only fill to the line



Always unplug before emptying the tank



Do not run continuously
Allow to cool between cycles



## Included in the box

- Ultrasonic Cleaner
- Lid
- Mesh Basket
- Power Cable

### USING YOUR ULTRASONIC CLEANER

- 1. Select your cleaning solution and fill to the line on the inside of the tank do not exceed the "max" line. Use only water or recommended cleaning concentrate to the instructed proportions. Fill the tank with Fluid.
- 2. Plug in the power cord. Once the switch at the back of the unit is turned on the LED lights will illuminate.
- 3. Turn the heater knob clockwise to set the temperature between 30° and 60°. After reaching the set temperature, you can adjust between 30° and 60° as desired. The Blue light will come on and the red cursor will blink throughout the heating cycle



- 4. Note: Optimal cleaning temperature is 40°-60° and the unit should not run at 80+ degrees for long periods of time.
- 5. Activate the De-Gas function for removing the air bubbles in the cleaning solution. This process will take approximately 5-10 minutes. Once no bubbles remain, you can turn this feature off and continue.
- 6. Place your items into the wire basket and slowly submerge into the tank. The basket can be hung on the edge of the tank which will keep the items fully covered by your cleaning solution. The Timer can be set and the Ultra Sonic function can be turned on the Ultra Sonic mode will automatically turn off at the end of the time period.
- 7. Do not overload the Basket with items as this will affect the efficiency of the Cavitation.
- 8. When the cleaning process is complete the heater should be turned back to zero and the unit turned off. Do not empty the unit until the power cable is removed. Please note while using the Ultrasonic Cleaner, it will make a high-pitched noise and may create some spray.



Your Durston Pro Ultrasonic Cleaner has been made for professional cleaning with high output transducers and components.

To ensure a long working life you must not run the machine for long periods of time at high temperatures. Please follow all the guidelines in this booklet.

If you need any additional information or if any doubt on how to use your machine, please contact support@durston.com