



# CUP HORN ASSEMBLY

The cup horn can process multiple sealed tubes or vessels at one time without contact with an ultrasonic probe. This method eliminates cross contamination, sample foaming, overheating and aerosolization which can all occur when using a probe. Most importantly the cup horn enables samples under 200µl to be effectively processed.

**VCX500 WITH  
CUP HORN, CHILLER,  
ENCLOSURE PACKAGE**

**PART NO.  
VCX500CCE**



**CUP HORN  
ACCESSORY**

**PART NO.  
630-0731**



The cup horn is attached to the converter in place of a probe, and filled with water. Microtubes containing samples are placed inside using specially designed tube holders. Ultrasonic energy is transferred through the water and into the sample tubes. Multiple tube holders are available for various size tubes and vessels. Both types of 1.5mL tube holders shown below are included.

Inlet and outlet ports enable cold water to be circulated within the cup, inhibiting heat build up during extended operation. Use of the chiller is highly recommended and due to the high noise level created by the cup horn, a sound abating enclosure is required.

Note: Selecting the appropriate size and type of sample tube will greatly improve results. Contact Sonics for application assistance.

**HOLDER FOR (8) 1.5ML  
POLYSTYRENE TUBES**



**PART NO.  
830-00247**

**HOLDER FOR (8) 1.5ML  
POLYPROPYLENE TUBES**



**PART NO.  
830-00248**

**HOLDER FOR  
15ML TUBE**



**PART NO.  
529-0029**

**HOLDER FOR  
50ML TUBE**



**PART NO.  
529-0030**



# MULTI ELEMENT PROBES

The high throughput multi-element probes increase productivity and minimize repetitive tasks by processing numerous samples simultaneously. Units are available with 4, 8, 16 and 24 tips and are compatible with either the 500 or 750 watt systems. Custom formatted multi-element probes are available upon request. The replacement tips are Part no. 630-0660.

**4-ELEMENT**



**PART NO.**  
630-0559

**8-ELEMENT**



**PART NO.**  
630-0586

**16-ELEMENT**



**PART NO.**  
630-0699

**24-ELEMENT**

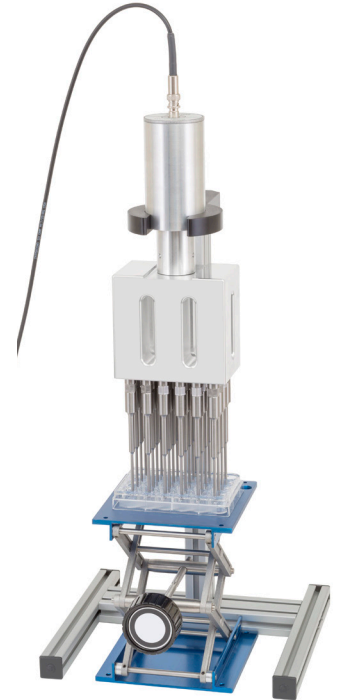


**PART NO.**  
630-0579

**TIP DIAMETER**  
1/8" (3mm)

**VOLUME**  
0.5-15mL

**AMPLITUDE**  
120µm

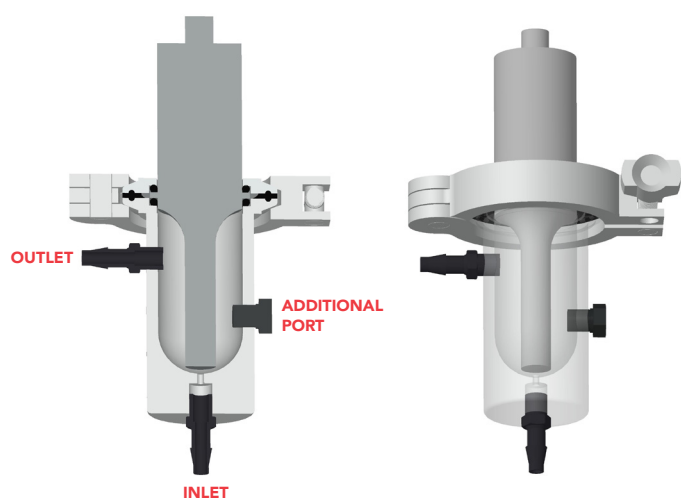




# MEDIUM VOLUME CONTINUOUS FLOW CELL

The flow cell enables continuous processing of 1L or greater volumes. The process fluid enters through the inlet at the bottom of the unit. As it passes through the cavitation field, it is ultrasonically processed. The fluid exits the unit through an outlet port. The intensity and extent of processing are controlled by adjusting both the flow rate and amplitude setting.

A ½" (13mm) solid tip flow cell probe is included and the volume of liquid inside the chamber with the probe installed is 65 ml. A variable speed pump is recommended but not included.



**FLOW CELL ASSEMBLY**

**REPLACEMENT PROBE**



**PART NO.**  
630-0651



**PART NO.**  
630-0644

## FLOW CELL SPECIFICATION

Material: 316L stainless steel  
Height: 9.1" (231mm)  
Diameter: 3.5" (89mm)  
Max flow rate: 0.5L/min.

Operating pressure: 100 psi  
Internal volume w/probe: 65 mL  
Product/Coolant Connectors: hose barbs for ¼" ID tubing



# GENERAL ACCESSORIES FOR 750-500W



## SOUND ABATING ENCLOSURE

Ultrasonic processing produces high pitched noise, which originates from the vessel walls and the liquid surface. The sound enclosure reduces the noise to comfortable levels. A support rod and converter clamp are included. Access ports are available on both sides and the top of the enclosure.

**OUTSIDE DIMENSIONS:**  
(H x W x D) 30.5" x 13.5" x 13"  
(775 x 343 x 330 mm)

**INSIDE DIMENSIONS:**  
(H x W x D) 29" x 12.5" x 12"  
(737 x 318 x 305 mm)

**PART NO.**  
830-00427



## SUPPORT STAND WITH CLAMP

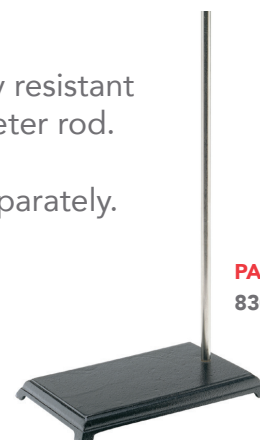
Securely support the ultrasonic processor with a chemically resistant plastic holder on a 5.5" x 9" cast-iron base with 0.5" diameter rod.

The converter clamp and support stand can be ordered separately.

**PART NO.**  
830-00459



**PART NO.**  
830-00116



**PART NO.**  
830-00109

## HEAVY DUTY SUPPORT ASSEMBLY

Supports the converter and multi-element probe with minimum deflection. Includes lab jack. Recommended when working with any multi-element horn.

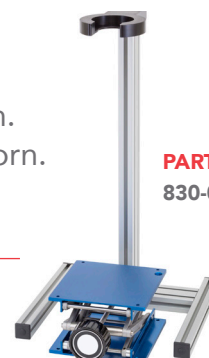
**PART NO.**  
830-00130



## LABORATORY JACK

Provides adjustable elevation from 2 1/2" (64 mm) to 10" (254 mm). Top plate: 6" x 6" (152 x 152 mm).

**PART NO.**  
830-00113



## ROSETTE GLASS COOLING CELLS

The rosette is a glass cell that enables uniform treatment at low temperatures. Fill the rosette with your liquid sample and place it in an ice bath. The ultrasonic energy forces the sample to circulate under the probe and through the cooling arms.



300mL Rosette

**PART NO.**  
830-00001

30mL Rosette

**PART NO.**  
830-00003



## JACKETED BEAKERS

The jacketed beaker is attached to a chiller or another cold water source. The chilled water is circulated around the liquid within the beaker maintaining the desired sample temperature.

10 mL cooling cell  
with water jacket

**PART NO.**  
830-00009

100 mL cooling cell  
with water jacket

**PART NO.**  
830-00010

## TEMPERATURE PROBE

Enables temperature monitoring from 1 – 100°C.

**PART NO.**  
830-00060



## REPLACEMENT CONVERTER



**PART NO.**  
CV334

## REPLACEMENT CONVERTER CABLE

6' (1.8m) length

**PART NO.**  
201-0300



## REPLACEMENT WRENCH SET

The 750 and 500W ultrasonic processors include 2 spanner wrenches and a  $\frac{9}{16}$ " x  $\frac{7}{16}$ " open end wrench.



**PART NO.**  
381-0005

## HAND HELD FREQUENCY METER

Check the frequency of energized probes, converters and boosters  
Frequency range:  
10.00 kHz - 80.00 kHz



**PART NO.**  
833-00012

## FOOTSWITCH

For hands-free operation with 10' (3m) cable.

**PART NO.**  
830-00004

