### MULTI-ELEMENT PROBES

The high throughput multi-element probes meet the needs of repetitive tasks by processing identically numerous deepwells simultaneously. They screw into the converter in place of the standard ½" (13 mm) probe, and can be used either manually or with automated systems. The energy delivered by each tip is uniform within 2%. With the four, eight, and twenty four-element probes, the spacing between the tips is ½½" (18 mm) and the length of the special microtips is 5%6" (139 mm). With the ninety-six element probe, spacing between the tips is ½½" (9 mm) and the length of the mini microtips is ¼6" (17 mm). Multi-element probes are fabricated from titanium alloy Ti-6Al-4V and are autoclavable. Connecting stud ½ - 20. Available with ¾ - 24 adapting stud to enable connection to a 20 kHz converter not manufactured by Sonics.

Note: Custom formatted multi-element probes are available upon request.

# **MULTI-ELEMENT PROBES**

PART NO.	DESCRIPTION	ULTRASONIC PROCESSOR
630-0559 630-0598	Four-element probe Consists of an aluminum coupler and four $\frac{1}{8}$ " (3 mm) special microtips. Replacement microtip (250 $\mu$ l – 10 ml) for four-element probe	500 watt or 750 watt
630-0586 630-0598	Eight-element probe Consists of an aluminum coupler and eight $\frac{1}{8}$ " (3 mm) special microtips. Replacement microtip (250 $\mu$ l – 10 ml) for eight-element probe	500 watt or 750 watt
630-0579 630-0598	Twenty-four-element probe Consists of an aluminum coupler and twenty-four $\frac{1}{8}$ " (3 mm) special microtips. Replacement microtip (250 $\mu$ l – 10 ml) for twenty-four-element probe	750 watt
630-0611 630-0599	Ninety-six-element probe* Consists of an aluminum coupler and ninety-six 11/16" (17 mm) mini microtips. Replacement mini microtip (1 – 2 ml) for ninety-six-element probe	500 watt or 750 watt



<sup>\*</sup> For use with 2 ml well microplates. Not recommended for use with microplate wells smaller than 1 ml.

## HEAVY DUTY MULTI-ELEMENT PROBE SUPPORT ASSEMBLY

Supports the converter and multi-element probe with minimum deflection. Recommended when working with twenty-four and ninety-six element probes. Base:  $10^{\circ} \times 10^{\circ} (254 \times 254 \text{ mm})$ .

Height: 24" (610 mm). Part No. 830-00320



### SOUND ABATING ENCLOSURE

Even though ultrasonic vibrations are above the human audible range, ultrasonic processing produces a high pitched noise in the form of harmonics which emanate from the vessel walls and the fluid surface. The sound abating enclosure permits extended processing without discomfort by reducing the sound by 35db. The probe/converter assembly is supported by the converter clamp, and the converter cable is fed through the  $\frac{3}{4}$ " (19 mm) opening at the top. Side access ports accommodate the tubing delivering the coolant and the sample to the processing vessel while the door is closed. The unit is faced on the exterior with white laminate, and on the interior with white waterproof polyethylene noise abating material. The access door permits observation during treatment and protects the operator against accidental splashing. Support rod and light duty converter clamp are included. Outside dimensions (H x W x D): 30" x 14" x 14" ( $762 \times 355 \times 355$  mm). Part No. 630-0427



### LABORATORY JACK

Provides adjustable elevation from  $2\frac{1}{2}$ " (64 mm) to 10" (254 mm). Top plate: 6" x 5" (152 x 127 mm). Part No. 830-00113



## NON-SLIP LABORATORY MAT

Holds beakers and microplates securely in place, and reduces noise by absorbing vibrations normally transmitted to the laboratory jack.

4" x 7" (100 x 175 mm).



Part No. 830-00119