



## **Probes for Ultrasonic Processor**



### **Description**

**Probes** (sometimes referred to as horns) are one-half wavelength long tools that act as mechanical transformers to increase the amplitude of vibration generated by the converter. They consist of two sections each having different cross-sectional areas.

The greater the mass ratio between the upper section and the lower section, the greater the amplification factor, and the greater the peak-to-peak excursion at the tip of the probe. Probes with smaller tip diameters produce greater intensity of cavitation, but the energy released is restricted to a narrower, more concentrated field. Conversely, probes with larger tip diameters produce less intensity, but the energy is released over a greater area. The larger the tip diameter, the larger the volume that can be processed, but at lower intensity. **High gain probes produce higher intensity than standard probes of the same diameter, and are usually recommended for processing difficult applications.**



**BUENO ELECTRIC**

<https://www.bueno-electric.com>

Probes are fabricated from high grade titanium alloy Ti-6Al-4V because of its high tensile strength, good acoustical properties at ultrasonic frequencies, high resistance to corrosion, low toxicity, and excellent resistance to cavitation erosion.

### Probe Option



Model	Inch	Frequency	Power Range	Crushing Capacity
Φ2	1/12"	20-25KHz	min-150W	0.2-5ml
Φ3	1/8"	20-25KHz	min-250W	3-10ml
Φ6	1/4"	20-25KHz	20-400W	10-100ml
Φ10	5/12"	20-25KHz	100-600W	30-300ml
Φ12	1/2"	20-25KHz	200-900W	50-500ml
Φ15	5/8"	20-25KHz	300-1000W	100-600ml
Φ20	4/5"	19.5-20.5KHz	400-1100W	100-1000ml
Φ22	5/6"	19.5-20.5KHz	400-1100W	200-1000ml
Φ25	1"	19.5-20.5KHz	800-1500W	500-1200ml