

**Shalom Ultrasonics**, Introduces as the largest conglomerates in the field of Ultrasonic Plastic Welding Machine & have vast and wide range of experience in joining of any Plastic products any shape any size i.e. PP, PE, PU, ABS, Fibre, LDPE, HDPE, Nylon, etc. with frequencies available 20Kz, 30Khz, 40 Khz Our core products includes Ultrasonics Plastic Welding Machine, Ultrasonic Plastic Welding Hand Gun, Poultry Manure Belt Welder, Spin Welding Machine, Tube Sealing Machine, Hot Plate Welding Machine, PP Box Welding Machine, Non Woven Bag Sealing Machine, Probe Sonicator, Bath Sonicator, High Frequency Horns etc.

### **ProbeSonicator**



# ULTRASONIC HOMOGENIZER PROBE SONICATOR

Ultrasonic Homogenizers are recommended for Homogenization of laboratory samples that do not require traditional grinding.

Shalom Ultrasonics, Ultrasonic Homogenizers offers precision total system for ultrasonic disruption. In biological applications, Probe Sonicator is often used to disrupt the cell membranes & release cellular contents also used for the fragment molecules of DNA.

Probe Sonicator is commonly used in nanotechnology for dispersing nanoparticles in liquid to break the particles in nano size. Probe Sonicator mainly made up of 3 main components: Generator, Converter & Horn. Generator is used to transform AC line power to high frequency electrical energy. Generator has a keypad for operating sonication parameters & also provides high voltage pulses of energy at a frequency of 20 Khz that drives piezoelectric converter. Converter which converts is a cylindrical type device connected to Generator by high voltage cable. This converter transforms electrical Energy into the mechanical vibrations. These vibrations are amplified & transmitted upto the length of Probe.

#### **Consists of:**

- ➤ Large screen LED
- Intensity is controlled from 1 to 100% which gives bigger degree of resolution & enables topinpoint amplitude needed to effectively process sample.
- ➤ Program : Parameters like total time, Pulse On Time, Pulse Off Time can be adjusted.

- ➤ Pulse On & Off time is adjusted to reduce heat rise in the temperature sensitive samples.
- > Integrated Temperature monitoring control to prevent heating of samples which are more heat

#### **Applications:**

Accelerate Chemical, Reactions, Degassing of Liquids, Emulsify Cosmetics, Prepare Emulsions, Disperse Solids, Extract DNA / RNA, Dissolve Powders & many depending on requirement

#### **Standard Probes:**

Probes are made from titanium and machined to various sizes & shapes. At the time of resonance frequency, they expand and contract longitudinally. This mechanical vibration is amplified and transmitted down the length of the probe and thus leads main mechanism for sample processing.

#### **Specifications:**

Power Rating	150 to 1200 wattage ( Depending on model selection )		
Operating Frequency	20 Khz & 40 Khz		
Input Power	100 to 240 V, 50 to 60 Hz		
Crusher Capacity	Capacity 0.2 to 1000 ml ( Depending on model and tip size selected )		
Temperature Control	Analogue type temperature locking system to prevent sample degradation		
Total Timer	0-999 min		
Pulse on/Pulse off Timer	0.1-9.9 sec		

#### Model as Under:

Model	Ultrasonic Frequency ( Khz )	Maximum Power	Probe Provided with Instrment	Optional Probe	Capacity depending on probe in ml ( etc )
SU 150	20	0-150 W	Single probe of any	8,10,12, etc	50,100
SU 250	20	0-250 W	One size from list	10,12,14	100,200
SU 500	20	0-500 W	Any size	12,14,16,18	200,500
SU 650	20	0-650 W	For any size	14, 17,20 etc	200, 500,1000
SU 950	20	0-950 W	Will be provided	18,20,22,25,28	1000
SU 1200	20	0-1200 W	Any size	22,25,28 etc	1000ml



## Shalom Ultrasonics



GST NO : 27AOTPB2539L1ZJ Address : Plot No. 5, Jyotiba Nagar, Talawade, Pune-411062 Maharashtra (INDIA)

Mr.Sanjay Bhalerao.

9172698534



