

***Ultrasonic HighTech
Equipment For
Packaging Industry***



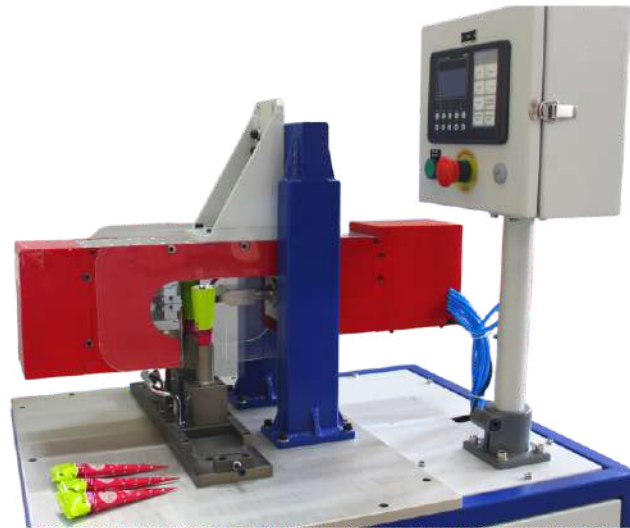
Innovative Packaging Solution

POWERHOUSE OF ULTRASONIC TECHNOLOGY®



Ultrasonic Packaging Systems

Ultrasonic welding is a reliable and economic alternative for typical thermal processes that ensures tight weld seals despite of product contamination. Ultrasonic welding technology is particularly well suited for packaging processes with high production rate requirements and applications with challenging process. The ultrasonic process also offers additional benefits such as cold welding/sealing process, tight sealing of films, repeatable and analyzable weld process which is not possible when using radiant heat process.



Technical Specifications

Ultrasonic Power	1000/ 1500 Watts
Frequency of Operation	36 kHz
Diameter of tubes	20 to 45 mm dia.
Speed of Operation	45 to 70 tubes/ min depending on the dia & material of tube
Air Flow	40 CFM at 8 kg/cm ²
Mode of Operation	Constant energy/ time



Main Features

- Universally adaptable to all filling machine styles.
- Seals both plastics & laminated tubes.
- Maintains high seal strength even when sealing through product over flow and contaminants.
- Microprocessor control for repetitive and accurate settings.
- Operation with constant welding time and constant welding energy.
- Operation with shake off pulse for removing the contaminants from the Horn.
- Fully regulated amplitude of $\pm 2\%$ over the whole load range and main supply from -10% to +20%.
- Electronic Booster allows amplitude selection over range of 70% to 100%.
- Standard RS-232 output for printing and monitoring production line.
- Clearly arranged front panel indicating selection and display of working amplitude optical bar indicating generator loading and frequency of operation, manual and automatic tuning etc.
- Specially designed Converter & Horn for longer life with built in Booster.

Joining of Thermoplastics in Packaging

As a joining process for industrial thermoplastics, the ultrasonic method is very well proven in practice in the packaging industry. Particularly in the production of mass-produced parts, the process offers definite advantage over previous methods such as for instance high strength, clean weld seams, fast processing times, extremely low rejection rates and low energy consumption.

In addition to its main application which is welding of moulded thermoplastic parts, this technique can be used successfully for riveting, forming, stacking as well as embedding of metal parts into thermoplastic materials.



A standard ultrasonic welding unit comprises the following main components: Electronic Ultrasonic Generator, Converter, Booster, Sonotrode, Pneumatic Press and Control Unit.

However, we integrate our ultrasonic attachments in special purpose machines like pouch sealing, tube sealing, Sealing through contamination, Vertical Form filling machines, Horizontal Form filling machines, BOPP bag and pouch machines, etc.

Ultrasonic technology can be helpful in saving time and cost while getting better performance in the packaging industry.



Unique Features

- 7" Colour touch screen.
- Provides 4 different Trigger modes - Time, Force, Distance and Touch
- Provides 5 different weld modes - Time, energy, Weld Distance, Absolute Distance and Maximum Power
- Energy, Distance Measurement and control
- Variable pressure profile for more accurate Weld Results
- Amplitude Profile to weld Few Semi- Crystalline Materials
- Automatic Saving of last 99999 welding Results
- User can store 50 different Job Settings (Data set management)
- Selectable calibration pulse for Automatic Sonotrode Frequency Tuning
- 6 Types of different quality windows
- RS-232/USB Interface for receiving Welding summary on PC
- In-built Rotary Table Interface with Two Sensor Support
- Provides 4 User Programable Inputs and Outputs
- Modular design of system allows easy capacity up-gradation
- Precise time setting with least count of 0.001 second, thus avoiding over welding, deformation, reduction of production rate and excess consumption of power
- Additional ultrasonic vibration at the end of cycle resulting into removal of particles from horn

Expertise Packaging Solution

We have successfully been catering to the needs of various industries.



Beverage



Food



Cosmetics & Personal Care



Pharmaceutical



Consumer/End user



VFFS

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