ULTRA-UPWM ULTRASONIC PLASTIC WELDING MACHINE



Used For Plastic Industry



Introduction

ULTRAAUTOSONIC are Manufacturers, Suppliers, and Exporters of Ultrasonic Plastic Welding Machine. We designed the ultrasonic welding machine for plastic parts in different industries like automotive, electronics, medical, packaging, textile, toy, Aerospace, etc.

ULTRAUTOSONIC introduces our latest innovation in Ultrasonic Plastic Welding Machines are devices used in industrial manufacturing processes to join thermoplastic materials together using ultrasonic vibrations. The process involves applying high-frequency ultrasonic vibrations to the materials being welded, which generates heat through friction at the interface of the materials. This localized heat causes the plastic to melt and form a bond when pressure is applied.

SPECIFICATION		
Frequency (Khz)	15	20
Power (Watt)	2600	1000/1200/1500/1800/2000
Horn		Design as per the customized application
Actual Weight		Approx. 96 kg
Actual Size (L X W X H)		Approx. (728 x 434 x 1193) mm
Packaging Type and Size		Wooden Box and Approx. Size (875 x 581 x 1340) mm
Operational Rquirement		

Input Power Supply	AC 230V 50/60Hz, 16Amp
CVT / Stabilizers	If the voltage is unstable then use CVT / Stabilizer to avoid damage
Working Pressure	2 to 10 bars (Air Compressor required 1 Hp 50Ltr)

FEATURES

1. Ultrasonic Generator: This is the heart of the machine, producing high-frequency electrical energy which is then converted into mechanical vibrations.

2. Transducer : These vibrations are then transmitted to the plastic parts to be welded.

3. Amplitude Adjustment : Many machines allow adjustment of the amplitude of the ultrasonic vibrations. This helps optimize the welding process for different materials and joint configurations.

4. Horn (Sonotrode): The horn amplifies and transfers the ultrasonic vibrations from the transducer to the plastic parts. It's designed to match the shape of the joint to ensure proper energy transmission.

5.Welding Fixture : This holds the plastic parts in place during the welding process.

6. Control System : Modern machines come with sophisticated control systems that allow operators to set parameters such as welding time, pressure, and energy levels.

7. Safety Features : These include features like emergency stop buttons, protective enclosures, and sensors to ensure the safe operation of the machine.

8. User Interface : This may include digital displays, touch screens, and simple control panels.

9. Cooling System : Ultrasonic welding generates heat, so machines often include cooling systems to prevent overheating and maintain consistent performance.

ADVANTAGES

1. Plastic welding machines can be used to join various types of plastic materials, including thermoplastics like PVC, PE, PP, and others.

2. Properly welded plastic joints can be as strong as or even stronger than the original material, depending on the welding technique used.

3. Plastic welding processes can often be completed quickly, leading to improved production efficiency.

4. Welding can be done in a single step, reducing assembly time and increasing throughput.

5. Some crucial in industries like packaging, where maintaining product integrity and freshness is paramount.

6. This simplifies the manufacturing process, reduces material waste, and eliminates the need for potentially harmful chemicals found in adhesives.

7. Plastic welding machines can provide consistent results, ensuring uniformity in joint quality and strength across production batches.

8. Plastic welding allows for greater design flexibility, as it can create joints in complex shapes and configurations that may be challenging or impossible with other joining methods..

9. Compared to some other joining methods that involve high temperatures, solvents, or mechanical forces, plastic welding can be safer for operators and the environment, particularly when using techniques like ultrasonic or hot plate welding.

APPLICATION

AUTOMOBILE INDUSTRY : Bicycle Light, Bumper, Centre Console, Glove Box, Indicator Light, Instrument Cluster Instrumental Panel, Tail Light, Toyota Logo
ELECTRONICS INDUSTRY : Airbuds, Battery Charger, Holder, Horn Fixture, Mobile Handset & Charger Pendrive, PLC Panel, Powerbank
HOME APPLIANCES INDUSTRY : Air Conditioner, Cooler, Fans, Iron & Geyser, Mixture & Grinder, Tea Maker, Vaccum Cleaner
MEDICAL INDUSTRY : Asthma Inhaler, Medical Equipment, Medical Tray , Nebulizer, Saline Cock, aline Tube, Small Tablet Bottle , Tablet Bottle
PACKAGING INDUSTRY : Corrugated Box, Cosmetic Packing, Spouts, Standing Pouches, Tetra Packing, Tube Sealing
RENEWABLE ENERGY INDUSTRY: Clamp for EV Charger, Solar Light, Mist Humidifier, Plastic Panel, Solar Charger, Solar Lamp, Solar Light
TEXTILE INDUSTRY : Filter Bag, Liquid Filter Bag , PP Kit , Safety Jacket, Woven Bag Material
STATIONARY INDUSTRY: Different Types Of Pouches, Education Slate, Plastic Folder, I-Card Holder, Plastic Paper Clip, Pencil Box, Stationary Item Holder, Stationary Item
Toy Industry

Aerospace Industry

AUTOMOBILE INDUSTRY



Bicycle Light



Centre Console



Glove Box



Indicator Light



Instrument Cluster





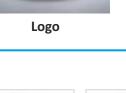




ELECTRONICS INDUSTRY :

Instrumental Panel







Horn Fixture

Mobile Handset & Charger



Airbuds



Battery Charger

Pendrive

PLC Panel





HOME APPLIANCES INDUSTRY :



Air Conditioner



Tea Maker

Small Tablet Bottle





Vaccum Cleaner



Fans



Mixture & Grinder



Asthma Inhaler



Tablet Bottle



Medical Equipment



Medical Tray



Nebulizer



Saline Cock



Saline Tube

PACKAGING INDUSTRY :













Corrugated Box





Tetra Packing









Solar Light

TEXTILE INDUSTRY :



Woven Bag Material

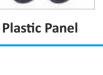


Safety Jacket



Mist Humidifier

Liquid Filter Bag







Solar Lamp









Filter Bag



PP Kit





Big Pouches



Plastic folder

Plastic Paper Clips

Education Slate



Folder



Pouches



Stationery Item Holder Stationery Item



Pencil Box



Zip Lock Pouches

TOY INDUSTRY



























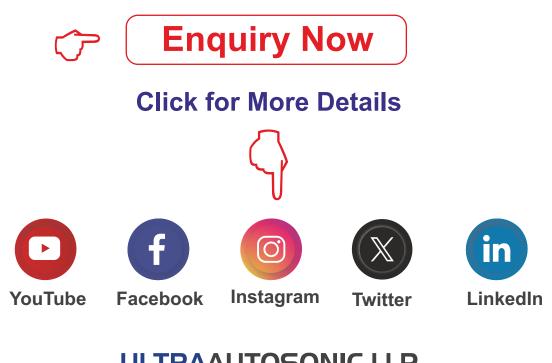




AEROSPACE INDUSTRY







ULTRAAUTOSONIC LLP

World Class Ultrasonic Equipments Manufacturer & Exporter

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