

UWP250

Ultrasonic technologies are set out because of their benefits in different branch industry of series production, short-run production or research work. It is the same for ultrasonic welding. Specific merits of the plastic welding of , non-woven textiles, artificial leather etc. are:

- care of environment - plastic jointing without sizing materials or chemicals
- small power spending - ultrasonic machine is not heating during welding
- cleanness, work without mechanical or chemical rubbish
- high level of repeatability and the same quality of weld
- short time of his own welding process
- small severity of space and small weight of the technological machine

Ultrasonic set for manual welding (further on only "welding set") is designed for direct welding of plastic materials such as plastic foils, non woven textiles, etc. It is possible to use it for joining other materials by suitable plastic rivets.

Welded materials are placed above each other on a suitable support plate, that they touch at required welding place. On the ultrasonic generator could be set required parameters of joint as the welding time, output power or overall output. Welding device is activated by the manual switches or by footswitch. After the switch is switching, the pneumatic tool is pressed welding tool (sonotrode) to the top welding part. With intensive ultrasound from the welding tool come to melting-down and after that to joint of plastic material where they touch. Weld time is determined by switching time switch or set the weld time using the timer control, whichever is less. After joint is complete, the sonotrode for the short time press welding materials together to achieve the required joint strength. Then the sonotrode will return to the resting position.

Because of the large number of existing plastic materials and their shapes is necessary tested suitability of usage ultrasonic welding tool for concrete application. When thinner materials is welded in addition to set duration of weld, may also be needed to reduce output power of ultrasonic generator.



Technical parameters

Transducer UT250

Nominal frequency	30 kHz (40 kHz)
Allowance of ultrasonic frequency	± 500 Hz
Power of transducer	max 200 W
Cover of transducer	IP 20
Max. measurements	D54 x 285 mm

Generator UZG10

Supply voltage	230 V ±10% /50 Hz
Nominal frequency	30 kHz (40 kHz)
Allowance of ultrasonic frequency	± 500 Hz
Cover	IP 20
Max. input	300 VA
Operating temperature	10°C to 45°C

Stand with pneumatic control

Required air pressure	1 to 6 Bar
Pneumatic plunger travel	max 100 mm
Height adjustment	120 mm
Dimensions (l x w x h)	200 x 360 x 700 mm
Weight	cca 55 kg

Ultrasonic welding tools could be delivered with various design (area of joint, design of joint).

Welding outfit UWP 250S40/01 includes:

- transducer (converter) UT250.40.05
- stand with pneumatic control
- ultrasonic generator UZG10
- sonotrode and support plate according to customer requirements
- 2pcs fork wrenches 22/24

Possibility order separately:

- Foot switch NS (is not part of standard delivery)

Production and development :

- ultrasonic compact cleaners
- ultrasonic industrial cleaners
- ultrasonic cleaning technologies
- ultrasonic generators for cleaners
- membrane and immersion ultrasonic emitters
- bar type ultrasonic emitters

- rinsed tanks

- ultrasonic welders
- ultrasonic generators for welding
- ultrasonic sonotrodes for welding
- welding sonotrodes

- ultrasonic cutting systems
- ultrasonic generators for cutting systems
- ultrasonic sonotrodes for cutting systems
- guillotine and blade cutting sonotrodes

- ultrasonic cleaning of items



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