



## Mini Vibration Welder Model Mini II

### General Description

Branson's Mini II Vibration Welder is a complete plastics assembly system for welding small or irregularly-shaped thermoplastic parts. The Mini II incorporates many features for improved operation, overall performance, and serviceability.

The Mini II Vibration Welder will handle parts up to 7" by 9" (178 by 230 mm). It has a solid-state 11 kW power supply with an adjustable vibrating frequency (nominal 240 Hz).

Modular construction allows the individual components, i.e., vibrator assembly and power supply/controller, to be adapted to automated or custom systems.

Features and benefits of the Mini II Welder are outlined in the table below:

FEATURES	BENEFITS
50% increase in drive force	Welds a larger area or welds faster
Increased platen size	Welds larger parts
Increased stroke	Welds deeper parts
Touch screen controls	Easier to set up More precise settings
Increased drive fixture weight	More flexibility in types of applications
Optional weld-by-distance package	Greater control of welding process

### Key Features

- **Simple maintenance-free electromechanical vibrator** with only one moving part and no bearing surfaces to lubricate or wear.
- **Dialable amplitude (stroke)** with a feedback loop assures constant amplitude during the entire weld cycle.



- **Adjustable frequency** allows for maximum flexibility in drive fixture weight.
- **Automatically self-adjusting stack-up** throughout entire stroke reduces setup times. Clamping is accomplished via a pneumatically-activated lift table.
- **Easy access to process controls** located on front of the machine:
  - Touchscreen user interface
  - Amplitude adjustment controls
  - Pressure gauge
- **Operator safety** provided through soft-touch start buttons (with anti-tie-down feature) and emergency stop button.
- **The power supply is housed in a standard NEMA 12 enclosure** with conveniently mounted interlock through-the-door disconnect.

**Applied  
Technologies  
Group**

41 Eagle Road  
Danbury, CT  
06813-1961  
(203) 796-0349  
fax (203) 796-9838  
email: info@bransonultrasonics.com



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- **Serviceability** - All electrical and pneumatic components are easily accessible for service and maintenance.
- **100%+ utilization** of lift table fixture mounting surface.
- **Variable speed lift table** travels at approximately 10 inches/second (254 mm/second).
- **Designed for material handling capabilities.** Easily removed panels provide access for added material handling integration.
- **Interior work light** for better work area visibility.
- **Ergonomically designed** for operator comfort.

## Electrical Specifications

Controller:	Solid state with Allen Bradley SLC 500 programmable controller
Power requirements:	480 V AC, 15 amps, 3 phase, 50/60 Hz
Output frequency:	240 Hz variable

## Performance Specifications

Drive platen fixture weight capacity:	7-8 lbs. (3.2-3.6 kg) recommended
Maximum clamp force:	800 lbs. (3.6 kN)
Amplitude range:	0.040" to 0.070" (1.02 to 1.8 mm)
Lift table speed:	10 inches/second (254 mm/second)
Total dry cycle time (without welding):	5.0 seconds (at 15" [380 mm] stroke and 50 psig)
Horsepower:	11 kW

*Note: All specifications subject to change without notice.*

## Mechanical Specifications

Weight:	Approx. 1,500 lbs. (680 kg)
Dimensions:	
Overall:	43" wide x 61" high (plus 6.5" casters) x 33" deep (1092 mm wide x 1715 mm high x 840 mm deep)
Lift table:	13.75" long x 9.5" wide (350 mm long x 240 mm wide)
Drive platen:	7" long x 9" wide (178 mm long x 229 mm wide)
Front opening:	27" wide x 15" high (685 mm wide x 380 mm high)
Variable stroke:	15" (380 mm) maximum
Noise level:	80 dB(A)

*Note: The Mini II Vibration Welder is designed in USCS units.*

## Warranty

The Mini II Vibration Welder is warranted to be free from defects two years for parts and one year for labor from the date of shipment.

## Ordering Information

*Note: All sales shall be subject to the Supplier's terms and conditions of sale as described in Branson's quotations and sales contracts.*

### Branson EDP No.

Model Mini II vibration welder	300-101-029
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## Options

- Light screen (safety)
- Weld by distance package (meltdown control)
- Transformers for voltages other than 480V
- Part eject
- Vacuum
- Tool slide

## Branson

41 Eagle Road  
Danbury, CT  
06813-1961

475 Quaker Meeting  
House Road  
Honeoye Falls, NY  
14472  
(585) 624-8000  
Fax (585) 624-1262  
info@BransonUltrasonics.com

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