

## Vibration Welding

### *Mini Vibration Welder Model Mini II*

Emerson's Branson 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 seamless operation, overall performance, and serviceability.

The Mini II Vibration Welder will handle parts up to 7" x 9" (178 x 230 mm). It has a solid state 12.7 kW power supply with an adjustable vibration frequency (nominal 240 Hz). Modular construction allows the individual components, vibrator assembly and power supply/controller, to be adapted to automated or custom systems.

#### KEY FEATURES:

- **Simple maintenance-free electromechanical vibrator** with only one moving part and no bearing surfaces to lubricate or wear.
- **Adjustable amplitude** with a feedback loop assures constant amplitude during the entire weld cycle.
- **Adjustable frequency** allows for maximum flexibility in drive fixture weight.
- **Easy access to process controls** located on front of the machine:
  - Touchscreen user interface
  - Amplitude adjustment controls
  - Table-up speed
  - Pressure gauge
- **Operator safety** provided through soft-touch start buttons (with anti-tie-down feature) and emergency stop button.



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- **The power supply is housed in a standard NEMA 12 enclosure** with conveniently mounted interlock through-the door disconnect.
- **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.

## OPTIONS

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

ELECTRICAL SPECIFICATIONS	
Controller:	Solid state with Ellrn Bradley MicroLogix 1500 Programmable logic 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:	12.7 kW

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)

ORDERING INFORMATION	
	<b>BRANSON EDP No.</b>
Model Mini II Vibration Welder	300-101-029

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

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.

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