



SONICS®

Model MW20

20 kHz

Sonics & Materials, Inc.

Ultrasonic Metal Welding System

more Power Features



Model MW20
Welding Press



GX-Series Power Supply

Power	Available in: 1200 watts ■ 1700 watts ■ 2200 watts ■ 3500 watts
Features	<ul style="list-style-type: none"> • Simple and Precise Set Up and Operation • Optimum Operator Safety and Ergonomics • Highest Quality and Lowest Cost Welds
Quality	digital time - Model GXT digital energy with upper/lower time limits - Model GXE digital distance with upper/lower energy limits - Model GXL

STANDARD FEATURES INCLUDE:

- Automatic Frequency Tuning
- Digital Amplitude Control
- Good Part/Bad Part Output Signal
- Multiple Job Storage
- Back-Lit LCD Display
- Ultrasonics Load Meter Scale
- Upper and Lower Weld Quality Settings
- RS232 Serial Port Printer Output
- Optional PLC I/O (Input/Output) Ports
- Soft Start Overload Protection Circuitry
- Load Regulation Circuitry
- Distance Mode Settings in English or Metric Units (with Model GXL only)

Leaders in the field of ultrasonic welding equipment and technology since 1969, Sonics & Materials offers its new line of ultrasonic metal welders combined with the GX-Series ultrasonic power supply to create a powerful and precise system, designed to handle even the most demanding applications.

The GX-Series provides microprocessor control and consistent reliability for every application, and delivers more output power to the MW20 welder. Power supplies feature smart-logic, user-friendly navigation and are available in three different welding mode configurations for maximum versatility and quality.

System Specifications

System Weight: 85 lbs. (Press), 21 lbs.* (Power Supply)
 Power Supply Input Voltage: 220 VAC single phase
 Pneumatic Requirements: clean dry air at 85 psig

Corporate Headquarters

53 Church Hill Road
 Newtown, CT 06470 USA
 203.270.4600
 800.745.1105
 203.270.4610 fax
 info@sonics.com
 www.sonics.com

European Office

13, Rue Pre-de-la-Fontaine
 CH-1217 Meyrin/Satigny
 Switzerland
 (41) (0) 22/364 1520
 (41) (0) 22/364 2161 fax
 europe@sonicsandmaterials.ch
 www.sonics.com



For more information: **1-800-745-1105 • www.sonics.com**

MW20 Welder Features

- Patented self-orienting horn and tips permit simple, quick and precise tool change in under one minute.
- Patented one-piece horn/booster with dual nodal mounts assures the optimum efficiency of sonic transmission and eliminates horn deflection.
- Weld quality monitoring is available in time, energy and distance.
- Micrometer adjustment of the anvil height simplifies anvil set up, anvil reconditioning and weld quality.
- Ground base provides an ergonomic work area with integrated safety switches.
- Indicator lights alert the operator on weld status, good parts and faults.
- Exclusive Sonics' safety system advances the slide at low force until it is within 1 mm of closure to protect the operator, even with foot pedal operation.
- Large anvil stage with independent x-y adjustment facilitates part fixturing.
- Hinged cover protects all adjustments from unwarranted change.
- Precision down stop with micrometer increment is provided for ease of setup.
- Precision up stop adjustment provides total motion control.
- Spring return keeps the weld head up when air is removed.
- Heavy duty cylinder and mechanical linkage provides up to 750 lb. force for 20 kHz.
- Four heavy duty linear bearings assure precise motion and weld position. Bearings are sealed and prelubricated for longest life, with a design safety factor of over 10 to 1.
- Heavy duty, all cast I-beam housing assures rigidity at maximum force.
- Independent air cooling adjustments for the converter and horn are provided, with a timed program, for optimum air conservation.
- Pneumatic valve stack provides 200 million cycles and 10 millisecond response time.

*Power supply for 3500 watt system weighs 70 lbs.

Dimensional Data

