Model 1595

15 kHz ultrasonic plastics welding systems

Leaders in the field of ultrasonic plastics welding equipment and technology since 1969, Sonics & Materials offers its new line of GX-Series ultrasonic power supplies, combined with 15 kHz welders, for welding medium to large-sized parts at higher amplitudes.

The new GX-Series provides microprocessor control and consistent reliability for every application. Power supplies feature smart-logic, user-friendly keypad navigation. Line voltage phase angle regulation allows for single phase power requirement and promotes conservation of on-demand electrical energy.

**POWER SUPPLIES**
High Profile Chassis
3500 or 4500 Watts Power
Height: 11.00” (279.4 mm)
Width: 17.75” (450.8 mm)
Depth: 22.50” (571.5 mm)
Weight: 70 lbs. (31.8 kg)

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**STANDARD FEATURES INCLUDE:**
- Automatic Frequency Tuning
- Multiple Job Storage
- Digital Force Triggering
- Calibration Pulse Prior to Every Weld Cycle
- Back-Lit LCD Display
- Ultrasonics Load Meter Scale
- Upper and Lower Weld Limit Settings
- Optional RS232 Printer Output Port
- Optional PLC I/O (Input/Output) Ports
- Soft Start Overload Protection Circuitry
- Load Regulation Circuitry
- Distance Mode Settings in English or Metric Units**

**Requires optional linear encoder**
model 1595 features

- Single Piece Rigid Cast Aluminum Base and Column Hub
- Dual Column Low Friction Linear Bearings
- Direct In-Line Air Cylinder
- Motorized Actuator Head Up and Down Switches
- Motorized Actuator Head Up and Down Adjustment
- Front Panel Pneumatic Pressure and Speed Up and Down Controls
- Linear Encoder for Distance Welding (optional)

specifications, additional features and options

- Dual Cycle Start Buttons  Standard
- Non-Contact Cycle Start Buttons  Optional
- Front Emergency Stop  Standard
- Adjustable Positive Stop  Standard
- Automation Limit Switches  Optional
- 360° Snap-In Stack Assembly  Standard
- Stand Alone Column Hub  Optional
- Extended Length Column  Optional
- 3.75" (95.3) Column Diameter  Standard
- 4" (101.6) Stroke Air Cylinder  Standard
- Air Cylinder Bore Diameter  4" (101.6)
- Clamping Force at 90 PSIG  1130 lbs. (5026n)
- Input Voltage  220 VAC
- Weight (1595)  280 lbs. / 127.0 kg

dimensional data

All Dimensions: Inches (mm)
Model 2050 / 1550
20 kHz / 15 kHz ultrasonic plastics welding systems

STANDARD FEATURES INCLUDE:
• Automatic Frequency Tuning
• Multiple Job Storage
• Digital Force Triggering
• Calibration Pulse Prior to Every Weld Cycle
• Back-Lit LCD Display
• Ultrasonics Load Meter Scale
• Upper and Lower Weld Limit Settings
• Optional 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*

* requires optional linear encoder

Leaders in the field of ultrasonic plastics welding equipment and technology since 1969, Sonics & Materials offers its new line of **GX-Series** ultrasonic power supplies, combined with the super-rigid Model 2050 or 1550 press, to create a powerful new system designed to handle even the most demanding applications.

The new GX-Series provides microprocessor control and consistent reliability for every application, and delivers more output power to the Model 2050 press, easily handling significantly larger part size and force requirements. Power supplies feature smart-logic, user-friendly navigation and are available in three different welding mode configurations for maximum versatility and flexibility.

**Power Supply**
Dimensions: 15.25" W x 6.50" H x 18.75" D (387.3 x 165.1 x 476.25 mm)
Weight: 21 lbs. (9.5 kg)

**Power supply for 3500 watt system is larger and heavier. Call for more information.**

for more information: 1-800-745-1105  www.sonics.com
model 2050 features

- Single Piece Rigid Cast Aluminum Machine Base and Column Hub
- Increased Steel Column Diameter and Wall Thickness
- Single Rail Linear Slide
- Direct In-Line Air Cylinder
- Extended Center Base to Column Throat Depth Distance
- Additional 12" Center-to-Center Lower Fixture Mount Holes
- Front Panel Pneumatic Speed and Pressure Controls
- Linear Encoder for Distance Welding (optional)

specifications, additional features, and options

- Dual Cycle Start Buttons: Standard
- Non-Contact Cycle Start Buttons: Optional
- Front Emergency Stop: Standard
- Head Adjust Counter: Standard
- Balance Spring: Standard
- Adjustable Positive Stop: Standard
- Automation Limit Switches: Optional
- 360° Snap-In Stack Assembly: Standard
- Rigid Mount Booster: Optional
- Stand Alone Column Hub: Optional
- Extended Length Column: Optional
- 3.75" (95.3) Column Diameter: Standard
- 4" (101.6) Stroke Air Cylinder: Standard
- 6" (152.4) Stroke Air Cylinder: Optional
- Air Cylinder Bore Diameter: 2.5" (63.5)
- Clamping Force at 90 PSIG: 441 lbs. (1961n)
- Input Voltage: 220 VAC
- Weight: 180.5 lbs. / 81.9 kg

dimensional data

All Dimensions: Inches (mm)

Dual Cycle Start Buttons: Standard
Non-Contact Cycle Start Buttons: Optional
Front Emergency Stop: Standard
Head Adjust Counter: Standard
Balance Spring: Standard
Adjustable Positive Stop: Standard
Automation Limit Switches: Optional
360° Snap-In Stack Assembly: Standard
Rigid Mount Booster: Optional
Stand Alone Column Hub: Optional
Extended Length Column: Optional
3.75" (95.3) Column Diameter: Standard
4" (101.6) Stroke Air Cylinder: Standard
6" (152.4) Stroke Air Cylinder: Optional
Air Cylinder Bore Diameter: 2.5" (63.5)
Clamping Force at 90 PSIG: 441 lbs. (1961n)
Input Voltage: 220 VAC
Weight: 180.5 lbs. / 81.9 kg
Leaders in the field of ultrasonic plastics welding equipment and technology since 1969, Sonics & Materials offers its new line of **GX-Series** ultrasonic power supplies, combined with the super-rigid Model 2055 and 1555 presses, to create a powerful new system designed to handle even the most demanding applications.

The new GX-Series provides microprocessor control and consistent reliability for every application, and delivers more output power to the Model 2055 and 1555 presses, easily handling significantly larger part size and force requirements. Power supplies feature smart-logic, user-friendly navigation and are available in three different welding mode configurations for maximum versatility and flexibility.

**Power Supply**

- **Dimensions:** 15.25" W x 6.50" H x 18.75" D (387.3 x 165.1 x 476.25 mm)
- **Weight:** 21 lbs. (9.5 kg)

**Power supply for 3500 watt system is larger and heavier. Call for more information.**
model 2055 and 1555 features

- Single Piece Rigid Cast Aluminum Machine Base and Column Hub
- Increased Steel Column Diameter and Wall Thickness
- Single Rail Linear Slide
- Direct In-Line Air Cylinder
- Extended Center Base to Column Throat Depth Distance
- Additional 12" Center-to-Center Lower Fixture Mount Holes

specifications, additional features, and options

<table>
<thead>
<tr>
<th>Feature</th>
<th>Standard</th>
<th>Optional</th>
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<tbody>
<tr>
<td>Dual Cycle Start Buttons</td>
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<tr>
<td>Non-Contact Cycle Start Buttons</td>
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<td>Head Adjust Counter</td>
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<td>Automation Limit Switches</td>
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<td>360° Snap-In Stack Assembly</td>
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<tr>
<td>Rigid Mount Booster</td>
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<td>Extended Length Column</td>
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<td>3.75&quot; (95.3) Column Diameter</td>
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<td>4&quot; (101.6) Stroke Air Cylinder</td>
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<td>6&quot; (152.4) Stroke Air Cylinder</td>
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<td>Air Cylinder Bore Diameter</td>
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<td>Clamping Force at 90 PSIG</td>
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<tr>
<td>Input Voltage</td>
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<tr>
<td>Weight</td>
<td>165 lbs. / 74.8 kg</td>
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Air Cylinder Bore Diameter 2.5" (63.5) 
Clamping Force at 90 PSIG 441 lbs. (1961n) 
Input Voltage 220 VAC 
Weight 165 lbs. / 74.8 kg

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Leaders in the field of ultrasonic plastics welding equipment and technology since 1969, Sonics & Materials offers its new stepper-motor driven e-Press Touch, combined with a unique touch-control power supply with built-in stepper controller. The new system produces repeatable, precision welds to a weld depth tolerance of +/- 0.0003 in. (0.008 mm).

The advanced power supply provides superior microprocessor control and consistent reliability, along with an array of convenient networking and plotting features. Power supplies feature smart-logic, user-friendly navigation with touch controls plus enhanced features such as frequency display and digital amplitude control.

**Power Supply with built-in Stepper Controller**
Dimensions: 10" W x 9.5" H x 24.75" D (254 x 241.31 x 628.65 mm)
e-Press features

- Single Piece Rigid Cast Aluminum Machine Base and Column Hub
- In-line Load Cell for Precise Force Trigger
- Linear Ball Screw Actuator
- Single Rail Linear Slide
- Rigid Mount Booster Technology

specifications, additional features, and options

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
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<tr>
<td>Dual Cycle Start Buttons</td>
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<tr>
<td>Non-Contact Cycle Start Buttons</td>
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<tr>
<td>Front Emergency Stop</td>
<td>Standard</td>
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<td>Head Adjust Counter</td>
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<td>Balance Spring</td>
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<td>Automation Limit Switches</td>
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<td>360° Snap-In Stack Assembly</td>
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<td>Extended Length Column</td>
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<td>3.75” (95.3) Column Diameter</td>
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<tr>
<td>3.5” (89 mm) Max Stroke</td>
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<tr>
<td>Weight</td>
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</table>

power requirements

**Power Supply:**
- 1200 watt
- 2200 and 2500 watts
- 2200 and 2500 watts
- 220 VAC

**EP controller**
- 110 VAC

**NOTE:** These dimensions apply to 20 kHz model only.