



Now available in: 3500 watts 4500 watts

#### **new FEATURES**

- Digital Amplitude Control
- Ultrasonic Horn/Stack Frequency Display
- Good Part/Bad Part **Output Signal**
- Digital Soft Start Amplitude Ramp Control\*
- Line Voltage Phase Angle Regulation\*

#### new MODELS

WELD BY: digital time

- Model GXT

digital time and/ or constant energy

- Model GXE

digital time, constant energy and/or distance

- Model GXL

#### **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** 

# 15 kHz ultrasonic plastics welding systems



GX-Series High Profile Power Supply



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)



### model 1595 features

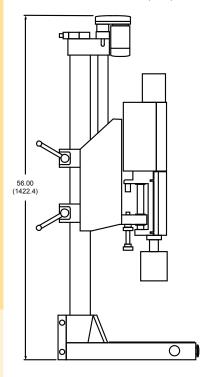
- Single Piece Rigid Cast Aluminum Base and Column Hub
- Dual Column Low Friction Linear Bearings
- Direct In-Line Air Cylinder
- Motorized Actuator Head Up and Down Switches
- Motorized Actuator Head Up and Down Adjustment
- Front Panel Pneumatic Pressure and Speed Up and Down Controls
- Linear Encoder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

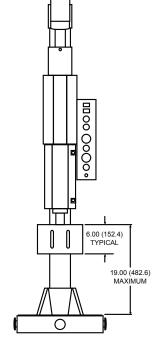
# specifications, additional features and options

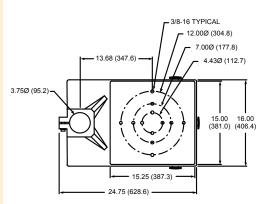
**Dual Cycle Start Buttons** Standard Non-Contact Cycle Start Buttons Optional Front Emergency Stop Standard Adjustable Positive Stop Standard **Automation Limit Switches** Optional 360° Snap-In Stack Assembly Standard Stand Alone Column Hub Optional Extended Length Column Optional Standard 3.75" (95.3)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

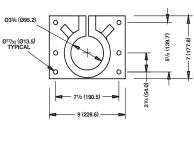
dimensional data

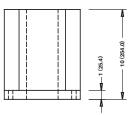
All Dimensions: Inches (mm)











optional stand-alone hub



280 lbs. / 127.0 kg



Weight (1595)





Now available in: 1200 watts 20 kHz 2200 watts 20 kHz 2500 watts 15 kHz 3500 watts 20 kHz

#### **new FEATURES**

- Digital Amplitude Control
- Ultrasonic Horn/Stack Frequency Display
- Good Part/Bad Part **Output Signal**
- 30% smaller power supply footprint



#### WELD BY:

digital time

- Model GXT

digital time and/ or constant energy

- Model GXE

digital time, constant energy and/or distance

- Model GXL\*

#### **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





Model 2050 / 1550 20 kHz / 15 kHz ultrasonic plastics welding systems



GX-Series Power Supply\*\*

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)

<sup>\*\*</sup>Power supply for 3500 watt system is larger and heavier. Call for more information.



### model 2050 features

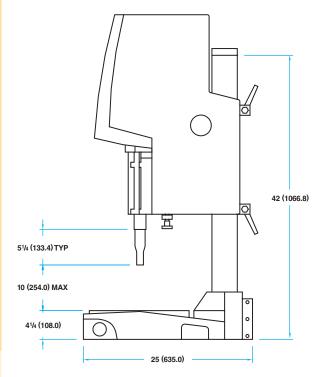
- Single Piece Rigid Cast Aluminum Machine Base and Column Hub
- Increased Steel Column Diameter and Wall Thickness
- Single Rail Linear Slide
- Direct In-Line Air Cylinder
- Extended Center Base to Column Throat Depth Distance
- Additional 12" Center-to-Center Lower Fixture Mount Holes
- Front Panel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

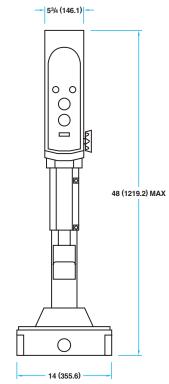
# specifications, additional features, and options

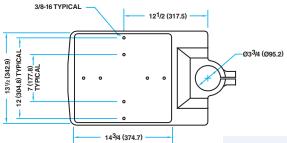
**Dual Cycle Start Buttons** Standard Non-Contact Cycle Start Buttons Optional Front Emergency Stop Standard Head Adjust Counter Balance Spring Standard Standard Adjustable Positive Stop Automation Limit Switches Optional 360° Snap-In Stack Assembly Standard Rigid Mount Booster Optional Stand Alone Column 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) 220 VAC Input Voltage Weight 180.5 lbs. /81.9 kg

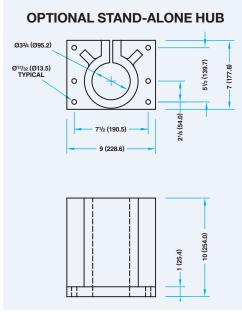
## dimensional data

All Dimensions: Inches (mm)

















Now available in: 1200 watts 20 kHz 2200 watts 20 kHz 2500 watts 15 kHz 3500 watts 20 kHz

### new FEATURES

- Digital Amplitude Control
- Ultrasonic Horn/Stack Frequency Display
- Good Part/Bad Part **Output Signal**
- 30% smaller power supply footprint



#### WELD BY:

digital time

- Model GXT

digital time and/ or constant energy

- Model GXE

digital time, constant energy and/or distance

- Model GXL

#### **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





20 kHz and 15 kHz ultrasonic plastics

welding systems



Model 2055 Press

GX-Series Power Supply\*\*

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)

<sup>\*\*</sup>Power supply for 3500 watt system is larger and heavier. Call for more information.



# model 2055 and 1555 features

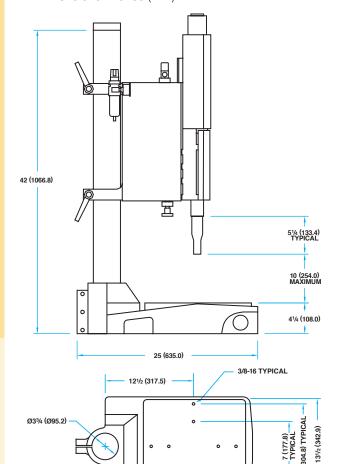
- Single Piece Rigid Cast Aluminum Machine Base and Column Hub
- Increased Steel Column Diameter and Wall Thickness
- Single Rail Linear Slide
- Direct In-Line Air Cylinder
- Extended Center Base to Column Throat Depth Distance
- Additional 12" Center-to-Center Lower Fixture Mount Holes

# specifications, additional features, and options

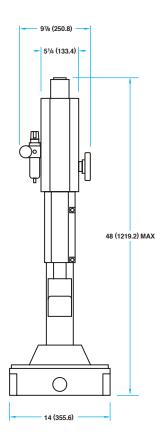
**Dual Cycle Start Buttons** Standard Non-Contact Cycle Start Buttons Optional Front Emergency Stop Standard Head Adjust Counter Standard **Balance Spring** Adjustable Positive Stop Standard Automation Limit Switches Optional 360° Snap-In Stack Assembly Standard Rigid Mount Booster Optional Stand Alone 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) 220 VAC Input Voltage Weight 165 lbs. /74.8 kg

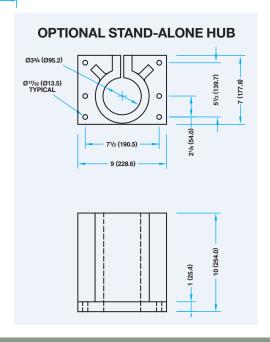
### dimensional data

All Dimensions: Inches (mm)



143/4 (374.7)











#### new POWER

Now available in: 15 kHz 2500 watts 20 kHz 1200 watts 20 kHz 2200 watts 30 kHz 1200 watts 40 kHz 800 watts

### new FEATURES

- Precision controlled weld depth tolerance of +/-0.0003 in. (.008 mm)
- Electric stepper motor drive/optical encoder
- Programmable digital force, velocity, distance
- Touch screen technology with dynamic full-color menus
- Virtual Network Computing (tablets/PC's)

#### **STANDARD FEATURES INCLUDE:**

- Automatic Frequency Tuning
- Graph Plotting
- Uploadable Event Logging
- Trend Capture / Plotting
- Weld to Peak Power
- Calibration Pulse Prior to **Every Weld Cycle**
- Weld Set-up Wizard
- Ultrasonics Load Meter Scale
- Absolute and Incremental Distance Modes
- Printer Data Log Output
- Optional PLC I/O (Input/Output) Ports
- Soft Start Overload **Protection Circuitry**
- Load Regulation Circuitry







# ultrasonic electropress™

15 kHz/20 kHz/30 kHz/40 kHz

high precision plastics welder with touch control

> Power Supply with built-in Stepper Controller



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

10" W x 9.5" H x 24.75" D (254 x 241.31 x 628.65 mm) Dimensions:



### 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

**Dual Cycle Start Buttons** Standard Non-Contact Cycle Start Buttons Optional Front Emergency Stop Standard Head Adjust Counter Balance Spring Standard **Automation Limit Switches** Optional 360° Snap-In Stack Assembly Standard Standard Rigid Mount Booster Stand Alone Column Hub Optional Extended Length Column Optional 3.75" (95.3) Column Diameter Standard 3.5" (89 mm) Max Stroke Standard Weight 210 lbs.

#### power requirements

#### Power Supply:

1200 watt 220 VAC

(110 VAC Optional)

 $/95 \, kg$ 

2200 and 2500 watts 220 VAC

**EP controller** 110 VAC

## dimensional data

All Dimensions: Inches (mm)

