



Bell Jar Heating Systems

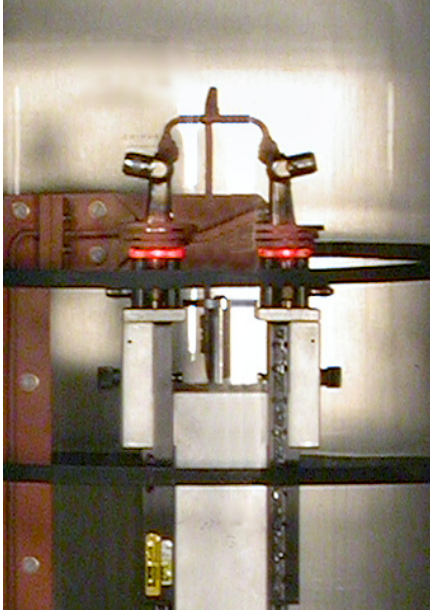
- Protective Atmosphere Heating With Easy Access To Parts & Fixturing
- Vacuum Level To 10^{-6} Torr At Moderate Temperatures
- Can Be Adapted For Automatic, High Volume Operation
- Optional Temperature Control

Our Bell Jar Vacuum Systems offer amazing flexibility and ease-of-use in a very cost-effective package. For maximum accessibility, the vacuum chamber lifts up and completely out of the way at the touch of a button. So it's easy to load and unload parts, adjust tooling or change components.

These compact systems are designed for induction brazing, heat treating, melting and general purpose heating. The single chamber unit shown above is designed for laboratory use, prototyping and low volume manufacturing. This unit can also be adapted for high volume, automatic operation with fixturing to move parts

in and out of the chamber, and to adjust position as needed. Multiple chamber systems can be driven by a single power supply and vacuum system.

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OPERATOR SAFETY FEATURES

- Light Curtain
- E Stop
- Systems Guarding
- Fully Isolated Heating System

OPTIONS AND ACCESSORIES

- Quenching - Inert Gas
- Optical Pyrometer
- Digital data collector
- Multiple zone heating
- Camco index table
- One rotary feed thru
- Closed loop temperature control
- Vacuum throttle control valve
- Mass flow regulator
- Dewpoint gas sensor

HEATING

- Direct induction or susceptor
- Up to 10 kW power supply

CHAMBER

- Pyrex 17" ID x 30" Height (432 mm x 762 mm)
- Stainless steel base plate with standard vacuum parts - ISO, QF & CF
- Ultimate vacuum: 5×10^{-6} Torr
- Pumping System: Edwards RV 12 mechanical; 300 l/sec turbo pump
- Vacuum sensing (thermocouple and cold cathode)

CONTROLS

- PLC-controlled with push-button or touch-screen operator interface
- Honeywell 300 series temperature controller

ELECTRICAL REQUIREMENTS

- 480 VAC, three-phase, 30 Amps [typical]

WATER PRESSURE

- 4 GPM @ 40 psi (15.1 LPM @ 117 kg/sq cm.) [typical]

AIR PRESSURE

- 80 psi (234 kg/sq cm.) [typical]

INERT GAS PRESSURE

- 30 psi (87.8 kg /sq cm.) [typical]

DIMENSIONS

- 3' W x 2.5' D x 7' H (914 mm x 762 mm x 2133 mm)

WEIGHT

- 850 lbs. (385.6 kg)