



Model AB-1 Automated Brazing System

- Compact 4' x 4' Footprint Fits Your Manufacturing Cell
- Indexing Turntable For Easy Loading And Unloading
- For Automated Brazing & Soldering
- Multiple Heat Program Capability
- Energy-Efficient Induction Heating System
- Facilitates Continuous Flow Manufacturing

Our IA automatic brazing systems are ideal for medium-volume industrial brazing and soldering operations where increased throughput is required without any compromise in quality. Choose a pre-designed, off-the shelf system or let our engineering staff customize a design to meet your specific tooling requirements.

Our cost-effective Model AB-1 Automatic Brazing System includes dual 5kW induction heating power supplies and a four or six-position indexing table. Front panel start/stop push buttons place the system in a PLC-controlled auto run mode with full manual

control available for process development. To maximize safety, optional water or air quenches can be utilized to cool the parts before they are returned to the operator. The low-voltage induction coils are isolated from earth ground.

Other available options include multiple joint brazing, a digital chart recorder, automatic flux dispensing, wire feed of alloy and automatic placement of the alloy preforms.

When compared to other heating methods such as open flame, resistance or a hot gun, induction heating provides many advantages for brazing and soldering. An induction system

provides quick, clean, consistent and highly controllable heat within precise production tolerances so that the characteristics of the surrounding metal are not affected. Cycle times are typically less than 20 seconds per part, as fast as three seconds per part or 4800 parts per hour with a four-position coil. Closed loop temperature can be achieved with the addition of a temperature-sensing mechanism such as an optical pyrometer.

The Model AB-1 is completely self-contained with a built-in water-to-air heat exchanger. The system requires a 240/480 VAC three-phase, 40 Amp electrical hookup and 80 PSI air pressure.

AB-1 Automated Brazing System



OPERATOR SAFETY FEATURES

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

OPTIONS AND ACCESSORIES

- Quenching water or air
- Optical pyrometer
- Digital data recorder
- Multiple joint brazing
- Automatic flux dispensing
- Wire feed of alloy
- Automatic placement of alloy preforms
- LAN interface for data exchange

CONTROLS

- PLC controlled with single push button operation
- Store up to 35 different processing programs
- Available with PLCs from Allen-Bradley, GE Fanuc, XYCom and others

POWER SUPPLY REQUIREMENTS

- Typically 3-7.5 kW per braze joint

CYCLE TIME

- Typically less than 20 seconds per part; as fast as three seconds per part or 4800 parts per hour with a four-position coil

ELECTRICAL REQUIREMENTS

- 240 or 480 VAC, 3-Phase, 40 Amp service (typical)

AIR PRESSURE

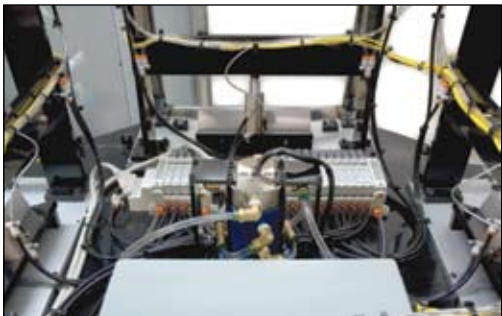
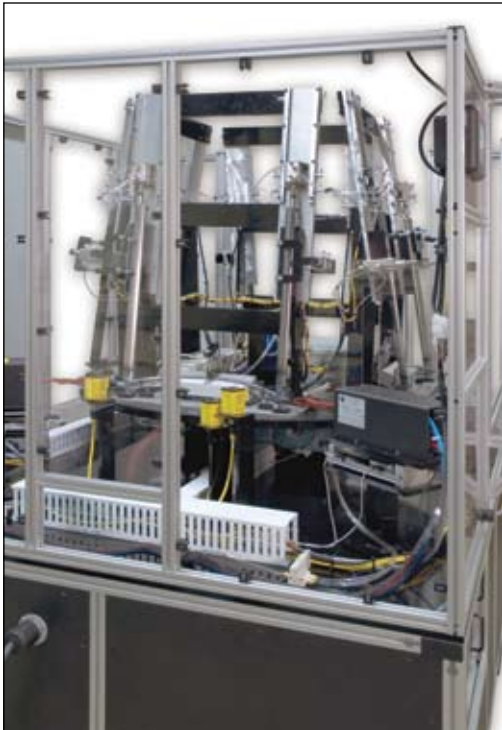
- 80 psi (typical)

DIMENSIONS

- 4' W x 4' D x 8' H (1220 x 1220 x 2440 mm)

WEIGHT

- 700 lbs. (317.51 kg)



Learn about brazing procedures,
alloys, atmospheres and more!

Visit our Online Brazing Guide
www.inductionatmospheres.com



35 Industrial Park Circle • Rochester, NY USA 14624
Tel: 585.368.2120 • Fax: 585.368.2123
www.inductionatmospheres.com

© August 2008, Induction Atmospheres LLC. All information subject to change without notice.