



Model EB-4 Epoxy Bonding System

- Compact 3' x 4' Footprint Fits Your Manufacturing Cell
- Indexing Turntable For Easy Loading And Unloading
- Designed For High Throughput With Single Operator
- Multiple Heat Program Capability
- Energy-Efficient Induction Heating System
- Facilitates Continuous Flow Manufacturing

Our IA semi-automatic epoxy bonding systems are ideal for bonding flexible, epoxy-based gaskets to metal or other conductive material without a third bonding agent. 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 EB-4 Epoxy Bonding System includes dual 2kW induction heating power supplies and an 8-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, integral air quenches cool the parts before they are returned to the operator. The low voltage induction coils are isolated from earth ground.

Common applications for these systems include bonding gaskets to metal automotive parts, thermoplastic composite bonding, and rubber washer/bumper assemblies. Bonding rubber to metal requires accurate heat control with temperatures in the range of 300-350°F in order to properly form the bond.

When compared to other heating methods such as open flame, resistance or a hot gun, induction heating provides many

advantages for adhesive bonding. 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. Closed loop temperature can be achieved with the addition of a temperature-sensing mechanism such as an optical pyrometer.

The Model EB-4 is completely self-contained with a built-in water-to-air heat exchanger. The system requires only requires 240/480 VAC three-phase electrical hookup and 80 PSI air pressure.

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OPERATOR SAFETY FEATURES

- Light curtains
- E Stop
- Systems Guarding
- Fully Isolated Heating System
- Custom designed to support part feed rates and temperature
- Powder-coated and/or black anodized surfaces for long life

OPTIONS AND ACCESSORIES

- Quenching water or air
- Optical pyrometer
- Digital data recorder
- Multiple zone heating
- Wonderware control

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 upon request.



POWER SUPPLY REQUIREMENTS

Typically 2 kW per bonding area.

CYCLE TIME

Typically less than 20 seconds per part; 3 seconds per part maximum.

ELECTRICAL REQUIREMENTS

- 240 or 480 VAC, 3-Phase, 20 Amp service (typical)

AIR PRESSURE

- 80 psi (typical)

ADHESIVE MATERIAL COMPATIBILITY

Epoxy-based adhesives from companies such as:

- L&L Products
- Orbseal

DIMENSIONS

- 4' W x 3' D x 8' H (1220 x 915 x 2440 mm)

WEIGHT

- 700 lbs. (317.51 kg)



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