



Model HS-2 Heat Staking System

- For Inserting Metal Components Into Plastic Assemblies
- Compact 3'x 3' Footprint Fits Your Manufacturing Cell
- Designed For High Throughput With Single Operator
- Energy-Efficient Induction Heating System
- Facilitates Continuous Flow Manufacturing

Our semi-automatic heat staking systems are ideal for inserting metal components into plastic assemblies. Choose a pre-designed, off-the-shelf system or let our engineering staff customize a design to meet your specific tooling requirements.

For the injection molder who is looking to add value, our heat staking systems may be used for a variety of products with easy change-over fixturing and PLC control for added flexibility. Our systems are designed for use by a single operator and can be integrated into your manufacturing cell to facilitate lean, continuous flow manufacturing.

Our cost-effective Model HS-2 Heat Staking System includes a 2kW induction

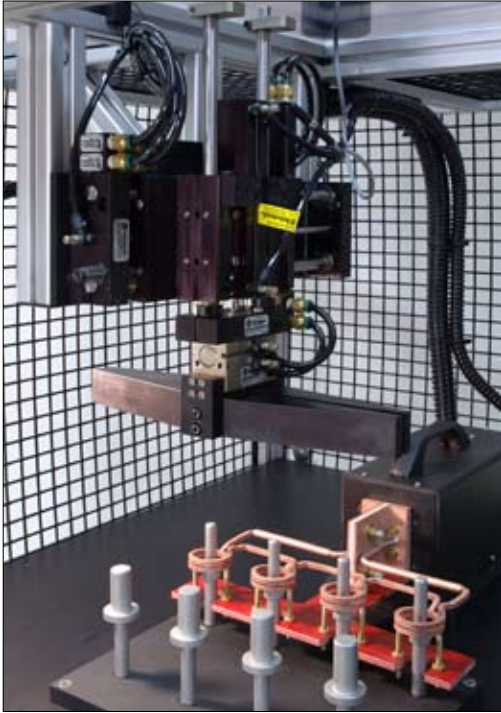
heating power supply and a custom-designed, four-position induction coil which is safely isolated from earth ground. The side-mounted control console includes start/stop push buttons which place the system into auto run mode. Full manual control is available for process development.

In one common application, threaded metal ferrules are bonded to plastic automotive parts. Brass or steel ferrule inserts are first moved into position above corresponding holes in the plastic material. After the inserts are heated to the correct temperature, they are quickly pressed into the plastic. The plastic immediately surrounding the inserts melts and flows into the knurl areas. The plastic then cools and securely holds the metal gaskets in position.

When compared to other heating methods induction heating provides many advantages for heat staking applications. An induction system provides quick, clean, consistent and highly controllable heat within precise production tolerances. Cycle times are typically less than 15 seconds per part. Closed loop temperature can be achieved with the addition of a temperature-sensing mechanism such as an optical pyrometer.

The Model HS-2 is completely self-contained with a built-in water-to-air heat exchanger. The system requires only 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 15 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)

DIMENSIONS

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

WEIGHT

- 700 lbs. (317.51 kg)



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