Hot Plate Welder
Model HH-15

General Description
Branson’s HH Series horizontal hot plate welder Model HH-15 is a complete assembly system designed to weld parts up to 12” by 15” (300 by 375 mm), or multiple smaller parts.

Hot Plate Welding
Hot plate welding is used to join two or more thermoplastic parts and can produce a high-strength hermetically sealed assembly. The part surfaces are melted by contact with a heated platen and then precisely clamped together to form the final assembly. The flexibility of this process permits a wide latitude in designing parts.

Process Advantages
- Difficult geometries can be welded (e.g., compound curves, multi-level).
- Can weld internal walls.
- Produces consistent, high-pressure hermetic seals.
- Eliminates consumables (e.g., glues, solvents, adhesives, etc.).

HH Series – Horizontal Heat Platen
- Automatic part pick-up available.
- Loose internal parts stay in place.
- Both part halves can be loaded at the same time.
- Heat platen can be loaded from the front of the machine.
- Heat platen can be easily serviced and changed.
- Can be adapted to in-line systems, conveyors or dial tables.
## Hot Plate Welding

### STANDARD FEATURES

<table>
<thead>
<tr>
<th>Feature</th>
<th>BENEFITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compact design</td>
<td>Small footprint minimizes floor space requirement</td>
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<tr>
<td>Interlocked safety doors with full guarding</td>
<td>Maximum operator safety</td>
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<tr>
<td>Heavy duty construction</td>
<td>Consistent alignment of tools/platen</td>
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<tr>
<td>Allen-Bradley SLC-500</td>
<td>Precise machine control with easy cycle parameter modification</td>
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<tr>
<td>Touch screen HMI</td>
<td>Ease of setup</td>
</tr>
<tr>
<td>Automatic cycle start on closing of door</td>
<td>Increased production rates</td>
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<tr>
<td>Single zone temperature controller</td>
<td>Allows for precise temperature control</td>
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<tr>
<td>Digital temperature controller</td>
<td>Ease of setup</td>
</tr>
<tr>
<td>Two vacuum and two mechanical part clamping circuits/valves are standard</td>
<td>Set-up versatility</td>
</tr>
<tr>
<td>Auto part pick-up</td>
<td>Ease of part loading</td>
</tr>
<tr>
<td>Raising lower press platen</td>
<td>Safer operation than moving overhead press</td>
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</tbody>
</table>

### Electrical Specifications:

- **Machine Controller:** Allen-Bradley SLC500 programmable controller
- **Interface:** Proface Monochromatic
- **Power Requirements:** 480V AC, 3 phase, 60 Hz, 20 amp

### Mechanical Specifications

- **Weight:** Approx. 2,300 lbs. (1,045 kg)
- **Dimensions:**
  - Overall: 58"W x 55"D x 79"H (1473 mm x 1397 mm x 1207 mm)
  - Heat platen size: 15" wide x 12" deep (375 x 300 mm)
  - Max. distance between press platens (std): 27" (685 mm)
  - Max. vertical press stroke: 16" (406 mm)
  - Max. heat platen stroke, in/out: 14" (355 mm)
  - Max. heat platen stroke, up/down: 4" (102 mm)
- **Air Pressure:** 80 psi minimum (552 kPa)

### Ordering Information:

**Branson EDP No.**

| HH-15 Hot Plate Welder | 300-101-04 |

**Options**

- Additional heat zone controller.
- Heater burnout alarms (per zone).
- Light screen.
- Hood with exhaust fan.
- Hood with smoke and fume “scrubber”.
- Cycle counter with key reset.
- Lower frame side panels.
- Overhead operator light.
- On-board printer.
- RS-232 port for SPC capability.

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**Note:** All sales shall be subject to the Supplier’s terms and conditions of sale as described in Branson’s quotations and sales contracts.

**Warranty:** The HH Series hot plate welder is warranted to be free from defects in materials and workmanship for two years.

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**Revised and printed in the U.S.A. 6/2011**