



FORWARD TECHNOLOGY

a Crest Group Company



(shown with optional features)

B3A-1148

Horizontal Three Battery Air Hot Plate Welder

The B3A-1148 is a horizontal heat platen orientation, pneumatic motion controlled hot plate welding system specifically designed for welding: three Standard Group size batteries 9"D x 14"W x 12"H (228mm x 355mm x 305mm) or smaller per welding cycle; OR two Commercial Group size batteries 9"D x 20"W x 12"H (228mm x 508mm x 305mm) or smaller per cycle.

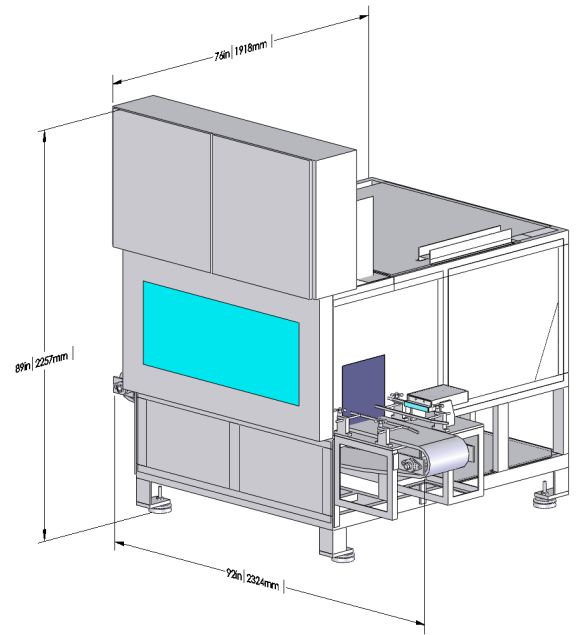
The system design is ideal for welding:

- Battery covers to cases.
- Battery manifold covers to case covers.

This horizontal systems single motion (upper) tool mounting jaw makes possible automatic feed of the battery components into the equipment for welding and automatic out-feeding of the welded batteries via the system's built-in conveyor system.

Standard Features

- **Ultra-Rigid Construction** utilizing a tubular steel framework with leveling feet and linear guide shafts & bearings designed for precise tool alignment through decades of use.
- **Polymer Pass-Thru Power Conveyor System** allows pass-through assembly of the battery components in the production line. Conveyor system is fully guarded end-to-end. Customer is responsible for further guarding of adjacent, supplied infeed/outfeed conveyor segments to fully comply with OSHA standards.
- **Fully Automatic Cycle/Start & Operation** enables system to cycle without operator intervention based on part flow down the assembly line. System recognizes entry of batteries into the welder via power conveyor and automatically starts the welding cycle when the batteries are in the welding position.
- **Pneumatically Actuated In-Feed Diverter System** controls quantity and rate of entry of pre-assembled battery components into the welding positions. Presence sensors verify battery components are properly staged in the in-feed area and enables actuation of diverter to allow components to continue into welding positions.
- **Pneumatically Actuated Locating Rail** ensures precise location of battery components entering on the conveyor system. Presence sensor detects correct positioning of battery on conveyor stop block and enables actuation of locator rail to properly square battery in position for welding. Upon completion of welding, the locating rail and conveyor stop blocks retract allowing welded product to exit system on conveyor.
- **Digital Three-Zone Temperature Control via PLC with Heater Burnout Alarm** ensures even heating and precise temperature control with temperature alarm limits. Burnout alarm halts operation of the machine in the event of platen heater failure.
- **Programmable Automatic Heat Platen Startup (Time/Date Based)** saves production time as the machine can be user programmed to automatically initialize warm-up of heat platen before start of production.
- **Allen Bradley MicroLogix PLC with PanelView Plus 7 - 700 Color 6.5" Touch-Screen Graphical Display** simplifies parameter input and allows the following to be displayed:
 - Melt, Weld (Seal), & Open Time Digital Control & Display
 - Resettable Parts Counter
 - Non-Resettable Total Machine Cycle Counter
 - Diagnostic Display
 - Machine Alarms (history storage of up to 99 alarms)
 - Ethernet Connectivity
- **Multi-Level Passcode Protection** limits parameter adjustment to qualified personnel only.
- **10 Weld Program/Setup Memory** allows storage for instant recall, minimizing tool change time.
- **External 120VAC Duplex Electrical Outlet** allows user to easily connect small auxiliary equipment such as computers, printers, radios, etc.
- **Three Venturi 25.0 in/Hg (63.5cm/Hg) Vacuum Pump Systems** designed to secure even the largest parts within the tooling. Vacuum sensors on each circuit verify presence of battery cover in tooling after part pick-up.
- **Front & Rear Hinged Access Panels with Safety Interlock Switches** allow extensive access while providing maximum personnel protection.
- **Vent Hood with Exhaust Fan** evacuates airborne smoke and particulate from the interior enclosure.



MECHANICAL SPECIFICATIONS:

Weight:	~5000 lbs (2268kg)
Overall Dimensions:	83.0" D x 93.0" W x 90.1" H (2108mm x 2362mm x 2289mm)
Maximum Heat Platen:	11.0" x 48.0" (279mm x 1219mm)
Heat Platen Carriage Stroke (back-front):	14.0" (356mm)
Heat Platen Assembly Lateral Stroke (top-bottom):	3.5" (89mm)
Tool Mounting Jaw(s):	(3 each) 11.0" x 16.0" (279mm x 406mm)
	OR
	(1 each) 11.0" x 48.0" (279mm x 1219mm)
Daylight Opening (between Tool Mounting Jaw & Conveyor):	21.0" (533mm)
Tool Mounting Jaw Stroke:	9.0" (229mm)

PERFORMANCE SPECIFICATIONS:

Moving Tool Mounting Jaw(s):	Triple - Upper OR Single - Upper
Total Clamp Force:	390 lbs @ 80 PSI (1.74kN @ 5.5 Bar)
Dual Venturi Vacuum System:	25.0 in/Hg (63.5cm/Hg)
Thermal Temperature Range:	100°F - 1000°F (38°C - 538°C)
	Tooling and Application Dependent
Warranty:	1 Year (Parts & Service)

SYSTEM REQUIREMENTS:

Electrical Requirements:	240VAC, 3PH, 60 Hz
Pneumatic Requirements:	80 PSI, 0.5" ID (5.5 Bar, 13mm ID) Supply Line

System includes Filter/Regulator/Lubricator



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