



Polaris Electronics Corp. offers projection welders and parallel seam sealers for microelectronic and optoelectronic packages, as well as spot welders, lid tackers and other, optional accessories designed to meet every **hermetic sealing** need. Such needs often include atmosphere chambers, vacuum/bake-out ovens, gas dryers and other compatible accessories to assist customers in effectively tailoring a system for their specific requirement. Their broad spectrum of technologically advanced hermetic sealing systems, optional accessories and service assistance have been field proven for over thirty years to operate with exceptional accuracy and efficiency, providing their customers with little or no yield loss.

PROJECTION WELDERS



Accu-Weld 4100 AC/Accu-Weld 4200 CD

This system has capability of hermetically sealing one small metal electronic package at a time in one shot by pulling a vacuum and welding, pulling a vacuum and backfilling with an inert gas and welding, or by welding without pulling a vacuum or backfilling with an inert gas.



Accu-Weld 5100 AC/5200 CD

This system will weld one projection weld type package with flanges on the header and lid at a time. This system does not have the capability of welding in a vacuum.



Accu-Weld 7100 AC/Accu-Weld 7200 CD

This system with capability of hermetically sealing (8) small metal electronic packages in one shot on our (8) position rotary table welding system. Accu-Weld 7100 AC/7200 CD (8) position rotary table projection welding system. This system has (8) positions available for loading (8) packages at a time on the rotary table and welding at a rate of 2000 + per hour depending on material and size of package.

PARALLEL SEAM SEALERS



Venus III Parallel Seam Sealer

This system will hermetically seal one small metal/ceramic electronic package (in a square or rectangular configuration) at a time. For years, the Venus III has proven its accuracy, reliability and cost efficiency. The straightforward engineering minimizes operator training and maximizes quality out-put. The low initial cost of the Venus III delivers the fastest payback in the industry.

LID TACKER



LID TACKER

This system was designed for tacking lids on to headers before taking them into a vacuum/bake-out oven and then into an inert gas filled glove box to hermetically seal the package shut. The Lid Tacker tacks a variety of lid sizes for microelectronic and optoelectronic packages using either a singular or matrix (multiple) mode. It is also ideal for fine wire and ribbon bonding to hybrid or microwave circuitry, fine line printed circuit traces, miniature components and thin or thick film substrates.

PARALLEL SEAM SEALERS



Snap-Tite SPACER/INSULATOR APPLICATION SYSTEM

OPTIONS



Atmosphere Chambers

Future charging system with 1 1/2" water column positive pressure of nitrogen or other inert gases. They are constructed from 304 stainless steel featuring a modular construction with removable end panels. Optional moisture monitors and current analyzers available with our atmosphere chambers.



Pass-Thru Interlock Chamber

Remove welded parts independent of the oven.

- Purging Gas Controls and dual interlock doors maintain gas integrity in atmosphere chamber.



Vacuum Bake-Out Oven

Used to bake packages under vacuum to help eliminate moisture. Our standard Vacuum Bake-Out Oven features automatic oven control up to 200° C. A special order system is available with an automatic oven control up to 350° C.



The Orion II Gas Dryers

Capable of achieving levels of less than 5 PPM of moisture and oxygen. They are available in both single and dual column systems and recirculate gas at 2400 CFH.



Current Analyzer - Argus I

- Monitors current during welding process
- Essential for setting up precise weld schedules
- Available with optional Cycle Master Automatic Programmable Oven Sequencer



Hermetic Sealing Services

Metal to metal and ceramic to metal microelectronic and optoelectronic package sealing to mil standard Vacuum bake-out to help remove moisture Leak Tests to Mil standard De-lidding packages to preserve electronics