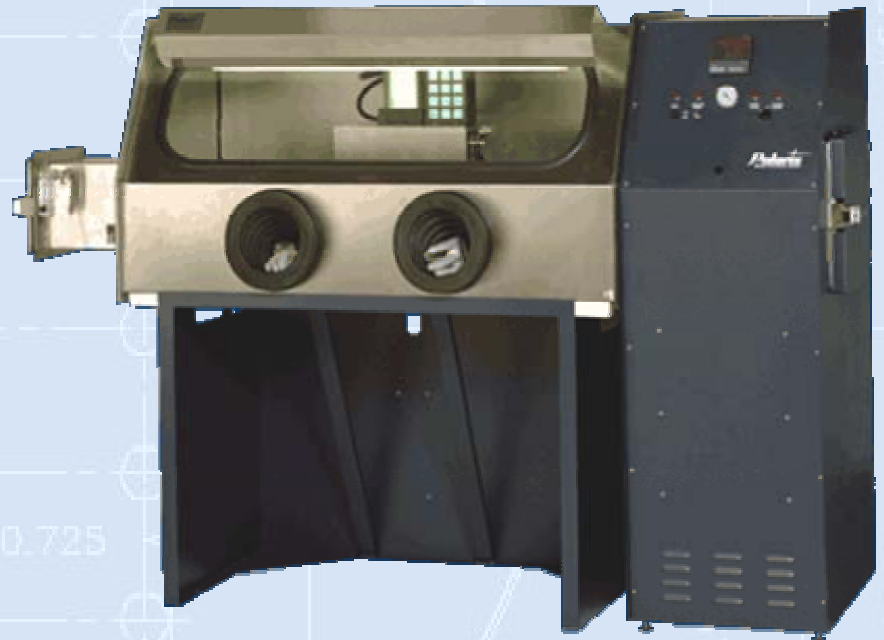




Polaris Electronics Hermetic Welding Systems

Protect your investment

- Our company started producing Hermetic Welding Equipment in 1971. Many of our earliest welders are still working in the field.
- When advances are made in our electronics or software, we make them retrofitable to our existing welders in the field. You will never hear "We no longer support that model."
- Our service representatives have an average of 15 years experience building and servicing our equipment. If you ever have a problem, that level of knowledge will get the problem resolved quickly.
- Our welding systems are all modular so you get what you need. As your needs expand, our welding systems expand with you.
 - Atmosphere chambers, vacuum bake-out ovens, gas dryers, gas mixers and various environmental control and monitoring equipment can be part of the original configuration or added as needed.





5100 AC/5200 CD Single station Welder

- **Welds microelectronic and optoelectronic packages: DIP packages, TO, optical, semiconductor, crystal and custom packages**
- **Welds to MIL SPEC 883**
- **Energy output independent of power fluctuations**
- **1,000 to 12,000 Joule transformers available for CD systems**
- **Adjustable weld head and travel speed**
- **Automatic ejection of welded packages**
- **Production rates up to 800 packages per hour**
- **Stand alone or enclosed in an atmosphere chamber**
- **Pre-aligned/indexed electrodes for easy dressing and changing**
- **CE certified**





7100 AC/7200 CD Multi-Station Welder

- Production rates up to 2000 packages per hour
Welds microelectronic and optoelectronic packages: DIP packages, TO, optical, semiconductor, crystal and custom packages
- Welds to MIL SPEC 883
- Energy output independent of power fluctuations
- 1000 through 7000 Joules available in CD systems
- Automatic ejection of welded packages
- Pre-aligned/indexed electrodes for easy dressing and changing
- Stand alone or enclosed in an atmosphere chamber
- CE certified





Accu-Weld 4100/4200 CD Vacuum Welder

- The 4100AC/ 4200 CD can provide vacuum or special gas backfill around the package before welding.
- Vacuum levels down to 1 millitorr at the weld point are easily achievable.
- Hermetically welds microelectronic and optoelectronic packages: DIP packages, TO, optical, semiconductor, crystal and custom packages.
- Welds to MIL SPEC 883.
- Adjustable weld head and travel speed.
- Pre-aligned/indexed electrodes for easy dressing and changing.
- Self-diagnostic with error code read-out.
- CE Certified



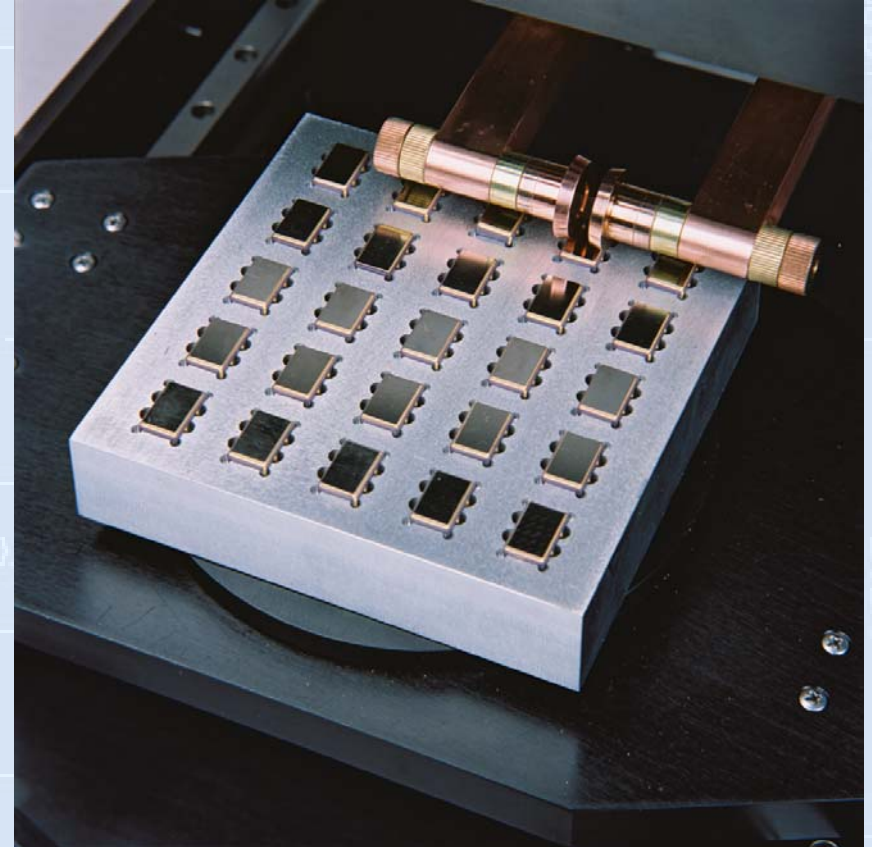
Venus IV Seam Welder

- The Venus IV matrix seam welder delivers high performance and high production weld after weld.
- Sealing capability up to 2000 parts per hour in matrix mode
- Rectangular and square packages from .05" to 5.5" with fixturing available for up to 9" packages to MIL SPEC 883
- Single or matrix self-contained tacking operation available for stepped and non-stepped lids
- Seals round packages
- Low package temperature during sealing process
- Independent stepper motor control of all 6 axes of motion.
- Graphical display and controls conveniently located in the same area.



Venus IV Seam Welder

- Programmable weld speed of .05 to 2.0 in/sec.
- Non-volatile memory with storage for up to 60 weld schedules.
- Graphical display and controls conveniently located in the same area.
- Positioning accuracy 0.001" (stepper motor control).
- Embedded microprocessor control of all functions.
- Maximum power output of 3500 watts.
- CE Certified



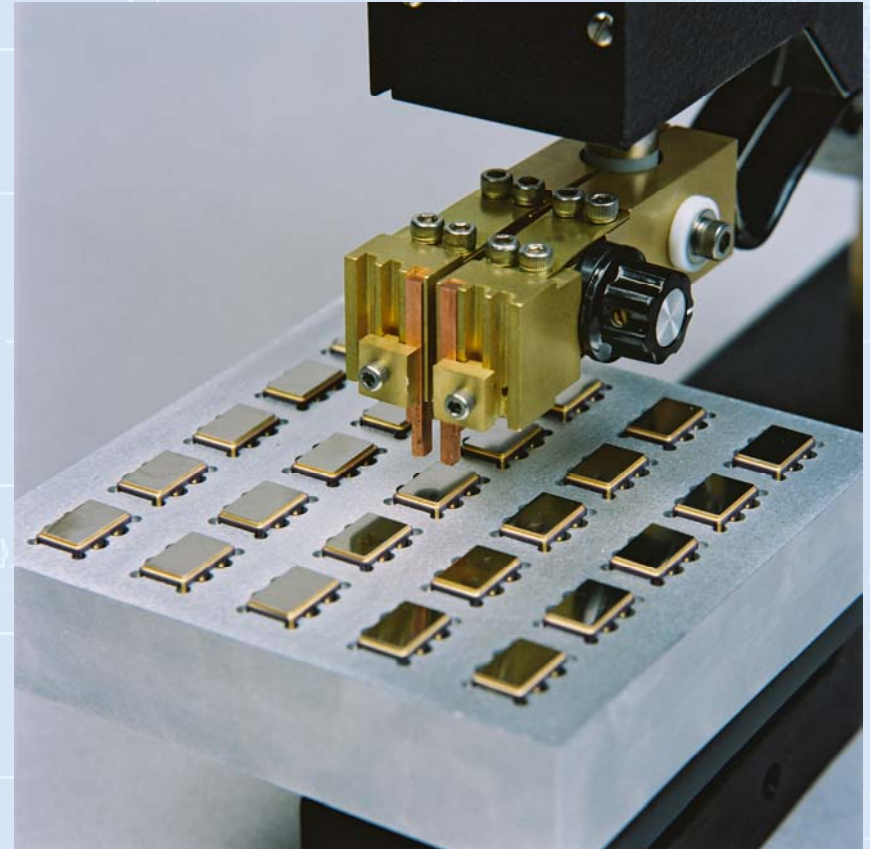
Venus III Seam Sealer

- The Venus III delivers the fastest payback in the hermetic seam sealing industry.
- Single package, hermetic sealing and solder reflowing on microelectronic and optoelectronic metal and ceramic packages to MIL SPEC 883.
- Linear Sealing for square and rectangular packages from 0.8" to 5.5" with fixturing available for packages up to 9".
- Microprocessor-controlled phase angle firing for power control.
- Force equalizing system between electrodes.
- Low package temperature during sealing process.
- Automatic force compensation at corner of packages.



Lid Tacker

- **Ideal for tacking a wide variety of lid sizes to microelectronic, optoelectronic,, semiconductor, and crystal packages**
- **Available for fine wire and ribbon bonding to hybrid or microwave circuitry, miniature components, and thin or thick film substrates**
- **Can be used inside or outside the atmosphere chamber**
- **Tacks lids in single or matrix mode**
- **Adjustable gap range: 0" to .060"**
- **Total gap range: 0" to 1.0"**
- **Throat depth: 6.75"**
- **Manual or air activation**
- **Power supply: AC – 1KVA, 3.5 V**
- **Electrical Service Requirements: 220V, 20Amp, Single Phase**



Spot Welders

- **We applied the technology developed for hermetic sealing to precision spot welding and got dramatic results.**
- **The precise control of current and force by the Accu-Weld Spot Welder delivers better yields than other spot welders.**
- **Available with AC or +/- DC current, the Accu-Weld Spot Welder can weld a wide variety of part sizes and materials including wire welding.**
- **Microprocessor Control with key pad entry and LED read-out**
- **Power Supply available in 1.0 KVA, 3.5V or 7.5 KVA, 7V**
- **Electrical service requirement: 220V, 20 AMP, Single Phase**
- **Throat Depth: 2.5" to 4.5"**



Gap Welder

- The economical Polaris Gap Welder delivers precise bonding of fine wires and ribbon to hybrid or microwave circuitry, miniature component and thin or thick film substrates.
- Polaris developed a solid-state, microprocessor-controlled power supply that delivers the constant power and the precise time control essential for reliable and consistent gap bonds.
- The parallel gap weld head design features dual cantilever type electrodes and produces parallel gap step bond using resistance welding, reflow soldering or resistance brazing.
- Materials as diverse as gold, nichrome, platinum, kovar, nickel, inconel, stainless steel, cold-rolled steel and silver can be joined using gap techniques and the appropriate power supply.



Gap Welder

- **Adjustable gap range: 0" to .060"**
- **Step Max 0" to .030" (contact factory if greater step is required)**
- **Electrode travel: .625"**
- **Electrode Force: up to 10lbs. Continuously adjustable**
- **Throat depth: 6.75"**
- **Manual or Air Activation**
- **Dimension: 12" x 1.72" x 11.25"**
- **Table dimension: 4" x 5"**
- **Weight 16lbs.**
- **Power supply: AC-1KVA, 3.5V**

