



Benchmark SM8500

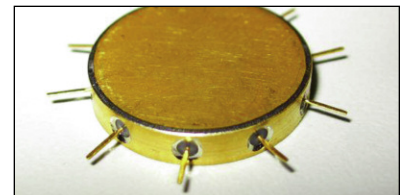
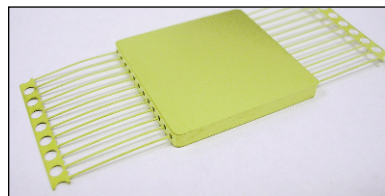
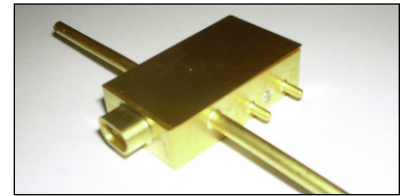
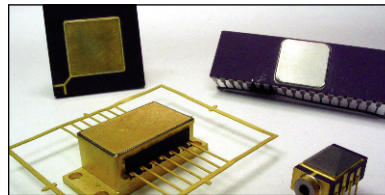
Parallel Seam Sealing System

Packed with advanced features, the Windows®-based SM8500 parallel seam sealing system, reliably performs welding, brazing and soldering processes on a variety of metals, metal alloys, plated materials, and solder pre-forms. It can be operated as a stand-alone unit or fully integrated into an environmental enclosure for a complete closed loop hermetic sealing process.

KEY FEATURES

- Utilizes the advanced HF25 25 kHz closed-loop feedback weld power supply
- Programmable electrode force enables user to optimize both force and energy
- Indexed electrodes ensure extended, even wear providing superior results
- Position-based weld pulses provide increased or decreased energy at part corners reducing corner leaks
- Electrode roll-back feature facilitates electrode release from light weight parts
- Circular mode seam sealing allows processing of round parts

TYPICAL APPLICATIONS





WIDE RANGE OF PART PROCESSING CAPABILITIES

- Operates as tacker only, sealer only, or combined tacker-sealer
- Four-pass welding feature starts weld from center and welds to the part corner – for large part sealing
- Set different energy levels for each axis welded for higher yields on rectangular parts
- Many tacking options – tack center, four-side tacking, multiple tacking
- Real time monitoring of weld inhibit inputs such as moisture, oxygen, and helium levels
- Unlimited weld schedule storage
- Lid hold down feature assists tacking process
- Multiple weld schedule chaining feature
- Optional CCTV camera available to assist the operator for improved lid placement
- Batch reporting option

TECHNICAL SPECIFICATIONS

Part size	0.158 in to 8 in (4 mm to 203 mm)	
Position encoder resolution	X – 20,000 cts/in,	
Position encoder resolution	Y – 40,000 cts/in	
Weld force (programmable)	500 to 5000 grams	
Linear weld speed	0.01 to 1.5 in/sec	
Rotary weld speed	0.01 to 1.5 linear- in/sec (720° max. rotation)	
Input gas requirements	60 psi minimum	
Input power – HF25 power supply	Three phase, 192-264 VAC (240 V nominal), 50/60 Hz, 25 A Three phase, 320-440 VAC (400V nominal), 50/60 Hz, 20 A Three phase, 384-528 VAC (480 V nominal), 50/60 Hz, 13 A	
HF25 current output	100 to 2400 A, ± 2 A	
HF25 pulse width	0.10 to 99.00 ms	
Mechanism input power	Single phase, autovolt 110 to 240 VAC 50/60 Hz, 15 A	
Calibration	To NIST standards	CE Certified

WEIGHT & DIMENSIONS

	SM8500 Mechanism	HF25 Power Supply
Dimensions (L x W x H)	23.0 in x 22.0 in x 18 in (584 mm x 559 mm x 470 mm)	16.25 in x 9.25 in x 13.0 in (413 mm x 235 mm x 330 mm)
Weight	85 lb (38.5 kg)	54 lb (24.5 kg)

