

SC1775S/1875S

Automated Stent Crimping Equipment



SC1775S

The MSI SC1775S/1875S Automated Stent Crimping Equipment expands upon industry proven manufacturing technology with vision assistance, automated product handling, bar code scanning, dual axis laser micrometer, leak detection and networking. These capabilities make the SC1775S/1875S an excellent choice for high volume manufacturers looking for advanced process control and integration with current MES systems.

The SC1775S/1875S is PLC controlled with an industrial PC HMI touch screen user interface. The PC HMI allows for networking with local and server based data management and integration with other systems. Processes are recipe/profile driven utilizing multiple alarms associated with product and cycle limits that can be stored locally or at the server level. The proprietary MSI Film Head Technology option protects drug coatings and polymer scaffolds during crimping.

SC1775S/1875S Features

- **PLC control with industrial PC HMI.**
- **Film Crimp Head option protects coatings & polymer scaffolds.**
- **Bar code scanning capabilities.**
- **Automated force calibration.**
- **Networking capabilities.**
- **Dual axis laser mic option.**
- **Leak detection option.**
- **Stores up to 999 recipes, 20 stages per recipe.**



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Summary of Spec Data

Control System	PLC control with industrial PC HMI 20 stages per recipe, 999 recipes
SC1775S Crimp Head Length	60mm (standard)
SC1875S Crimp Head Length	120mm (standard)
Operating Diameter Range	0.5-10mm (Thermoplastic, SS) 0.5-5.75mm (Film Head)
Operating Force Range	10-100, 20-200 or 30-300 lbs
Diameter Accuracy (Close Direction)	±0.001 in (±0.25mm)*
Force Accuracy/ Repeatability	±1% of full scale / ±0.4% of full scale
Data Storage & Networking	Ethernet, USB thumb drive
Balloon Pressure/Vacuum	3-300 PSI (standard) / 29 inHg (736mmHg) at sea level
Crimp Head Temperature Range	Room temperature to 100°C (over temp limited to 100°C)
Temperature Accuracy	±3°C
General Warranty	1 Year

*0.020-0.100 diameter, 30-150 lbs crimp force.

SC1775S Machine Dimensions

- Shipping Weight: 225 lbs (102 kg)
- Machine Weight: 155 lbs (70 kg)
- Height: 22 in (559 mm)
- Width: 30 in (762 mm)
- Depth: 24 in (610 mm)

SC1775S/1875S Equipment Specifications

Control Mode

- Crimp Diameter – Servo controlled.
- Crimp Force – Servo controlled.
- Catheter Position in Head – Servo controlled.
- Crimp Head Temperature – PLC controlled with over temperature protection.
- User access levels – four standard, programmable.
- Reminders and lock out for service activities.

Sensors

- Crimp Force – Load cell with overload protection.
- Crimp Diameter – High resolution optical encoder.

Inputs / Outputs

- MES option – various manufacturers, Ethernet or serial port.
- Local or server based profile management.
- Key process parameters stored local or server based.

Options

- Post-crimp laser micrometer inspection.
- Integrated barcode scanning.
- Integrated leak detection.
- Post-crimp image capture with high resolution camera.

Line Voltage/Power

- 110-220 VAC 50/60Hz.

Operating Environment

- 60-85°F (15-29°C).
- 0-85% RH, non-condensing.

Storage Temperature

- 32-140°F (0-60°C).

Safety Features

- Category III safety circuit.
- Polycarbonate safety covers with interlock switches.
- CE compliant.

SC1875S Machine Dimensions

- Shipping Weight: 315 lbs (143 kg)
- Machine Weight: 195 lbs (88 kg)
- Height: 23 in (584 mm)
- Width: 42 in (1067 mm)
- Depth: 24 in (610 mm)