

SC775S/875S Stent Crimping Equipment



The MSI SC775S/875S stent crimping equipment maximizes operator efficiency and streamlines product handling through automation, process control and feedback. This equipment is intended for medium to high volume manufacturing of balloon expandable stents and balloon expandable stent graft products. The SC775S/875S integrates the proprietary MSI segmental compression mechanism with PLC control and touch screen user interface. Data acquisition allows cycle data to be collected and stored for quality purposes.

The SC775S/875S stent crimping equipment utilizes multi-stage profiles with crimp-to-force and crimp-to-diameter movements, especially important for minimizing recoil associated with cobalt-chromium stents. Staged interrupts allow for in-process inspection and re-sheathing, and synchronized balloon vacuum and inflation can increase stent retention. Process alarm windows managed by the SC775S/875S ensure the crimping process remains in control.

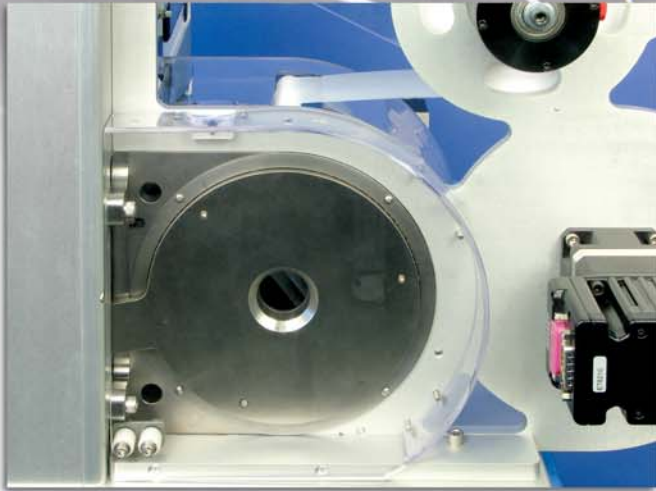
SC775S/875S Features

- PLC operated, software driven system.
- Servo motor activation.
- Crimp-to-force and crimp-to-diameter operating modes.
- Improved stent retention and stent profiles.
- Multi-stage profiles with synchronized balloon pressure and process interrupts.
- Cycle data acquisition and storage for quality purposes.
- Crimp Head Options:
 - Stainless Steel (heated, non-heated)
 - Thermoplastic
 - Quick Change
 - Film Crimp Head



SC775S/875S

Stent Crimping Equipment



Summary of Spec Data

<i>Crimp Diameter Range</i>	0-10mm
<i>SC775S Crimp Head Length</i>	60mm (Standard)
<i>SC875S Crimp Head Length</i>	120mm (Standard)
<i>Maximum Crimp Force</i>	100lbs (Thermoplastic) 300lbs (Stainless Steel)
<i>Power Requirements</i>	110 or 220 VAC
<i>Pneumatic Requirement</i>	Standard Shop Air, Clean and Dry
<i>Data Storage</i>	CompactFlash®
<i>Balloon Pressure</i>	300psi (Standard)
<i>Balloon Vacuum</i>	Up to 600mmHg
<i>Force Display Accuracy</i>	±1% of Full Scale
<i>Diameter Display Accuracy</i>	±0.0254mm*
<i>Units of Measure</i>	Selectable
<i>General Warranty</i>	1 Year

*0-0.100" diameter, 0-100lbs crimp force.

SC775S/875S Equipment Specifications

Control Mode

- Crimp Diameter – Servo controlled, operator adjustable.
- Crimp Force- PLC controlled, operator adjustable.
- Crimp Duration – Operator programmable PLC controlled.
- Crimp Temperature – Operator programmable digital controller with type K thermocouple.

Sensors

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

Outputs

- Crimp Diameter, Crimp Force – HMI touch screen.
- Machine Controls, Parameters, Mode, Calibration – HMI touch screen.
- Data Storage – CompactFlash®.
- Process Parameter Alarms – Crimp force and crimp diameter.

Options

- Laser Micrometer.
- Vision Alignment System.
- Rotational Product Handling.

Line Voltage/ Power

- 110 – 220 VAC 50/60Hz.

Operating Environment

- 60°F to 75°F (15°C to 24°C).
- 0 to 85% RH, non-condensing.

Storage Temperature

- 32°F to 140°F (0°C to 60°C).

SC775S Machine Dimensions

- Shipping Weight: 175lbs (79kg)
- Machine Weight: 145lbs (66kg)
- Height: 18" (457mm)
- Width: 28" (711mm)
- Depth: 22" (559mm)

SC875S Machine Dimensions

- Shipping Weight: 180lbs (82kg)
- Machine Weight: 150lbs (68kg)
- Height: 18" (457mm)
- Width: 33" (838mm)
- Depth: 22" (559mm)