



The MSI MS700S Mandrel Straightening Equipment recycles bent or bowed mandrels through an automated straightening process. The straightener utilizes a pick and place handling system capable of picking a single mandrel from a bin and automatically running it through the straightening process to be placed in the output tube upon completion. The MS700S has been configured for use with bare and coated stainless steel mandrels of various diameters and lengths with no need for tooling change.

The Mandrel Straightening Equipment features a touch screen interface and servo motor driven motion. The PLC control system allows for easy recipe setup, product change over, and precise control of the straightening process. Mechanical setup of the MS700S is recipe driven and automatically configured based on process parameters for any given mandrel diameter.

MS700S Features

- **Recycle bent or bowed mandrels.**
- **Reduced material costs.**
- **Automated pick and place product handling.**
- **Process multiple mandrel diameters without tooling changes.**
- **Works with bare and coated stainless steel mandrels.**



MS700S

Mandrel Straightening Equipment



Summary of Spec Data

<i>Mandrel OD Range</i>	0.012–0.040"
<i>Mandrel Length Range</i>	25–50cm (±1cm)
<i>Straightness Less Than Or Equal To</i>	0.025" of bend per 6" length
<i>Max Incoming Mandrel Bend/Kink Condition</i>	Bend - 0.12"/6" Kink - .002"/0.5"
<i>3 Sets Of Straightening Dies</i>	0.012-0.021", 0.021–0.031" 0.031-0.040"
<i>Input Tube Quantity</i>	Approx 100 parts
<i>Power Requirement</i>	220 VAC
<i>Pneumatic Requirement</i>	100psi

MS700S Machine Dimensions

- Shipping Weight: 620 lbs (181 kg)
- Machine Weight: 365 lbs (166 kg)
- Height: 54"(1372mm)
- Width: 34"(864mm)
- Depth: 24"(610mm)

MS700S Equipment Specifications

- Three (3) sets of straightening dies.
- Automated pick and place system.
- Servo actuated product handling system.
- Processed mandrels loaded into plastic output tube.
- Automatically configure dies based on profile selection.
- Laser measurement verifies mandrel diameter prior to processing.
- Diameter measurements falling outside of the profile specification are placed in reject tube.
- User defined lot size.

Control System

- PLC control system.
- Touch screen user interface.
- Process parameters stored and recalled via the HMI.
- Servo controlled parameters include: rotational speed, collet torque, pull rate/distance, straightening rollers separation and force.
- Password protected user manager.
- Interlock safety feature monitored by the PLC and halts the machine.