

FFS475/575iS

Simultaneous Pleat and Fold Capabilities for
Catheter Balloon Manufacturing

The **MSI FFS475/575iS** from Machine Solutions sets a new standard in balloon catheter pleating and folding by introducing independent servo motor-driven head activation, enabling the simultaneous operation of both pleat and fold processes. This innovative capability significantly enhances production efficiency, delivering faster cycle times and improved throughput without compromising on precision or quality.



Designed for demanding production environments, the FFS475/575iS combines the proven reliability of MSI's FFS475S/575S and FFS475i platforms with this advanced feature, making it the most versatile and high-performing pleating and folding solution available.

KEY FEATURES:

- **Simultaneous Pleat and Fold Processes:** Independent servo motor-driven head activation allows both pleat and fold operations to run concurrently, reducing cycle times and increasing throughput.
- **Industry-Leading Precision:** Ensures the tightest dimensional tolerances for consistent, high-quality results.
- **Enhanced Efficiency:** Streamlined operations with optimized production output.
- **User-Friendly Design:** Fully integrated machine controls via PLC/HMI for ease of operation and maintenance.
- **Pneumatic-Controlled Pucks:** Applies pressurized vacuum during folding and maintains vacuum during transitions.
- **Flexible Design:** Compatible with a wide range of pleat and fold head sizes for various balloon applications.
- **Scalable Recipe Storage:** Stores up to 1,000 profiles for quick setup and repeatability

SUMMARY OF SPECIFICATIONS

Category	Details
Pleat/Fold Head Length	FFS475S: 60mm, 80mm, 90mm FFS575S: 150mm, 250mm, 350mm
Thermal Compression Control	Ambient to 100°C / 212°F
Head Activation/Diameter Control	Independent Servo Motor Encoder
Simultaneous Operations	Run both pleat and fold processes simultaneously
Balloon Pressure	0 - 100 PSI
Balloon Vacuum	Up to 600 mmHg (at sea level)
Profile Storage Capacity	Up to 1,000 Recipes
Units of Measurement	User Selectable
Pleat/Fold Force	Up to 100 lb
Control System	PLC with PC HMI
Power Requirements	110 or 220 VAC
General Warranty	1 Year

ADDITIONAL EQUIPMENT SPECIFICATIONS

BASE UNIT FEATURES

- Independent servo motor control for simultaneous pleat and fold operations
- Pneumatic product holder pucks with pressurization and vacuum capabilities
- Indusoft Windows-based HMI with advanced process monitoring
- CE-compliant design with easy maintenance access
- Process force feedback for real-time adjustments.

PROGRAMMABLE PARAMETERS

- Starting diameter, fold head close diameter, delays, and dwell times.
- Balloon pressure and vacuum regulation.
- Force alarms and temperature control.

OPTIONS

- Barcode scanning for enhanced traceability.
- Vision alignment system for increased accuracy.
- Multi-Luer connections for flexible subassemblies.

APPLICATIONS

The FFS475/575iS is the ultimate solution for balloon catheter manufacturing environments that demand high throughput and precision. Its ability to run pleat and fold processes simultaneously makes it ideal for subassembly production and high-volume output.

MECHANICAL SPECIFICATIONS

Model	Height	Width	Depth	Weight
FFS475iS	20.0" (508mm)	34.0" (863.6mm)	29.0" (736.6mm)	155 lbs (70kg)
FFS575iS	20.0" (508mm)	40.0" (1016mm)	29.0" (736.6mm)	230 lbs (104kg)

