

The MS-350 Medical Device Pouch Sealing System

For more than 30 years, the MS-350 has set the benchmark for dependable, repeatable medical pouch sealing. Now reengineered with advanced system upgrades, it delivers even greater precision and workflow efficiency for sterile packaging environments. CE marking is available for global compliance needs.

The MS-350 uses a powerful direct-drive electronic solenoid to generate consistent seal-to-seal force, ensuring repeatable performance across every cycle. A thin-film thermocouple continuously monitors thermal conditions at the sealing interface, allowing the system's microprocessor to finely regulate temperature and maintain stable sealing output. Designed to be gentle on consumable parts, the MS-350 offers a low cost of ownership while supporting rapid pouch changeovers through an intuitive step-guided menu system.

Every unit ships from our ISO 17025 accredited calibration laboratory with traceable calibration, supporting ISO 13485 medical device manufacturing requirements. Over the past three decades, Van der Stähl Scientific sealers have produced billions of validated seals across our worldwide user base.



Airless Operation

The MS-350's solenoid-actuated sealing bar delivers force electronically, eliminating the need for compressed air and the complexities of validating an air source. Simply plug the unit into a standard power outlet and begin packaging.

Robust Construction

Many MS-350 units have been in continuous service for more than 30 years. Built on a heavy-duty cast-aluminum baseplate with precision-engineered components, the system is designed for long-term reliability and mechanical stability.

Calibrated for Compliance

Each sealer undergoes multi-zone internal temperature calibration for improved accuracy. Our optional **Pro Calibration** expands this process to include time output verification and multi-zone force calibration, providing a deeper view of mechanical performance.

The MS-350 produces a durable 10 mm wide seal and accommodates pouches up to approximately 13 inches in width. Engineered for versatility, it reliably seals nylon, Tyvek®, Mylar, poly laminates, and other medical packaging materials. With precise control over contact temperature, dwell time, and release temperature, the MS-350 delivers consistent, repeatable sealing performance essential for ISO 11607-compliant packaging validation.

Each MS-350 ships with a traceable calibration performed in our ISO 17025 accredited laboratory, providing the documentation and confidence required for ISO 11607-compliant validation. The system includes a consumable parts kit for routine service and a comprehensive user manual to support onboarding and long-term operation.

Unlike many sealers that rely on inexpensive air valves to generate platen pressure, the MS-350 uses a custom-built, electronically controlled solenoid—tightly managed by the machine's advanced microprocessor—to deliver consistent sealing force without the need for compressed air. The unit operates on a standard 120-volt service, simplifying installation and reducing facility requirements.

Where other machines are built on mild steel frames, the MS-350 is constructed on a cast-aluminum base plate designed for long-term stability, alignment, and durability. This commitment to engineering integrity has earned the MS-350 a strong reputation across the medical device packaging industry for reliability, precision, and longevity.

Medical Device Pouch Sealing Machine

The MS-350 medical pouch sealer machine ships to your doorstep with a temperature calibration from our ISO-17025 accredited laboratory. Ask about our "Pro Plan" for force, time, and multi-temperature calibration to jump-start your packaging validation.

The sterile barrier system's best friend

The MS-350 medical device packaging machine creates a 10mm wide seal and can seal a pouch up to approximately thirteen inches wide. The MS-350 sealer can seal a variety of materials such as nylon, Tyvek®, Mylar, foil, and poly. The microprocessor allows for the adjustment of contact temperature, contact time, and release temperature. Set the MS-350 sealer to a semiautomatic mode for touch-free operation or activate with the foot or hand switch for better user flexibility.

- Password protected settings
- Multi-zone internal calibration
- Adjustable auto-cycle mode
- Powerful solenoid
- Airless system operation
- Easy wipe-down design



MS-350: The Standard in medical device Packaging for more than 30 years

The MS-350 medical device pouch sealer has earned a reputation as a true workhorse in sterile packaging—trusted by packaging engineers worldwide. Thousands of units operate daily in cleanrooms, delivering repeatable, compliant seals, with some systems still running strong after more than 30 years. That level of longevity is virtually unheard of in this category of packaging equipment.

Every MS-350 is backed by comprehensive calibration and validation support from our Six Sigma-trained technical staff. Our large service center and dual ISO 17025 accredited laboratories provide exacting calibration and testing services to keep your system performing at its peak.

Connect with our engineering team or customer care to learn more about this exceptional packaging platform and how it can support your sterile packaging workflow.

Machine specifications

Electrical specifications		
Power ^{*1,2}	Single phase AC 110V or 220V 50/60HZ	
Power consumption	1500W/ stand by 30W	
Power cord and plug	110V: 14 AWG 3 cores 3m with type A 3 pin plug (12A 125V)	
	220V: 2CT 2 x 3 cores 3m with WF5324 plug (20A 250V)	
Power cord connection	Socket type C13	
*NOTE	¹ . Other voltages available on request. ² . Supply voltage should be within the fluctuation range of 10% from the rated voltage.	
Seal specifications		
Effective seal length ^{*1,2}	350mm (-0 to +10 mm)	
Seal width ^{*3}	10mm (± 0.1 mm ^{*4})	
Seal method	Impulse method upper, single-side heating	
Sealable film thickness	Less than 0.3mm (total thickness of overlapping films)	
*NOTE	¹ . Sealing width refers to the width of the heating element; it is not necessarily consistent with the dimension of the actual seal finish. ² . This is the tolerance of the heating element width. It is not necessarily consistent with the dimension of the actual seal finish.	
Other machine specifications		
Control method	Temperature control system regulated by microcomputer	
Driving system	Solenoid drive actuated by a touch switch	
Machine dimensions	W 520mm x D 435mm (without table 295mm) x H 215mm	
Machine weight	24kg	
Housing	Frame cover color	Light gray
	Machine base	Powder coated aluminum die-casting
	Table	Stainless steel
Microcomputer (control unit) specifications		
Keylock function	You can switch keylock function ON and OFF.	
Operation patterns	Maximum 5 operation patterns can be stored in the microcomputer.	
Display	LCD display (16 x 2 characters) Displays seal counter, seal parameters, etc.	

Operational Specifications

Setting items	
Heating temperature setting range	From 140 to 400°F (Precision: set temperature ±10°F)
Cooling temperature setting range	Between 100°F and the seal-heating temperature
Heating time setting range	From 0.0 to 5.0 seconds

Safety features

Operational safety features	
Overheating prevention	When overheating occurs (i.e., when power continues to be distributed to the heating element for longer than about 3 seconds), the power switch automatically shuts off to stop further heating.
Anomaly detection	Should abnormal situation arise, it will be indicated on the LCD screen on the control unit and by an alarm sound. See "4-2 Error detection and display function."
Anti-finger jamming feature ^{*5}	The pressure lever will not go down completely if a foreign object such as a finger is caught in the sealing area.
*NOTE	⁵ . Small fingers such as those of small children may not stop the pressure lever from coming down completely.

Error detection and display function

No.	Main Cause	Condition
ERROR 1 Microswitch ON	• Contact melt of the heating microswitch	Displayed when the heating microswitch is ON even before the lever closes.
ERROR 2 Microswitch OFF	• Insufficient seal pressure • The bag is too thick • Improper pressure adjustment	Displayed when the heating microswitch is turned OFF during heating, heat dwell time, or cooling.
ERROR 3 Heating time up	• The temp sensor is shifted. • The supply voltage is down. • The machine is cold.	Displayed when the heating temp does not reach to the set heat temp within the ERROR 3 detection time.
ERROR 5 Poor cooling	• The control board is broken. • The gap is created on the temperature sensor between the levers by sealing the thick material.	Displayed when the temperature rises about 90°F during the first 0.5 seconds of cooling process.
ERROR 6 Poor heating	• The heating element is broken. • The transformer secondary line is disconnected. • The temperature sensor is broken or the wire is disconnected.	Displayed when there is no increase in the heat temp and no voltage measured with the temp sensor within the ERROR 6 detection time.
ERROR 8 Sensor error	• The temperature sensor wire is disconnected.	Displayed when the measured heat temperature is too high over 626°F.
ERROR 30 Communication	• The noise is present • The communication wire is disconnected.	Communication error between the control boards A and B.

Accessories

Consumable parts	<ul style="list-style-type: none"> • I-heating element 350-10L • Sarcon sheet (13mm x 370mm) • Semi-transparent tape (15mm x 3m) • Glass tape (W 38mm) • Center-dry tape(40mm x 5m) 	5 pcs. 1 pc. 1 roll 3 pcs. 1 roll
Accompanying paper	Operating instructions	1 pc.
Others	Phillips screwdriver Table	1 pc. 1 pc.

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