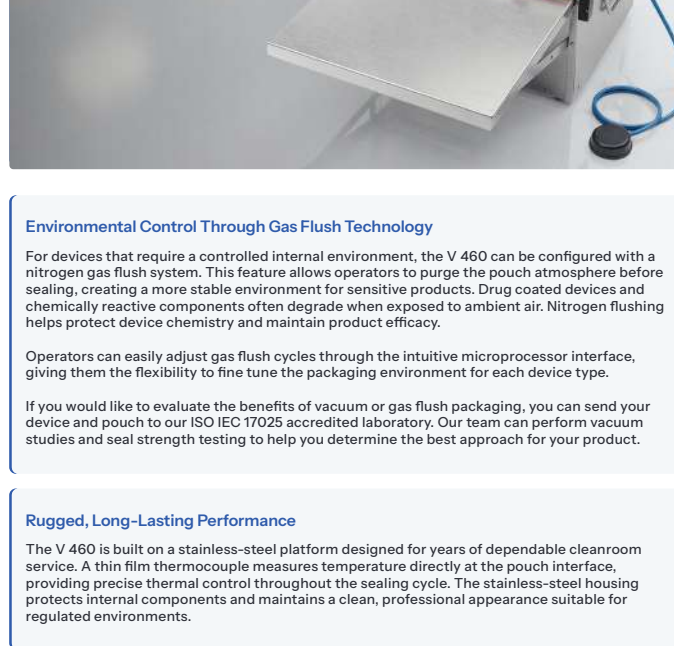


V 460 10 Medical Device Vacuum Packaging System

The V 460 from Van der Stähli Scientific is engineered for medical device manufacturers who demand precision, repeatability, and complete control over their sterile packaging workflow. This system replaces traditional air powered jaw mechanisms with a powerful electric solenoid that delivers consistent, repeatable seal force. By removing the variability of compressed air, the V 460 improves reliability, strengthens seal validation, and supports a higher level of process control.

A newly designed I Heater element extends component life, improves thermal efficiency, and provides exceptional seal uniformity from pouch to pouch. This technology helps ensure that every seal meets the strict requirements of medical device packaging.



Environmental Control Through Gas Flush Technology

For devices that require a controlled internal environment, the V 460 can be configured with a nitrogen gas flush system. This feature allows operators to purge the pouch atmosphere before sealing, creating a more stable environment for sensitive products. Drug coated devices and chemically reactive components often degrade when exposed to ambient air. Nitrogen flushing helps protect device chemistry and maintain product efficacy.

Operators can easily adjust gas flush cycles through the intuitive microprocessor interface, giving them the flexibility to fine tune the packaging environment for each device type.

If you would like to evaluate the benefits of vacuum or gas flush packaging, you can send your device and pouch to our ISO IEC 17025 accredited laboratory. Our team can perform vacuum studies and seal strength testing to help you determine the best approach for your product.

Rugged, Long-Lasting Performance

The V 460 is built on a stainless-steel platform designed for years of dependable cleanroom service. A thin film thermocouple measures temperature directly at the pouch interface, providing precise thermal control throughout the sealing cycle. The stainless-steel housing protects internal components and maintains a clean, professional appearance suitable for regulated environments.

Fully Calibrated and Ready for Compliance

Every V 460 ships from our ISO 17025 accredited calibration laboratory. Each system receives multi zone temperature calibration for improved accuracy. Redundant data logging is performed using an independent meter and probe to ensure traceable results. Accredited pouch testing services are also available for customers who require additional validation support.

V 460 Vacuum Packager

An electronic vacuum sensor continuously monitors vacuum levels to maintain a stable and repeatable packaging environment. The cleanroom ready tabletop design manages thermal conditions and seal force with precision through its microprocessor controls and electronic solenoid.

The V 460 seals most flexible medical grade films and includes preset, pouch specific recipes for fast changeovers. Its gentle operation extends consumable life and keeps the cost of ownership low.

Powerful Internal Vacuum Pump

The V 460 includes an internal vacuum pump, eliminating the need for factory air. This simplifies validation, removes the burden of monitoring external air sources, and reduces the risk of introducing particulates into the cleanroom. The only facility requirement is a standard 110-volt outlet.

Medical Device Vacuum Packaging

The V 460 can transform your packaging workflow with its ease of use and compact footprint. The small form factor keeps countertops open and helps maintain an organized workstation. Contact our engineering team to learn more about the value of vacuum packaging for your device.

Vacuum or Gas Flush Packaging for Medical Devices

The V 460 can seal most flexible films and is an effective way to manage the internal environment of a medical device pouch. Operators can toggle through preset, pouch specific recipes for fast job setup. The stainless-steel case provides rugged protection and is an attractive addition to any cleanroom. Microprocessor controlled attributes deliver exceptional seal performance while protecting consumable components for a low cost of ownership.

Key Features

- Microprocessor controlled temperature
- Release temperature control
- Manufactured for long duty performance
- Solenoid powered seal force
- Cleanroom friendly design
- Thermal calibration from our accredited lab
- Password protected

Power and Accuracy in Vacuum Packaging

Managing the gas environment inside a medical device pouch can improve device stability and reduce the risk of degradation. The V 460 can be configured to gas flush the pouch to control moisture and oxygen levels. The system is built on a robust machine architecture designed for high volume, continuous use.

Each V 460 receives accredited calibration for force, dwell time, and temperature. All three critical parameters are verified in our ISO IEC 17025 accredited calibration laboratory.

Additional System Advantages

Onboard Filtration

Vacuum side filtration helps prevent particulates from entering the system.

Easy Setup

An intuitive menu and paddle key interface make setup fast and accurate.

Accurate Sealing

The I Heater element is engineered to manage thermal expansion for consistent seal quality.

Solenoid Controlled Force

A direct drive solenoid delivers air free, repeatable force for seal consistency.

What Comes with Your New V 460 Pouch Sealer

Accredited Calibration

Each system includes a no cost thermal calibration from our ISO IEC 17025 laboratory.

Certified IQ Support

Our quality system certified technicians can assist with Installation Qualification documentation.

Pouch Integrity Test

Receive a no cost ten specimen pouch integrity test from our accredited laboratory. This includes a complete reporting.

Compliant Documentation

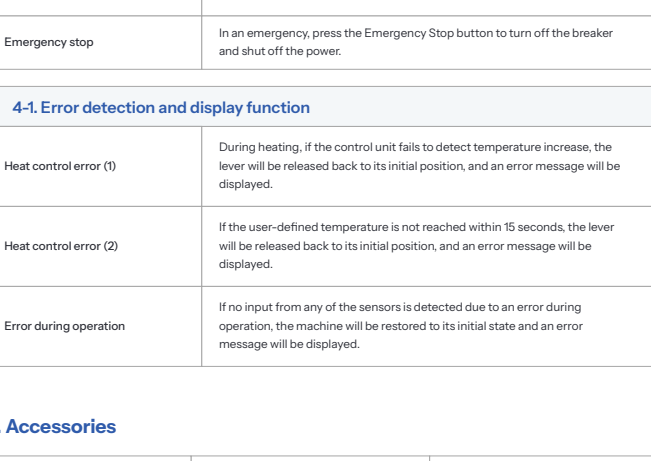
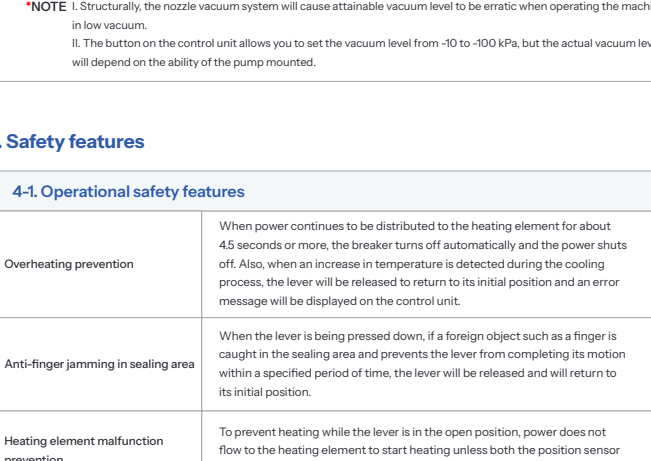
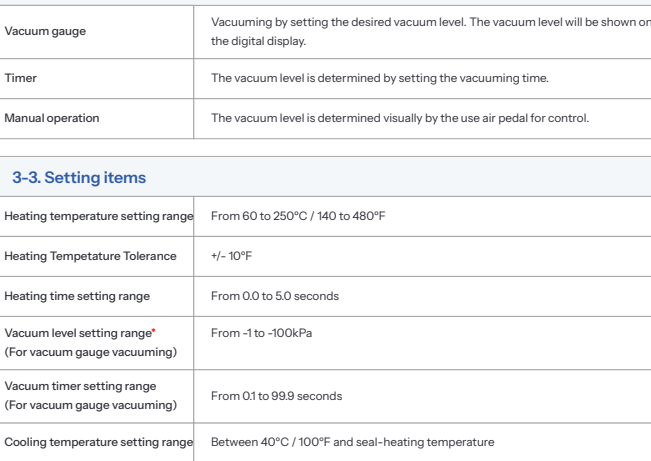
All documents and certifications originate from our ISO IEC 17025 accredited pouch test and calibration laboratory.

Expert Insight

"I have spent the last 32 years guiding and advising medical device manufacturing clients through the regulatory and engineering labyrinth of sterile packaging. Through data gathered from hundreds of audits I can say with great conviction that regular output seal quality testing will be your savior." **Charlie A. Webb, CPP, Six Sigma Master Black Belt, ISO 17025 Director of Quality**

Cradle Your Medical Device Safely to the Point of Care

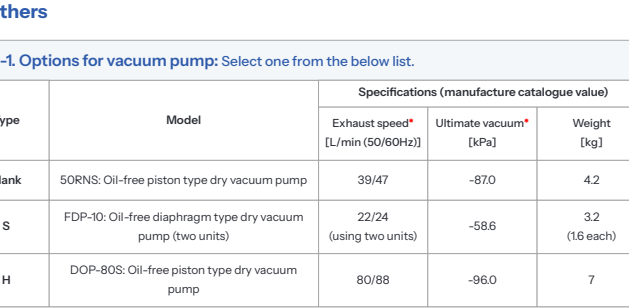
Vacuum packaging offers benefits beyond controlling unwanted gases. Removing air can help secure the device inside the pouch, reducing movement during transit. Less movement means less risk of damage.



V 460-10 Specifications

1. Device overview

1-1. Model name



Seal width (see 2-2)	5	Seal width 5mm	Lower single-side heating type
	5D		Double-side heating type
	10	Seal width 10mm	Lower single-side heating type
	10D		Double-side heating type
Options for vacuum pump (see 6-1)	Blank	Standard specification	
	S	Uses two small vacuum pumps	
	H	High speed and high vacuuming	
Effective seal length: 460mm			

2. Machine specifications

2-1. Electrical specifications		V-460-□ / V-460-S-□		V-460G-10D / V-460S-10D	
Power	Single phase AC110V or 220V	50/60Hz	Single phase AC220V	50/60Hz	
Seal width	5	5D	10	10D	
Power consumption	1.3kW		1.5kW		2.8kW
Power cord length	5m				
Plug rating	15A 125V		20A 250V		

2-2. Seal specifications		V-460G-H-□		V-460G-H-10D	
Power	Single phase AC110V or 220V	50/60Hz	Single phase AC220V	50/60Hz	
Seal width	5	5D	10	10D	
Power consumption	1.5kW		1.7kW		3.0kW
Power cord length	5m				
Plug rating	15A 125V	20A 125V	20A 250V		

2-3. Other machine specifications		
Control method	Temperature control system regulated by microcomputer	
Drive system	Two-step solenoid drive	
Vacuum source	See "6-1. Options for vacuum pump"	
Nozzle stroke	10 - 80 mm (adjustable in 10 mm increments using the control unit)	
Machine dimension	See the attached document.	
Machine weight	About 50kg with the vacuum pump weight (See "6-1. Options for vacuum pump")	
Housing	Exposed metal plates Exposed aluminum	SUS304, buff finish #400 White anodized finish

3. Operational Specifications

3-1. Work method options: Use the control unit to set the method according type of work.

Seal only	Only the sealing function will be performed
Vacuum seal	Once the air removal is completed by the selected vacuum method, the bag will be sealed.

3-2. Vacuum method options: Use the control unit to set the method according type of work

Vacuum gauge	Vacuuming by setting the desired vacuum level. The vacuum level will be shown on the digital display.
Timer	The vacuum level is determined by setting the vacuuming time.
Manual operation	The vacuum level is determined visually by the use air pedal for control.

3-3. Setting items

Heating temperature setting range	From 60 to 250°C / 140 to 480°F
Heating Temperature Tolerance	±10°F
Heating time setting range	From 0.0 to 5.0 seconds
Vacuum level setting range* (For vacuum gauge vacuuming)	From -1 to -100kPa
Vacuum timer setting range (For vacuum gauge vacuuming)	From 0.1 to 99.9 seconds
Cooling temperature setting range	Between 40°C / 100°F and seal-heating temperature

*NOTE I. Structurally, the nozzle vacuum system will cause attainable vacuum level to be erratic when operating the machine in low vacuum.
II. The button on the control unit allows you to set the vacuum level from -10 to -100 kPa, but the actual vacuum level will depend on the ability of the pump mounted.

4. Safety features

4-1. Operational safety features

Overheating prevention	When power continues to be distributed to the heating element for about 4.5 seconds or more, the breaker turns off automatically and the power shuts off. Also, when an increase in temperature is detected during the cooling process, the lever will be released to return to its initial position and an error message will be displayed on the control unit.
Anti-finger jamming in sealing area	When the lever is being pressed down, if a foreign object such as a finger is caught in the sealing area and prevents the lever from completing its motion within a specified period of time, the lever will be released and will return to its initial position.
Heating element malfunction prevention	To prevent heating while the lever is in the open position, power does not flow to the heating element to start heating unless both the position sensor on the lower side of the lever and the microswitch are turned on.
Emergency stop	In an emergency, press the Emergency Stop button to turn off the breaker and shut off the power.

4-1. Error detection and display function

Heat control error (1)	During heating, if the control unit fails to detect temperature increase, the lever will be released back to its initial position, and an error message will be displayed.
Heat control error (2)	If the user-defined temperature is not reached within 15 seconds, the lever will be released back to its initial position, and an error message will be displayed.
Error during operation	If no input from any of the sensors is detected due to an error during operation, the machine will be restored to its initial state and an error message will be displayed.

5. Accessories

Consumable parts	I-heating element 460-5 or 460-10 Glass tape (38mmx5m) Glass tape (25mmx5m) Center-dry tape(40mmx5m)	5 pcs. 1 roll (for single-side heating type) 1 roll (for double-side heating type)
Accompanying paper	Operating instructions Vacuum pump operating instructions	1 each
Others	Tools Power receptacle Low pressure gas hose (3m) Hose band dia14	1 set 1 pc. 1 pc. 2 pcs

6. Others

6-1. Options for vacuum pump: Select one from the below list.

Type	Model	Specifications (manufacture catalogue value)		
		Exhaust speed* (L/min (50/60Hz))	Ultimate vacuum* (kPa)	Weight (kg)
Blank	50RNS: Oil-free piston type dry vacuum pump	39/47	-87.0	4.2
S	FDP-10: Oil-free diaphragm type dry vacuum pump (two units)	22/24 (using two units)	-58.6	3.2 (1.6 each)
H	DOP-80S: Oil-free piston type dry vacuum pump	80/88	-96.0	7

*NOTE The exhaust speed and ultimate vacuum in the above chart represent stand-alone values, before installation to the machines.

6-2. Manufacturer option: Cannot be attached after the product delivery.

With the optional two line-printing device FEP-VA-N2	Exterior 2-line printing device FEP-VA-N2 can be installed as a manufacturer option. This allows the printing of texts and dates such as "Best before MIMDDYY" and "Sell by MIMDDYY". FEP-VA-N2 is a hot-print-type printer that utilizes heated types to print carbon.
	Mode name -FEPS

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To learn more about the value of vacuum packaging for your device, Contact our engineering group at 800-550-3854