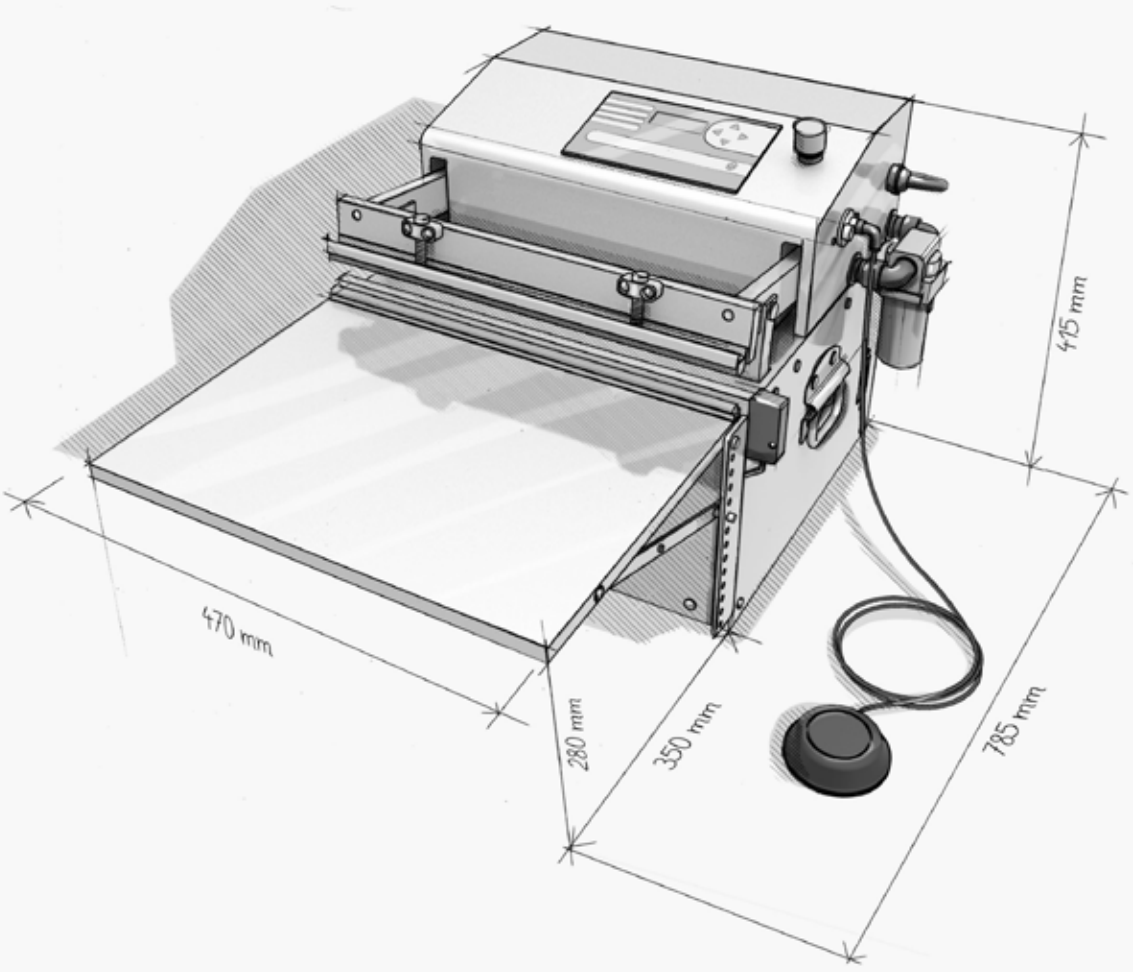
VAN DER STÄHL SCIENTIFIC

VACUUM POUCH SEALER

V 460-10
SPECIFICATIONS



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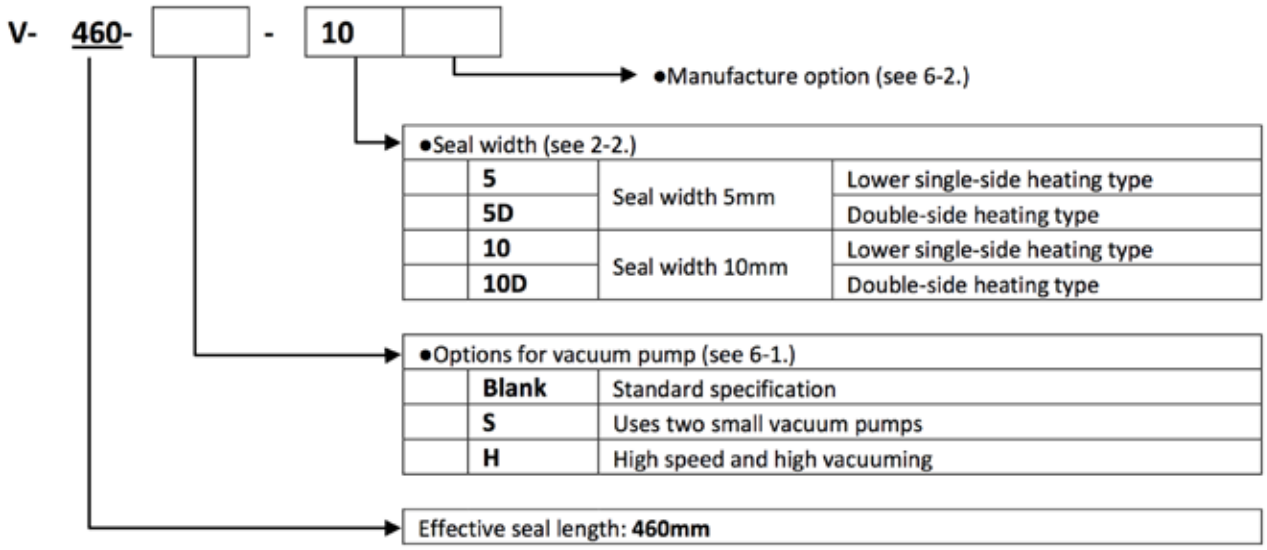
V 460-10

ABOUT

Cleanroom ready this stainless steel tabletop vacuum pouch sealer is ready to package your sensitive medical devices. Unlike many sealers that utilize air to drive the critical jaw pressure, the V-460-10 incorporates a powerful electronic solenoid. This advanced pressure system enhances reliability and streamlines validation. The new “I Heater” heating element enhances long lasting machine performance and improves seal-to-seal consistency. The V-460-10 sealer can also be ordered with a gas/flush configuration in order to nitrogen flush your medical pouch for better control of the sealed environment. Internally an electronic vacuum sensor can monitor levels of vacuum to create a consistent vacuumed environment for your medical device. Microprocessor controlled the V-460-10 vacuum sealer is easy to setup and is delivered with a full thermal calibration from our ISO-17025 accredited calibration laboratory. Call and speak with our engineering group and learn more about this exciting new packager.

1. Device overview

1-1. Model name



2. Machine specifications

2-1. Electrical specifications

	V-460-☐ / V-460-S-☐			V-460-10D / V-460-S-10D
Power	Single phase AC110V 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

	V-460-H-☐			V-460-H-10D
Power	Single phase AC110V 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

2-2. Seal specifications

Effective seal length	460mm		
Seal width※	5	5mm	Lower single-side heating type
	5D		Double-side heating type
	10	10mm	Lower single-side heating type
	10D		Double-side heating type

※NOTE The seal width here refers to the width of the heating element that is used in the device and does not necessarily correspond to the actual, finished seal dimension on the bag.

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	SUS304, buff finish #400
	Exposed aluminum	White anodized finish

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

※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.

4-2. 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) 1 roll
Accompanying paper	Operating instructions Vacuum pump operating instructions	1 each
Others	Tools Power receptacle	1 set 1 pc.

6. Others

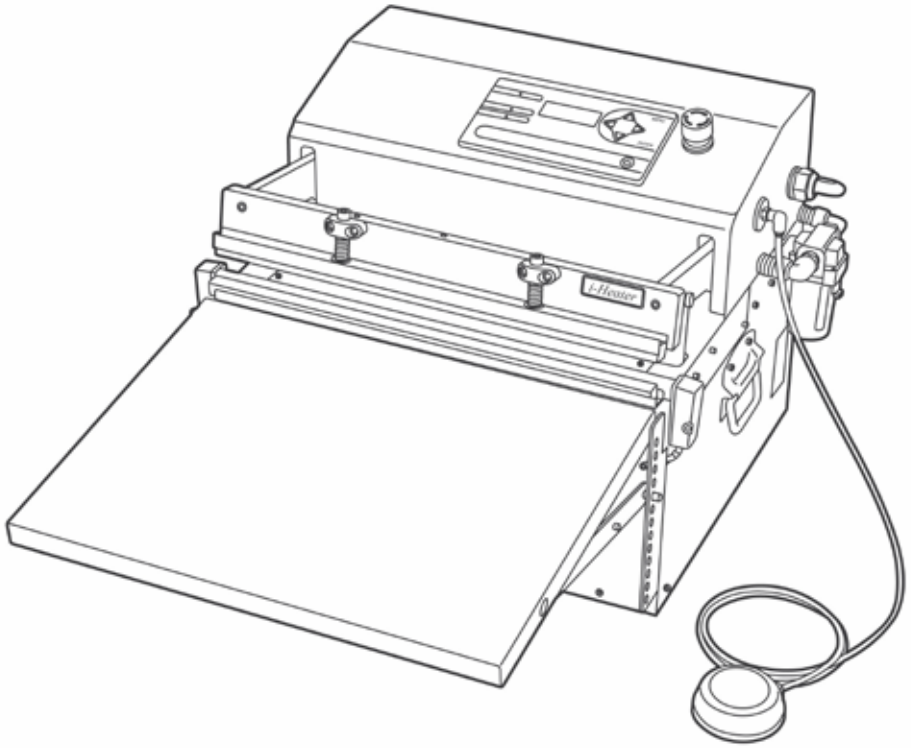
6-1. Options for vacuum pump: Select one from the below list.

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)	20/24 (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

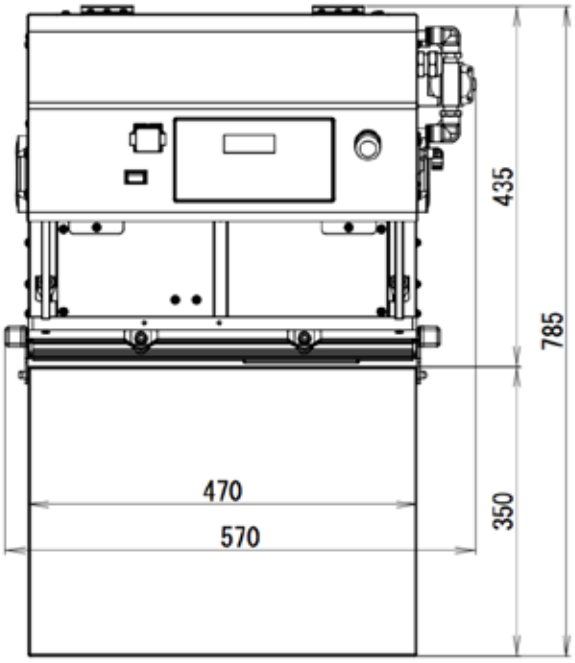
※**NOTE** The exhaust speed and ultimate vacuum in the above chart represent stand-alone values, before installation to the machines.

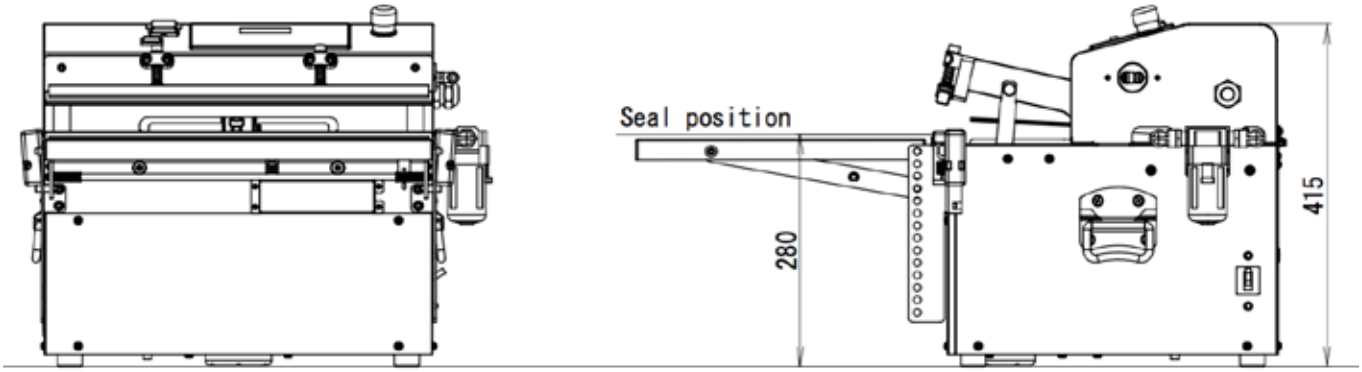
6-2. Manufacturer option: Cannot be attached after the product delivery.

	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 MMDDYY" and "Sell by MMDDYY." FEP-VA-N2 is a hot-print-type printer that utilizes heated types to print carbon.	
		Mode name	**-FEPS**



V 460-10 shown with optional stand





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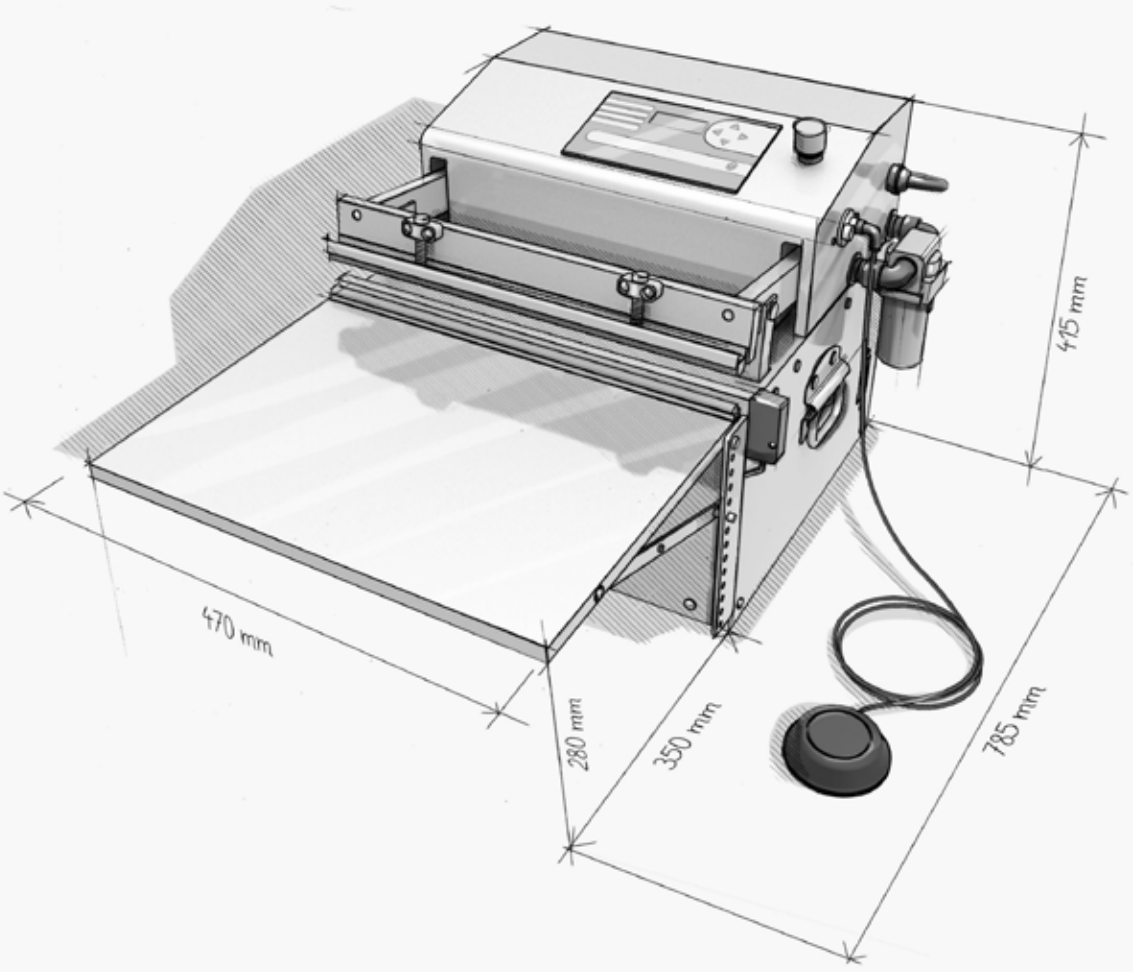
VACUUM POUCH GAS/FLUSH SEALER

V 460 G SERIES SPECIFICATIONS



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PRODUCT SPECIFICATIONS

Tabletop Nozzle-Type Vacuum and Gas-Flushing Sealer **V-460G Series**

Document No.	134B1100E	Rev.
Date	Jun 27th, 2019	**3**

1. Device overview

1-1. Model name

V- 460 G- [ ] - 10 [ ]

- [ ] ●Manufacture option (see 6-2.)
- 10 ●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

- [ ] G Gas flushing

Effective seal length: **460mm**

1-2. Overview

This device is a tabletop impulse sealer equipped with two nozzles one for removing air and the other for flushing gas. When the nozzles are inserted into a bag, the bag will be securely locked by sponge-rubber strips covering the sealing jaws. The air in the bag will be removed by the vacuum pump connected to the nozzle. The gas can also be flushed through the nozzle after vacuuming.

Once the vacuuming and/or gas-flushing process is complete and the nozzles retracted, the sealing jaws will clamp immediately, sealing, or thermally fusing, the bag.

Also, the device can perform just the sealing operation with the nozzles completely tucked away.

2. Machine specifications

2-1. Electrical specifications

	V-460G-☐ / V-460G-S-☐			**V-460G-10D / V-460G-S-10D**
Power	Single phase AC110V or 220V 50/60Hz			Single phase AC220V 50/60Hz
Seal choices※	5	5D	10	10D
Power consumption	1.3kW		1.5kW	2.8kW
Power cord length	5m			
Plug rating	15A 125V			20A 250V

	V-460G-H-☐			**V-460G-H-10D**
Power	Single phase AC110V or 220V 50/60Hz			Single phase AC220V 50/60Hz
Seal choices※	5	5D	10	10D
Power consumption	1.5kW		1.7kW	3.0kW
Power cord length	5m			
Plug rating	15A 125V		20A 125V	20A 250V

※**NOTE** See “2-2 Seal specifications” for the detail of seal choices.

2-2. Seal specifications

Effective seal length	460mm		
Seal width※	5	5mm	Lower single-side heating type
	5D		Double-side heating type
	10	10mm	Lower single-side heating type
	10D		Double-side heating type

※**NOTE** The seal width here refers to the width of the heating element that is used in the device and does not necessarily correspond to the actual, finished seal dimension on the bag.

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”	
Gas cock	2 ports Choose the type of gas depending on the packaging content.	
Nozzle stroke	10 ~ 80 mm (adjustable in 10 mm increments using the control unit)	
Distance between two nozzles	Min 65mm or max 180mm	
Machine dimension	See the attached document.	
Machine weight	About 52kg 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.
1-GAS flushing mode	Once the air removal is completed by the selected vacuum method, gas is flushed once to the bag by the timer and it will be sealed.
n-th GAS flushing mode	The air inside the bag is removed by the selected vacuum method and gas is flushed by the timer at set times and it will be sealed. You can set the vacuum and gas-flushing cycles up to 99 times.
Circulating gas-flushing mode	Vacuuming and gas-flushing are conducted simultaneously with one nozzle set for gas-flushing and the other for vacuuming.

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 timer vacuuming)	From 0.1 to 99.9 seconds
Gas flushing timer setting range	From 0.1 to 99.9 seconds (n-th final time : 0.0 ~ 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.
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Emergency stop	In an emergency, press the Emergency Stop button to turn off the breaker and shut off the power.

4-2. Error detection and display function

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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) 1 roll
Accompanying paper	Operating instructions Vacuum pump operating instructions	1 each
Others	Tools Power receptacle Low pressure gas hose (3m) Hose band dia.14	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)	-69.0	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 MMDDYY" and "Sell by MMDDYY." FEP-VA-N2 is a hot-print-type printer that utilizes heated types to print carbon.	
		Mode name	**-FEPS**