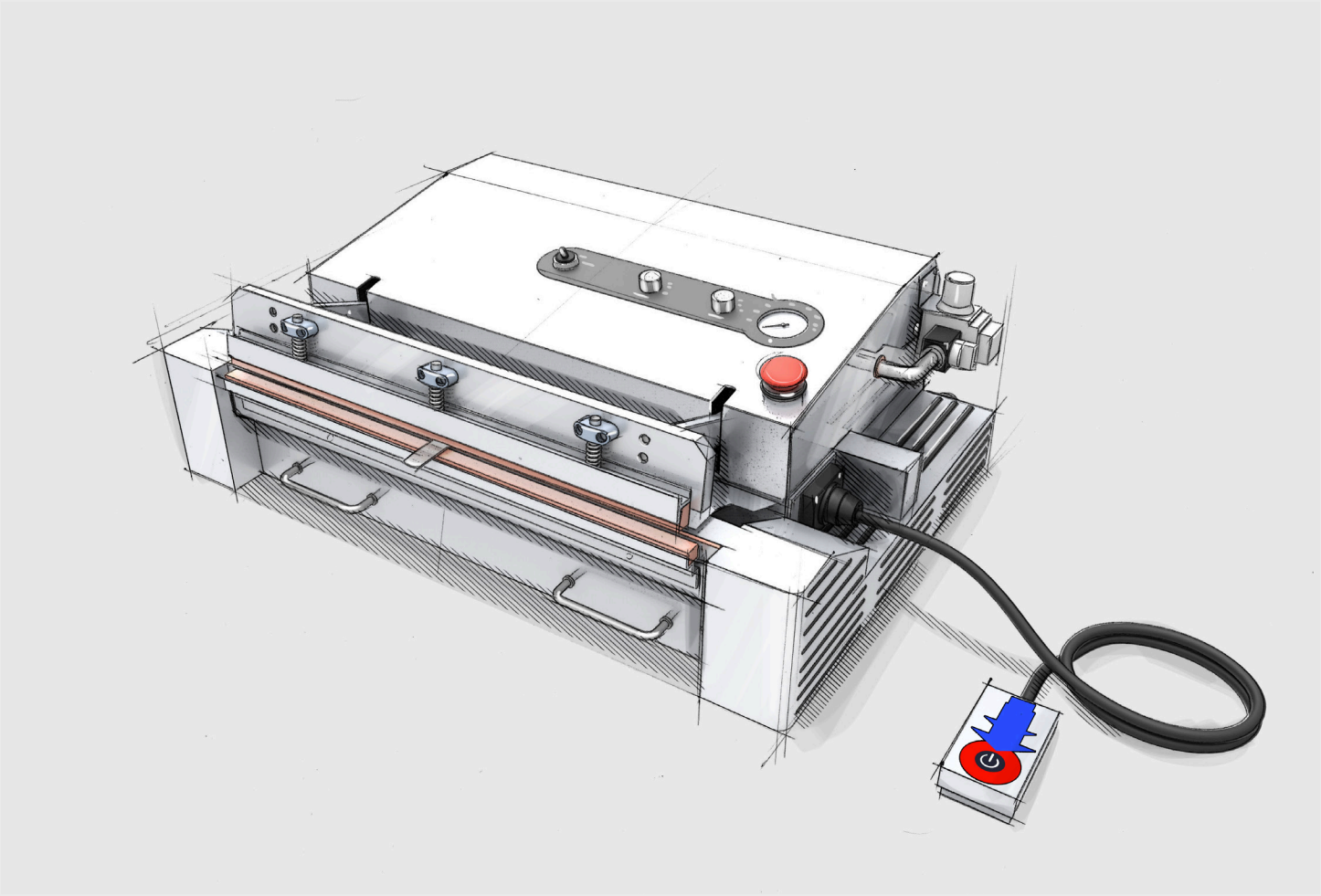
VAN DER STÄHL SCIENTIFIC

# VACUUM STEAMSEALER

# EPV-610 SPECIFICATIONS



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# EPV 610

## ABOUT

If you are packaging products in a flammable or particulate rich environment than you understand the risk of ignition sources caused by industrial machinery. With the patent pending air powered PLC developed by Fuji Impulse there is no longer a need for electricity for program functions or for the sealing platen heat source. Safe and powerful the EPV series sealers are the perfect choice for hazardous environment packaging. We invite you to learn more about the EPV-610 steam powered pouch sealer, call and speak with an application engineer now 800-550-3854. Let us test your pouches in our ISO/IEC 17025 accredited laboratory. We are here to support; call us today toll free at 800-550-3854

## 2. Machine specifications

### 2-1. Explosion proof specifications

| | |
|---|---|
| Explosion proof construction | Not applicable for classification of explosion proof construction.<br>Electrical parts are not used. |
| Available hazardous area | Division 1, Division 2 (Sealer only) |
| Ignitability | G2 (Ignition point 300 ~ 450°C) |

### 2-2. Power specifications

Electric source is not required

### 2-2. Seal specifications

| | |
|---|---|
| Effective seal length | 610mm ( 24" ) |
| Seal width※ | 8mm ( 0.31" ) |
| Seal method | Steam Impulse / Single, lower side heating |

※**NOTE** The seal width here refers to the width of the sealing pipe 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 | Air sequencer | |
| Drive system | Air cylinder | |
| Air source | External air required (Please prepare the air source at customer's facility.)<br>Compatible compressor 0.75kw(75L/min) or greater<br>Air pressure setting value: 0.5MPa | |
| Piping | Air supply line: Mail hose tail O.D 8mm<br>Saturated vaper supply line: R 1/2" (1/2" NPT)<br>Drain exhaust line: R 1/2" (1/2" NPT) | |
| Supply steam pressure | 0.8MPa (114psi)<br>*It can be used under that pressure, but the sealing temperature goes down.<br>At that case we need to have a meeting. | |
| Steam flow | Over 10kg/h (22 lb/h) | |
| Exhaust | Operated air is exhausted inside of the sealer.<br>Vaper and cooling air is exhausted form the drain exhaust line. | |
| Machine dimension | Refer the attached external view. | |
| Housing | Exposed metal plates<br>Exposed aluminum<br>Cock / Coupler | SUS304, buff finish #400<br>White anodized finish<br>Stainless steel, brass, plating processing |

## 3. Operational Specifications

3-1. Work method
Seal only

3-2. Setting items

| | |
|---|---|
| Heating temperature setting range | 120 ~ 175°C ( 0.1MPa – 0.8MPa)<br>(Corresponding value from the amount of saturated water vapor)※ |
| Heating time setting range | About 1 ~ 20 seconds |
| Cooling time setting range | About 3 seconds (fixed) |

※**NOTE** Heating temperature depends on the pressure of supplied saturated vapor.
Temperature is not adjustable. It is not possible to set the seal temperature on the machine.

## 4. Safety features

| | |
|---|---|
| Pressurizing at seal | The seal lever uses spring action to clamp down on the bag so that no forcible pressure is applied when finger or other foreign object get caught. Pressure of 63-diameter cylinder output force is applied when sealing. |
| Emergency Reset Mechanism: | When the lever is being lowered, removing foot from the footswitch will raise the lever from its lowered position. |

## 5. Accessories

| | | |
|---|---|---|
| Consumable parts | Antistatic glass tape (38mmx10m) | 1 roll |
| Accompanying paper | Operating instructions | 1 piece |

## 6. Requirements for installing the machine

(1)Please set the following equipments and piping around the interface area for steam line.

| | |
|---|---|
| 1. Regulator | Adjust the pressure of supplying saturated vaper to the sealer. |
| 2. Pressure gauge | Required for checking the pressure of saturated vaper at the interface point. |
| 3. Steam trap | Required to remove drained water. |
| 4. Vaper supply valve | Stop vaper supply after the operation or when you don't use. |
| 5. Bypass Valve | Use to blow and exhaust initial air, drain and etc. |
| 6. Safety valve | Install the pressure relief valve in case that steam pressure would become 1.0MPa or more. |

※**NOTE** Install the steam piping always higher position than stem inlet of the machine.
When the water drain is accumulated in the pipe, there is a possibility that the performance is lowered

(2) Please take measures for steam ejected from the exhaust port.
(3) Please provide heat insulation on the piping of vaper supply line and vaper exhaust line.
(4) Please install a ground line on the ground rod. A ground line is on the back of the sealer.
And the ground resistance should be under 1000Ω.

# EPV 610-NTW VACUUM BAG STEAMSEALER

## 1. Device overview

This device is over an intrinsic safety explosion proof steam sealer.
High temperature saturated steam is utilized as a heat source for sealing, there is no electrical ignition source in the seal portion.
Electrical power source is not necessary. Air pressure activates and controls the sealer.
Therefore EPV-460 is available for packaging in hazardous area.
Also this device has a vacuuming nozzle. So you can seal pouches after vacuuming.

## 2. Machine specifications

### 2-1. Explosion proof specifications

| | |
|---|---|
| Explosion proof construction | Not applicable for classification of explosion proof construction.<br>Electrical parts are not used. |
| Available hazardous area | Division 1, Division 2 (Sealer only) |
| Ignitability | G2 (Ignition point 300 ~ 450°C) |

### 2-2. Power specifications

Electric source is not required

### 2-2. Seal specifications

| | |
|---|---|
| Effective seal length | 610mm ( 24" ) |
| Seal width※ | 8mm ( 0.31" ) |
| Seal method | Steam Impulse / Single, lower side heating |

※**NOTE** The seal width here refers to the width of the sealing pipe 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 | Air sequencer | |
| Drive system | Air cylinder | |
| Air source | External air required (Please prepare the air source at customer's facility.)<br>Compatible compressor 1.5kw(165L/min) or greater<br>Air pressure setting value: 0.55MPa | |
| Piping | Air supply line: Mail hose tail O.D 8mm<br>Saturated vaper supply line: R 1/2" (1/2" NPT)<br>Drain exhaust line: R 1/2" (1/2" NPT) | |
| Vacuuming source | Using an ejector: Ultimate press. -34 kPa, Exhaust speed 1015 L/min<br>*The value is the value on the manufacture's catalog.<br>Actually, the value might be under the value. | |
| Supply steam pressure | 0.8MPa (114psi)<br>*It can be used under that pressure, but the sealing temperature goes down.<br>At that case we need to have a meeting. | |
| Steam flow | Over 10kg/h (22 lb/h) | |
| Exhaust | Operated air is exhausted inside of the sealer.<br>Vaper and cooling air is exhausted form the drain exhaust line. | |
| Machine dimension | Refer the attached external view. | |
| Housing | Exposed metal plates<br>Exposed aluminum<br>Cock / Coupler | SUS304, buff finish #400<br>White anodized finish<br>Stainless steel, brass, plating processing |

3-1. Work method

| | |
|---|---|
| Only sealing | Doing only sealing |
| Vacuuming and sealing | Sealing after vacuuming |

3-2. Setting items

| | |
|---|---|
| Heating temperature setting range | 120 ~ 175°C (0.1MPa – 0.8MPa)<br>(Corresponding value from the amount of saturated water vapor)※ |
| Heating time setting range | About 1 ~ 20 seconds |
| Cooling time setting range | About 3 seconds (fixed) |
| Vacuuming time | About 1 ~ 20 seconds |

※**NOTE** Heating temperature depends on the pressure of supplied saturated vapor.
Temperature is not adjustable. It is not possible to set the seal temperature on the machine.

## 4. Safety features

| | |
|---|---|
| Pressurizing at seal | The seal lever uses spring action to clamp down on the bag so that no forcible pressure is applied when finger or other foreign object get caught. Pressure of 63-diameter cylinder output force is applied when sealing. |
| Emergency Reset Mechanism: | When the lever is being lowered, removing foot from the footswitch will raise the lever from its lowered position. |

## 5. Accessories

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|---|---|---|
| Consumable parts | Antistatic glass tape (38mmx10m) | 1 roll |
| Accompanying paper | Operating instructions | 1 piece |

## 6. Requirements for installing the machine

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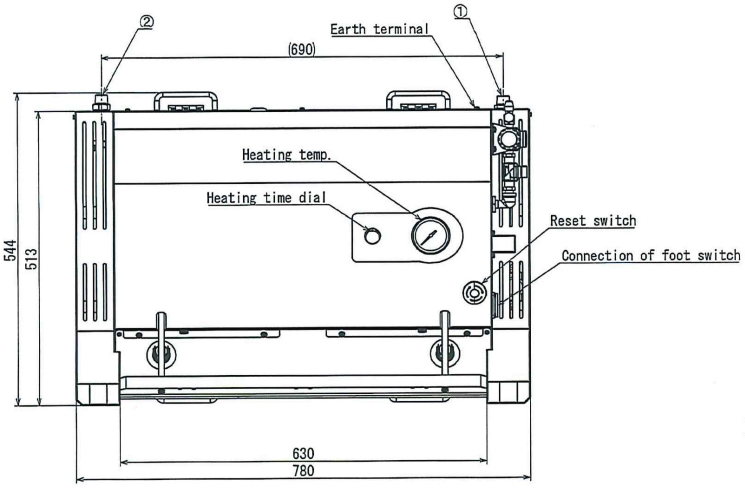
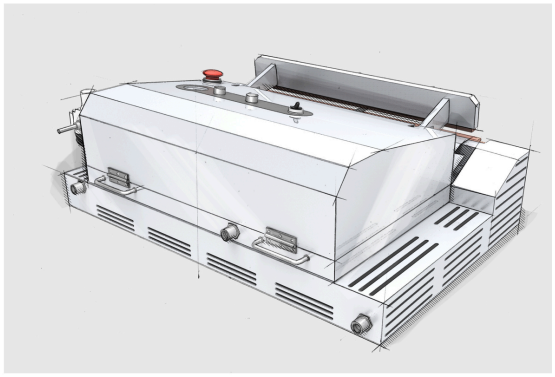
| 1. Regulator | Adjust the pressure of supplying saturated vaper to the sealer. |
| 2. Pressure gauge | Required for checking the pressure of saturated vaper at the interface point. |
| 3. Steam trap | Required to remove drained water. |
| 4. Vaper supply valve | Stop vaper supply after the operation or when you don't use. |
| 5. Bypass Valve | Use to blow and exhaust initial air, drain and etc. |
| 6. Safety valve | Install the pressure relief valve in case that steam pressure would become 1.0MPa or more. |

※**NOTE** Install the steam piping always higher position than stem inlet of the machine.
When the water drain is accumulated in the pipe, there is a possibility that the performance is lowered

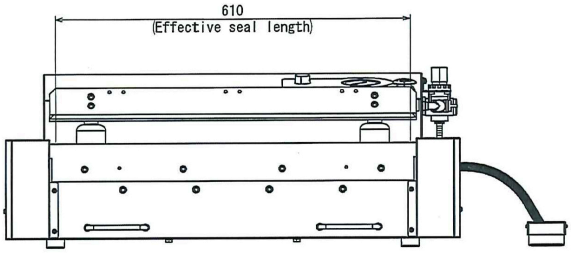
(2) Please take measures for steam ejected from the exhaust port.
(3) Please provide heat insulation on the piping of vaper supply line and vaper exhaust line.
(4) Please install a ground line on the ground rod. A ground line is on the back of the sealer.
And the ground resistance should be under 1000Ω.

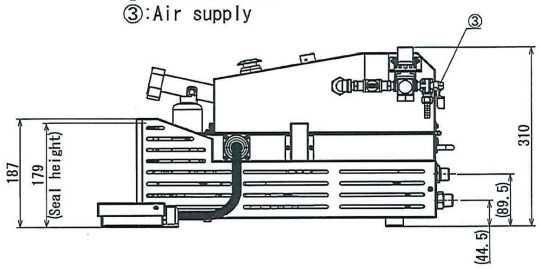


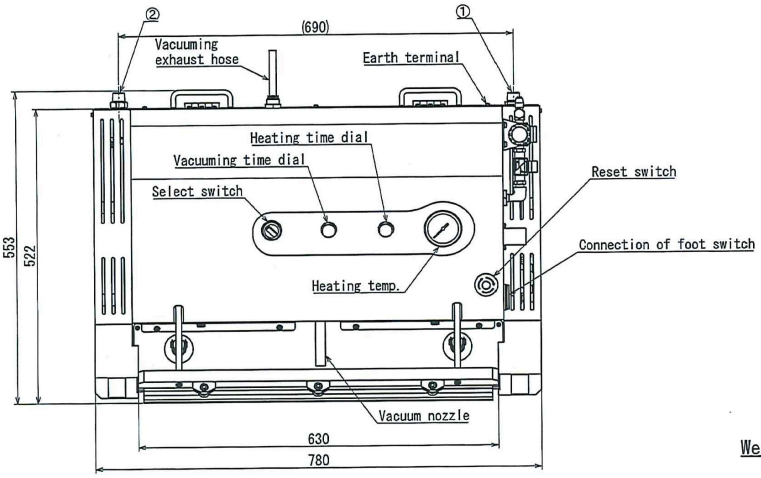
Weight:44kg(97lb)

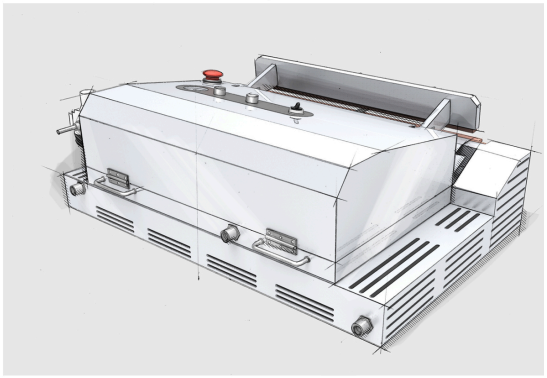
(Note)①～③ shows interface point with a facility.
①:Satulated vaper supply
②:Drain exhaust
③:Air supply



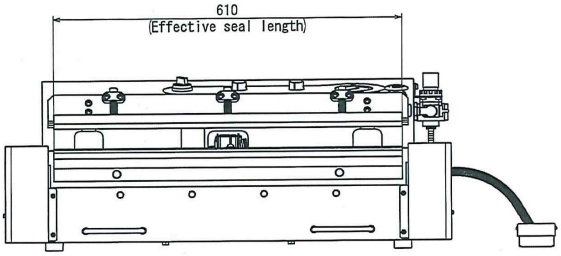

# EPV 610-NTW VACUUM BAG STEAMSEALER

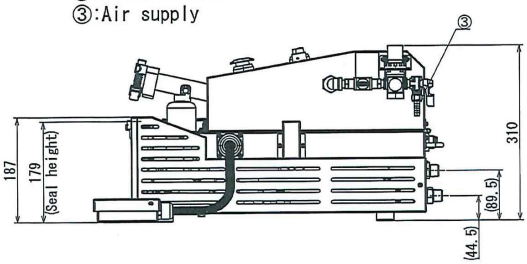


Weight:54kg(119lb)

(Note)①～③ shows interface point with a facility.
①:Satulated vaper supply
②:Drain exhaust
③:Air supply



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