

hawo



LIFE SCIENCE 4.0

**hv 460-1300 AP2/4-V**

V.1.0

# havo hv 460-1300 AP2/4-V

NOZZLE STYLE IMPULSE VACUUM SEALERS  
FOR INDUSTRIAL, PHARMACEUTICAL  
AND MEDICAL PACKAGING.

## hv 460/660 AP2-V hv 800/1100/1300 AP2/4-V

Nozzle style vacuum sealers with and without gas purge of vacuumable film and aluminium materials of all kinds with validatable sealing process compliant with ISO 11607-2:2019/ CEN ISO/TS 16775. The vacuum and gas purge time can be adjusted independently of each other. Sealing temperature and cooling time or cooling temperature can be adjusted. The process variables temperature, time and contact pressure are monitored. Disabling the vacuum and gas purge step causes nozzle to become inactive.

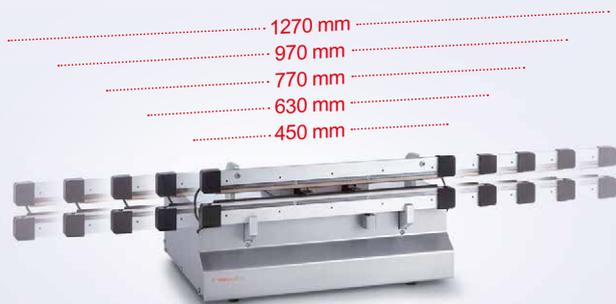
As a result, the machines can also be used as pure impulse sealing machines. The optionally available 'bag support device' allows machines also to be set up at an angle or vertically. The machines are designed for high volumes in multi-shift operation. The vacuum impulse sealers can be customized with a vacuum level sensor.

The sealing process is validatable in accordance with ISO 11607-2:2019/ CEN ISO/TS 16775 and fulfils the requirements of the guideline of the World Health Organisation (WHO) as well as the guideline of the World Federation for Hospital Sterilisation Sciences (WFHSS).



hv 460 AP2-V  
with SealCom PRO

hv 660 AP2-V



Available in five bar widths.

### FLEXIBLE IN SIZES.

The impulse vacuum sealers are available in bar widths of 450, 630, 770, 970 and 1,270 mm (18, 25, 30, 38 and 50 inches).

### Examples of use:

> Packaging of all industrial products, medical products, implants, medicines, pharmaceutical products of all kinds and industrial products in clean rooms (e.g. semiconductors). Oxygen-free packaging.

### DocLink – COMMUNICATION.

The vacuum impulse sealers feature RS 232 interfaces as standard for bidirectional communication.

### IntelligentScan – PROGRAMMING.

Operation is made even easier thanks to the hawo IntelligentScan function: individual specifications for the sealing and vacuum parameters can be programmed quickly and easily via the barcode scanner for the various materials. The barcode lists themselves can be generated individually using the PC-software supplied (e.g. different temperatures).

### AIR PURITY CLASS.

The hv 460 AP2-V impulse vacuum sealer in particular has been certified in accordance with the Fraunhofer IPA qualification mark for clean rooms of air purity class 6, compliant with ISO 14644-1. An individual certified clean room measurement with classification for each device is available.

### PROCESS.

Once the machine is connected to an external compressed air supply (minimum 6 bar required), the packaging process on impulse vacuum sealers takes place, as shown in the illustrations, in four stages.

The pouch is slipped over the nozzles and positioned between the two sealing bars. The rubber on the sealing bars ensures that the pouch is air-tight.



Actuating the footswitch closes the sealing bars and starts the vacuum-sealing process: The vacuum pump switches on and evacuates the air from around the product.



As soon as the vacuum time is up, the nozzles are automatically retracted.



The sealing bars then fully close and seal the packaging material. After the sealing process, the sealing bars open automatically and the sealer is immediately ready for the next pass.<sup>1</sup>



### SealCom PRO OPTIONAL COMMUNICATION MODULE.

Optional the communication module SealCom PRO with 10.4 inch colour touchscreen is available, resolution 1024 x 768 xGA. The system allows create and backup of 50 function lists with process parameters and operating modes. The process parameters are recorded to a USB stick by DataMatic automatically and transferred to an external computer for further data savings.

<sup>1</sup> Multiple cycles can be programmed via the SealCom PRO communication module (accessory).

## hv 460/660 AP2-V

## hv 800/1100/1300 AP2-V hv 800/1100/1300 AP4-V

### SEALING MATERIALS

Thermoplastic pouches, header bags (PP, PE, PVC),  
Peelable films made of PA/PE, All types of laminate,  
including aluminium laminate

x

x

### TECHNICAL DATA

Seal seam length	hv 460: 450 mm / 17.7 inch hv 660: 630 mm / 24.8 inch	hv 800: 770 mm / 30.3 inch hv 1100: 970 mm / 38.1 inch hv 1300: 1,270 mm / 50 inch
Seal seam width	8 mm (0.3 inch)	8 mm (0.3 inch)
Number of suction nozzles	2	AP2V: 2, AP4V: 4
Pump output	220 N/min (13,2 m³/h)	220 N/min (13,2 m³/h)
Maximum air consumption	90 – 126 N/min	90 – 126 N/min
Minimum air pressure	6 bar	6 bar
Vacuum time	0 – 60 s, optionally: unlimited	0 – 60 s, optionally: unlimited
Maximum vacuum	- 85 kpa (- 637,5 mm Hg)	- 85 kpa (- 637,5 mm Hg)
Pressure (during gas flushing, connection only with corresp. pressure reducer)	5 bar	5 bar
Gas flushing time	0 – 15 s	0 – 15 s
Permissible inert gases	N <sub>2</sub>	N <sub>2</sub>
Ventilation or cleaning time	0 – 15 s	0 – 15 s
Compressed air connection 1/4 inch	min. 6 bar	min. 6 bar
Dimensions W x D x H	hv 460: 515 x 490 x 280 mm hv 660: 700 x 490 x 280 mm	hv 800: 880 x 490 x 280 mm hv 1100: 1.070 x 490 x 280 mm hv 1300: 1.370 x 490 x 280 mm
Housing	Stainless steel AISI 304	Stainless steel AISI 304

### PROCESS VARIABLES AND PARAMETERS

Sealing temperature	max. 250°C (482°F)	max. 250°C (482°F)
Sealing time	0,5 – 10 s	0,5 – 10 s
Contact pressure	100 – 300 N	100 – 300 N
Cooling temperature	50 – 250°C (122 – 482°F)	50 – 250°C (122 – 482°F)
Cooling time	0,5 – 10 s	0,5 – 10 s

### ACCESSORIES

Power Kit 554 N/min instead of 220 N/min	x	x
Positioning tray	x	x
Clamping lever (foil holder)	x	
Label printer	x	x
Stand for conversion to a floor mounted machine	x	x
Digital vacuum switch	x	x
Operation via IntelligentScan	x	x
SealCom Pro (optional communication module)	x	x
PC-documentation software ProDoc	x	x
InkTest (dye penetration test according ASTM F3039-15)	x	x

Technical modifications reserved  
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**hawo** GmbH  
Obere Au 2–4  
74847 Obrigheim  
Germany  
T +49 (0) 6261/9770-0  
F +49 (0) 6261/9770-69  
info@hawo.com  
www.hawo.com

*hawo USA:*  
hawo  
150 North Michigan Avenue  
35th Floor  
Chicago, Illinois 60601  
T +1 312 585 8329  
F +1 312 644 0738  
info@hawo-usa.com  
www.hawo-usa.com

*hawo ASIA:*  
hawo  
25 International Business Park  
#03-105 German Centre  
Singapore 609916  
T +65 6433 5339  
F +65 6433 5359  
info@hawo-asia.com  
www.hawo-asia.com

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