



# TEXTILE PACKAGING 4.0

PACKAGING AND LABELLING SYSTEMS
FOR DRY CLEANERS, LAUNDRIES AND TEXTILE INDUSTRY.

## **CONTENT**

04	ABOUT US
12	SUSTAINABILITY IN TEXTILE PACKAGING
14	POLY BAGGERS
20	L-SEALERS
24	TABLETOP BAGGERS
26	SEALING TONGS
28	VACUUM PACKAGING MACHINES
32	MATTRESS PACKAGING MACHINES
33	LABELLING SYSTEMS
34	TECHNICAL DATA

Since the company was founded in 1975, hawo has been manufacturing packaging systems for a wide variety of different uses.

The emphasis lay on supplying high-quality products and covering every stage of the packaging process with a variety of accessories and services.

Inspired by our company values, we have been synonymous with safety, sustainability and responsibility for 40 years. All of our innovations are therefore geared towards the needs of our customers. Through constant dialogue with our partners and feedback from our customers, we have succeeded in bringing the very highest-quality products onto the market.

hawo products offer the ultimate in convenient use and efficiency. Our products also speak an aesthetic language of design intended to make using them a pleasure. We also started taking social responsibility early on, and for years have focused on resource-sparing designs and sustainable construction for our products that use a fraction of the energy of similar devices. And we do all this without any compromises in terms of sealing quality.

Taking responsibility and protecting resources, as well as providing our customers and the people around us with expert, helpful and comprehensive advice has been our pledge since the company was first founded in 1975. We want to continue this success, even after 40 years, and remain a reliable and professional partner for sealing and vacuum technology. That is our mission.

## Hawo

## TEXTILE PACKAGING SYSTEMS SINCE 1975.

Founding of the company by Hans and Helga Wolf. hawo is now a protected brand name in several countries.

Construction of the first production and administration facilities in Obrigheim / Baden.

Development and market launch of the first textile packaging machine.

Development and market launch of the first L-sealer. Expansion of the production facilities in Obrigheim.

First patent. In 2016, hawo has got many patents and registered designs.

1982 First delegation visit of Hans Wolf to Asia with the former Baden-Württemberg Minister for Business, SME and Transport. Today, hawo maintains a sales and service network in many countries across the globe.

1992 hawo sets up quality management standards according to ISO 9001 and is certified in 1994.

Opening of a further production facility in Mosbach (plant 2).

Expansion of the production facilities in Mosbach (plant 2).

Following successful studies in "engineering" and "business administration", as well as practical experience in the USA, Chile and Singapore, son Christian Wolf joins the company.

2005 Christian Wolf becomes Managing Director of hawo GmbH.

Construction of a new production facility at the production site in Mosbach (plant 2)

Construction of a new warehouse and logistics facility at the production site in Mosbach (plant 2).

Inclusion in the lexicon of German world market leaders.



**2011** hawo is ranked for the first time among the top 100 most innovative SME-sector companies in Germany.

**2012** hawo is included in the lexicon of German family-owned companies.

2015 40-year anniversary. Inauguration of the Competence Centre (CC) in Obrigheim. The hawo Competence Centre is also the company's new administrative and sales headquarters.

2016 Hans Wolf withdraws from the operating business and takes over the Chairmanship.

Market Launch of the hawo vakuum packaging machines in the textile industry.

## A FAMILY COMPANY.

Since it was first founded, the company has focused on developing packaging, testing and labelling solutions for various areas of application. The second generation of the company's owners is now in charge, and with every change of generation we take care to ensure equal parts of continuity and change.

We believe our role to be one of a mastermind who recognises future developments and translates them into innovative products. This means we are able to offer our customers specific assistance in their work and also resolve individual packaging problems.









## WORLD MARKET LEADER.

As a globally active company, we felt it important right from the start to stay on the ball with our products. This included early thoughts of exports, permanent market monitoring, continuous improvement processes and future-focused innovations.

All of our innovations are geared towards our customers' requirements. We insist on precise functionality and maximum ergonomics - and of course the highest possible safety and quality standards. This is also reflected in our award as one of the 100 most innovative SMEs in Germany, as well as being once again crowned the "German world market leader".



## SOCIAL RESPONSIBILITY.

As a global company, we have valued and acted on our social responsibility for many years. In our local area, the Neckar-Odenwald, we are a long-term supporter of targeted promotion of young talents. In addition, we are committed to the worldwide improvement of hygienic standards – for example in Cambodia. For our social commitment, especially providing and training the use of sterile barrier systems and for our activities in our home country, we have been repeatedly honoured with the German award for "social commitment".

## MADE IN GERMANY.

For 40 years, we have been manufacturing our products exclusively in Germany and we are committed to preserving and expanding Germany as a place of business and production.



As well as safeguarding jobs and expanding our production facilities at two manufacturing sites in southern Germany, we are a family company who want to make a contribution to safeguarding and strengthening the future of our local economy. This is why we specifically encourage newcomers and why our training places are regularly filled.

## CERTIFIED QUALITY AND SAFETY

The textile packaging systems by hawo are all "GS certified". The globally recognized GS symbol certifies that the products conform to the quality and safety standards of the German Product Safety Act (ProdSG).









## SUSTAINABILITY OF TEXTILE PACKAGING MATERIAL

Our long established packing solutions for textiles are also impressive when it comes to economic viability and the protection of the environment. For the clothing industry we always recommend the environmentally–friendly packaging of clothes and linen in PE films.

Even though the average person is sceptical about the environmental impact of plastics, we, the experts, know that packaging made from plastics - provided it is polyethylene - always has a better eco balance than other packaging materials. The production of polyethylene films requires significantly less energy than that of other packaging (e.g. paper). This means that natural resources are conserved.

These classical polyethylene films have been used successfully for many years. They are tear-resistant and 100% recyclable. No harmful vapours are released during production or the sealing processes. Polyethylene films are suitable for many different applications. They protect sensitive items like clothing and textiles from environmental impact.

## POLYETHYLENE AND THE ENVIRONMENT

- > Contains neither softening agents nor stabilisers.
- > Is physiologically harmless.
- > Is groundwater-neutral on the landfill site.
- > Will break up residue-free into CO<sup>2</sup> and hydrogen during waste incineration.
- > Leaves no toxic gases or vapours.
- > Can be reprocessed into recyclable material in recycling plants.
- This allows trouble-free disposal, incineration or recycling.
   (A prerequisite is however the professional disposal.)

With 40 years of experience to look back on, we see ourselves as visionaries. For years we have been using environmentally-friendly materials in all our product lines, which are work-efficient while at the same time emphasising sustainability. Even tried-and-tested and long established packaging systems are constantly tested, improved and upgraded to the highest quality standards by our development department. All products that stand for our philosophy of sustainability carry our hawo GreenTek logo.

Our packaging machines for the textile industry work with the so-called impulse-sealing technology. The heating elements are only active during the sealing process. When the appliance is not in use the stand-by or switch-off function cuts in, rounding off the hawo GreenTek concept. All these features are included without compromising the quality of the sealing processes. Another plus for environmental awareness.

# POLY BAGGERS CT OVER LEW





# POLY BAGGERS

MAXIMUM FLEXIBILITY.

hp 630/700 KST/KW hp 630 KST-P/KW-P







The standard system hp 630 KST and the wall-mounted system hp 630 KW (no picture) are our basic models for the individual and hygienic wrapping of hanging clothing. The length of the film can be precisely tailored to the packaged garment. Hence packaging that is too short or too long is a thing of the past. Air can circulate easily within the packaging.

#### EASY HANDLING.

The packing machine can be supplied with integrated height adjustment on request, allowing better adaptation of the floor unit to your local circumstances and the individual requirements of the operator. During the development phase, the human-machine interface was optimised, making it extremely user-friendly, even when it is in constant use. Briefly push the lever and the machine will hold the sealing pressure until the end of the packaging process. The sealing results are consistent and produce identical results every time because they cannot be influenced by the operator.

- > No heating time, ready for immediate use.
- > No additional cutting process necessary (integrated cutting wire seals and cuts at the same time).
- > Infinitely variable sealing time interval, acoustic sealing time indicator (can be switched off).
- > Especially suitable for PE films.
- > hp 700 KST is available for extremely wide garments on request.

#### Examples of use:

> Packaging on hanger of all types (e.g. dry cleaner, hotel, spa, mail –order business, care home, airline, costume hire).

# POLY BAGGERS

PERFECT ALL-ROUND WRAPPING.

hp 630 KST-BS hp 630 KST-P-BS





Especially during the transportation and the storage of high–value garments reliable all-round protection is of the utmost importance. In order to offer comprehensive transport protection the basic model of the standing system of the hp 630 series can be enhanced with an adaptable floor sealing unit. Soiling through articles falling to the ground or through slippage of the film can be avoided.



## ADDITIONAL BOTTOM SEALING UNIT.

The packaging is sealed at the top and bottom in just one step. The floor sealing unit has an additional second lever and offers the highest comfort of operation for all users.

#### **Examples of use:**

> Packaging of clothing on hangers that has to be sealed all the way around (e.g. clothing industry, sample collections, transport companies, dry cleaner, mail-order businesses, airlines). The optional pneumatic two-handed operation adds to the ease of use especially when the system is in continuous use, as is the case at big industrial drycleaners or the textile industry. The work stations comply with EN 574.

For customers with a high workload and fast product flow hawo offers a pulling pneumatic version for each model. The machines are no longer operated with a manual pulling motion, but can be operated comfortably by pushing a button at elbow height. The two-handed control complies with all aspects of work safety regulations according to EN 574.

### TYPE OF SEAM.

The systems are supplied with a standard slanted sealing line that conforms perfectly to the shape of a normal coat hanger. If required we can also deliver the system with a straight horizontal seam (e.g. for trouser hangers or clamp hangers)



# L-SEALERS UCT OVERVIEW





# L-SEALERS UCT OVERVIEW

PROFESSIONAL AND EFFICIENT.

hp 630 WS







The hawo L-sealer designed for professional applications, is suitable for continuous use and guarantees optimum lock safety.

#### OPTIMUM SEALING PROCESS.

After the frame has been closed the machine will hold the sealing pressure until the end of the packaging process. The sealing results are consistent and produce identical results every time because they cannot be influenced by the operator. At the end of the packaging process the frame will open automatically. This optimised human-machine interface allows the operator to prepare the next item to be packaged on the integrated workspace while the unit is sealing.

#### FLEXIBLE ADJUSTMENT.

The variable table with height and depth adjustment allows you to adapt the size of the packaging to the different product sizes without changing the film roll (from approx.  $15 \times 15$  to  $60 \times 60$  cm  $/ 6 \times 6$  to  $23 \times 23$  inch).

- > No heating time, ready for immediate use.
- > No additional cutting process necessary. (integrated cutting wire seals and cuts at the same time).
- > Infinitely variable sealing time interval and automatic opening of the frame at the end of the packaging process through magnets.
- > Especially suitable for PE films.

#### Examples of use:

> Packaging of all types of clothing (e.g. clothing industry, general industry, transport companies, dry cleaners, mail –order businesses, airlines).



## TABLETOP BAGGERS

### SIMPLE AND COMPACT.

## hp 500 TM

The hawo table top unit is the ideal packaging solution for flat products (e.g. shirts, T-shirts, ties and small textiles). With its compact dimensions, the system can easily fit onto any counter in dry cleaners and laundries. The easy handling ensures a quick packing process. The funnel on the machine is filled with film. The packaging process uses the tunnel technique where the so-called detachable seam seals and separates in one step.

- > No heating time, ready for immediate use.
- > No additional cutting process necessary (integrated cutting wire seals and cuts at the same time).
- > Infinitely variable sealing time interval, acoustic sealing time indicator.
- > Up to 15 m / 600 inch of film can be loaded.
- > Easy loading due to funnel technology.
- > Especially suitable for PE films.

#### **Application examples:**

> Packaging of all flat or folded products (e.g. shirts, T-shirts), table and bed linen, as well as small items (e.g. ties, breast pocket handkerchiefs, underwear and socks).









# SEALING TONGS CT OVERVIEW





## hpl ISZ

The hpl ISZ impulse sealing tongs seal any type of thermoplastic film and aluminium laminate film. The sealing tongs are lightweight thanks to the separate impulse power supply. The sealing process starts automatically after closing the tong.

- > The tongs are available in bar widths of 20, 30, 45 and 63 cm (8, 12, 18 and 25 inches).
- > Total flexibility in the application (also fixed installation with ISZ-TK table clamp).
- > No heating time, ready for immediate use.
- > Especially suitable for PE films.

## Examples of use:

> Packaging of folded products (e.g. shirts, t-shirts, table cloth and bedding, ties, pocket square, underware and socks).



# VACUUM PACKAGING MACHINES





## VACUUM PACKAGING MACHINES

SPACE-SAVING AND HYGIENIC.

hv 450 AP-2 hv 630 AP-2







The hawo vacuum packaging machines¹ shrink-wrap textiles. Shrink-wrapping can reduce the volume of textiles to one fifth of their original size.

#### SERVICE FOR YOUR CUSTOMERS.

This has several advantages for your customers. Where before there was only room for one down duvet in a closet, now there is room for up to five. The sealing of the packaging through a vacuum guarantees protection against moths and other insects. What is more their larvae and eggs are also killed through the lack of air. In addition, washed and dry-cleaned garments are stored hygienically until the packaging is opened.

#### FLEXIBLE AND FAST.

The handling is easy since the machines are controlled by a microprocessor. They can be used on an ordinary table and are space saving. The packaging machines are fast, a complete work step takes no more than 40 s. The costs for the consumables are also low (vacuum bags, electricity).

#### OPTIMUM SEALING PROCESS.

After pushing the foot switch the machine will hold the sealing pressure until the end of the shrink-wrapping process. The sealing results are consistent and produce identical results every time because they cannot be influenced by the operator. At the end of the packaging process the sealing bars will open automatically. This optimised human-machine interface allows the operator to prepare the next item to be packaged on the integrated workspace while the unit is sealing.

- > No heating time, ready for immediate use.
- > Infinitely variable sealing and vacuum time interval.
- > Conventional vacuum packaging can be used (also unstructured or peelable).

#### **Examples of examples:**

> Packaging and shrink-wrapping of all types of textiles (e.g. table and bed linen, towels, duvets, and pillows).



## hpl 1500/1800 MS

The impulse large-scale sealers seal any type of thermoplastic film up to a thickness of  $4 \times 0.15$  mm ( $4 \times 0.006$  inch) gusseted and are therefore ideal for large dust covers (e.g. for mattresses). The sealing time can be easily adjusted on the "W.I.N.G" impulse power pack which can be set up separately. An integrated cutting device allows the film length to be easily adjusted to the product being packaged. Thanks to the impulse process, the device is very cost-effective since it only draws power when it is being used (hawo GreenTek). A 3 mm (0.12 inch) wide sealing seam, constant contact pressure using two precision cams and even temperature distribution over the entire width ensure a fast and reliable sealing process.

Simple operation is effected by repositioning one of the two process levers. Once the sealing time has been reached, the sealing process stops automatically. The machines are available with bar widths of 1.5 and 1.8 m (59 and 71 inches).

#### Examples of use:

> Production of pallet dust covers made from thermoplastic films for products of all kinds, packaging of large volume products, e.g. mattresses, textiles.



## LABELLING SYSTEMS



## TRANSPARENT AND RETRACEABLE.

## **VeriDoc-I SYSTEM**

The hawo VeriDoc-I is the new package labelling system for dry cleaners, laundries, as well as the clothing industry. The heart of the VeriDoc-I system is the new PrintBox from hawo. Using this compact print server, the data read by the barcode scanner (hawo IntelligentScan technology) is transmitted to the connected label printer and printed. No additional computer peripheral equipment is required to record important packaging information and print it onto a label. Even when the print server is switched off, all of the data recorded via the barcode scanner is retained and the production and expiry dates are updated automatically. VeriDoc-I is therefore the perfect addition to existing packaging solutions.

#### Examples of use:

> Packaging of all types of textiles (e.g. clothing industry, general industry, transport companies, dry cleaners, mail –order businesses, airlines, costume hire).

## **POLY BAGGERS**

	hp 630 KW hp 630 KW-P	hp 630 KST hp 630 KST-P	hp 630 KST-BS hp 630 KST-P-BS
RANGE OF USE AND CERTIFICAT	IONS		
Especially suitable for use in	cleaners and laundries	cleaners and laundries	cleaners and laundries
Type of device	wall unit	floor unit	floor unit
CE Sign	x	x	x
GS-certified	x	X	х
POWER OF SUPPLY DATA			
Mains connection	230 V, 50/60 Hz 115 V, 50/60 Hz	230 V, 50/60 Hz 115 V, 50/60 Hz	230 V, 50/60 Hz 115 V, 50/60 Hz
Power (during sealing process)	1250 Watt	1250 Watt	2 x 1250 Watt
MECHANICAL DATA			
Dimensions W x D x H	550 x 800 x 400 mm (21.6 x 31.5 x 15.7 inch)	810 x 570 x 2,030 mm (31.9 x 22.4 x 79.9 inch)	810 x 670 x 2,230 mm (31.9 x 22.4 x 79.9 inch)
Casing	metal, powder-coated	metal, powder-coated	metal, powder-coated
Sealing type	impulse separation seam shoulder shaped <sup>1</sup>	impulse separation seam shoulder shaped <sup>1</sup>	impulse separation seam shoulder shaped <sup>1</sup> / straight (bottom sealing unit)
Control	manual pneumatic	manual pneumatic	manual pneumatic
Sealing time	infinitely adjustable	infinitely adjustable	infinitely adjustable
Sealing seam length	2 x 320 mm (2x 12.6 inch)	2 x 320 mm (2x 12.6 inch)	2 x 320 mm (2x 12.6 inch) 630 mm floor sealing unit (24.8 inch)
Film width	max. 600 mm (23.6 inch)	max. 600 mm (23.6 inch)	max. 600 mm (23.6 inch)
Film thickness	min. 2 x 0.01 mm (2 x 0.04 inch) max. 2 x 0.02 mm (2 x 0.08 inch)	min. 2 x 0.01 mm (2 x 0.04 inch) max. 2 x 0.02 mm (2 x 0.08 inch)	min. 2 x 0.01 mm (2 x 0.04 inch) max. 2 x 0.02 mm (2 x 0.08 inch)
Pneumatic air consumption <sup>2</sup>	max. 0.9 l/cycle	max. 0.9 l/cycle	max. 0.9 l/cycle
Pressure <sup>2</sup>	max. 6 bar (hp 630 KW-P)	max. 6 bar (hp 630 KST-P)	max. 6 bar (hp 630 KST-P-BS)
Weight	40.0 kg (88.2 lbs) 52.7 kg (116.2 lbs)	46.5 kg (102.5 lbs) 59.2 kg (130.5 lbs)	91.5 kg (201.72 lbs) 95.7 kg (210.99 lbs)
PACKAGING MATERIALS			
All types of thermoplastic film (e.g. PP, PVC, PE) <sup>3</sup>	Х	x	Х

<sup>&</sup>lt;sup>1</sup> Optionally available with straight sealing form.
<sup>2</sup> Only with pneumatic control.

 $<sup>^{3}</sup>$  hawo recommends the use of environmentally friendly and completely recyclable PE films for textile packaging.

## L-SEALERS

### hp 630 WS

RANGE OF USE AND CERTIFICATIONS	
Especially suitable for use in	textile industry
Type of device	L-sealer
CE Sign	X
GS-certified GS-certified	X
POWER OF SUPPLY DATA	
Mains connection	230 V, 50/60 Hz 115 V, 50/60 Hz
Power (during sealing process)	500 Watt
MECHANICAL DATA	
Dimensions W x D x H	1,650 x 950 x 1,555 mm (64.7 x 37.4 x 61.2 inch)
Casing	metal, powder-coated
Sealing type	impulse separation seam, L- shaped
Control	semi-automatic
Sealing time	infinitely adjustable
Sealing seam length	630 x 630 mm (24.8 x 24.8 inch)
Height of the packaging goods	max. 300 mm (11.8 inch)
Film width	max. 600 mm (23.6 inch) (Holder for max. 600 mm / 23.6 inch wide film)
Film thickness	min. 2 x 0.01 mm (0.0004 inch) max. 2 x 0.02 mm (0.0008 inch)
Weight	103,5 kg (228,18 lbs)
PACKAGING MATERIALS	
All types of thermoplastic film (e.g. PP, PVC, PE) <sup>1</sup>	×

 $<sup>^{\</sup>scriptsize 1}$  hawo recommends the use of environmentally friendly and completely recyclable PE films for textile packaging.

## TABLETOP BAGGERS

### hp 500 TM

RANGE OF USE AND CERTIFICATIONS	
Especially suitable for use in	cleaners and laundries
Type of device	tabletop unit
CE Sign	Х
GS-certified	Х
POWER OF SUPPLY DATA	
Mains connection	230 V, 50/60 Hz 115 V, 50/60 Hz
Power (during sealing process)	180 Watt
MECHANICAL DATA	
Dimensions W x D x H	550 x 800 x 400 mm (21.6 x 31.5 x 15.7 inch)
Casing	metal, powder-coated
Sealing type	impulse seperation seam
Control	manual
Sealing time	infinitely adjustable
Sealing seam length	500 mm (19.67 inch)
Film width	max. 500 mm (max. 19.67 inch)
Film thickness	min. 2 x 0,01 mm (0.0004 inch) max. 2 x 0,02 mm (0,0008 inch)
Weight	20 kg (44.10 lbs)
PACKAGING MATERIALS	
All types of thermoplastic film (e.g. PP, PVC, PE) <sup>1</sup>	х
ACCESSORIES	
Stativ	X
Additional funnel	х

hv 450 AP2 hv 630 AP2

GENERAL DATA	
Mains connection	230/115 V   50/60 Hz
Power consumption (only during the packaging process)	2,800 W (16 A, characteristic curve G (K))
Compressed air connection 1/4 inch	min. 6 bar
Dimensions W x D x H	515 x 490 x 280 mm (20.3 x 19.3 x 11 inch) 700 x 490 x 280 mm (27.6 x 19.3 x 11 inch)
Housing	Stainless steel AISI 304
Weight	30 kg (66.1 lbs) 35 kg (77 lbs)
Seal seam width	8 mm (0.3 inch)
Seal seam length	450 mm (17.7 inch) 630 mm (24.8 inch)
COMPRESSED AIR, VACUUM AND GAS FLUSHING	
Pump output	220 N/min (13.2 m³/h)
Maximum air consumption	90 – 126 N/min
Minimum air pressure	6 bar
Compressed air quality	according to ISO 8573-1, solid particles class 3, (max. 5 µm). Water dew point 15°C below the ambient temperature, oil content class 3 (max. 1 mg/m²)
Vacuum time	unlimited
Maximum vacuum	-85 kpa (-637.5 mm Hg)
Pressure (during gas flushing, connection only with corresp. pressure reducer)	No gas flushing possible
Gas flushing time	No gas flushing possible
Permissible inert gases	No gas flushing possible
Ventilation or cleaning time	manually
PACKAGING MATERIALS <sup>1</sup>	
Polyethylene, Polypropylene	х
PVC	х
All types of laminate, including aluminium laminate	х
Film thickness	max. 2 x 0.4 mm (2 x 0.016 in)
ELECTRONICS	
Sealing system	Impulse
Control	Microprocessor (SPS)
OPERATION AND COMMUNICATION	
Operation	Individual buttons / LCD, illuminated
PROCESS PARAMETERS	
Sealing time	max. 6 s
Cooling time	max. 6 s
ACCESSORIES	
Positioning tray	X
Stand for HV ST	x
Digital vaccuum switch	X
Clamping lever for films	х
Film holding support	X
IntelligentScan (Scansystem)	x

<sup>&</sup>lt;sup>1</sup> hawo recommends the use of environmentally friendly and completely recyclable PE films for textile packaging.

## **SEALING TONGS**

	hpl ISZ 200	hpl ISZ 300	hpl ISZ 450	hpl ISZ 630
GENERAL DATA				
Type of device	Impulse sealing tongs	Impulse sealing tongs	Impulse sealing tongs	Impulse sealing tongs
Sealing seam length	200 mm (7.9 inch)	300 mm (11.8 inch)	450 mm (17.7 inch)	630 mm (24.8 inch)
Sealing time	steplessly adjustable	steplessly adjustable	steplessly adjustable	steplessly adjustable
Sealing seam width	3 mm (0.12 inch) double-sided			
Film thickness	2 x 0.5 mm (2 x 0.02 inch)	2 x 0.5 mm (2 x 0.02 inch)	2 x 0.5 mm (2 x 0.02 inch)	2 x 0.5 mm (2 x 0.02 inch)
Power supply	WING 200 Pulse generator	WING 200 Pulse generator	WING 200 Pulse generator	W.I.N.G 300 Pulse generator
Power consumption	250 W	250 W	250 W	250 W
Mains connection	230 V, 50/60 Hz 115 V, 50/60 Hz			
Full weight	6.1 kg (13.4 lbs)	6.2 kg (13.6 lbs)	6.3 kg (13.9 lbs)	9.6 kg (21.2 lbs)
Weight of tongs	1.6 kg (3.5 lbs)	1.7 kg (3.7 lbs)	1.8 kg (4.0 lbs)	2.0 kg (4.4 lbs)
ACCESSORIES				
Table clamp	ISZ-TK	ISZ-TK	ISZ-TK	ISZ-TK
PACKAGING MATERIALS				
All types of thermoplastic film (e.g. PP, PVC, PE) <sup>1</sup>	х	х	x	х
PE-coated paper	X	Х	Х	Х
Aluminium laminate	X	X	X	X

## MATTRESS PACKAGING MACHINES

	hpl 1500 MS	hpl 1800 MS
GENERAL DATA		
Type of device	Impulse sealer	Impulse sealer
Sealing time	stepless	stepless
Sealing seam length	max. 1,480 mm (58.2 inch)	max. 1,780 mm (70 inch)
Sealing seam width	3 mm (0.12 inch)	3 mm (0.12 inch)
Film thickness	4 x 0,15 mm (2 x 0.006 inch)	4 x 0,15 mm (2 x 0.006 inch)
Film width	max. 1,480 mm (58.2 inch)	max. 1,780 mm (70 inch)
Power supply	WING 500 Pulse generator	WING 500 Pulse generator
Mains connection	230 V, 50/60 Hz	230 V, 50/60 Hz
Power consumption (only during the sealing process)	500 W	500 W
Material	powder-coated	powder-coated
Dimensions W x D x H	1.990 x 600 x 1,400 mm (78.3 x 23.6 x 55.1 inch)	2.150 x 600 x 1,280 mm (84.6 x 23.6 x 50.4 inch)
Total weight	98 kg (216 lbs)	119 kg (262.4 lbs)
ACCESSORIES		
Length counter	х	х
2. film reel holder	X	X
PACKAGING MATERIALS		
All types of thermoplastic film (e.g. PP, PVC, PE) <sup>1</sup>	Х	Х





Our insistence on quality is a pledge to everyone who comes into contact with us and our products. This is why our equipment all bears the CE mark. We have been certified to ISO 9001.



#### © 2016 hawo GmbH

hawo, hawo IntelligentScan and GreenTek are applied-for or registered trademarks of hawo GmbH in Germany and many other countries.





Our current product videos and information films on professional textile packaging can be found at:

www.hawo.tv

#### COPYRIGHT

The layout of this brochure, along with the graphics, photographs and edited texts used, are protected by copyright. hawo GmbH reserves all rights of distribution and dissemination, including the photomechanical reproduction or parts thereof via data media, data networks, etc.

### DISCLAIMER

The brochure has been put together with the greatest care and is constantly being updated. All content is intended merely as a non-binding offer and for the purposes of general information and does not replace in-depth and personal advice in relation to buying decisions. hawo GmbH offers no guarantee of the correctness, up to date nature, completeness or quality of the information contained in the brochure and accepts no liability.

Technical modifications reserved 06/2016 | 9.340.016

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