

handtmann

***Vacuum filler
VF 300***
*Decision
for progress*



The vacuum filler for efficient and profitable sausage production.

In the development and manufacture of automatic filling and portioning machines, handmann can draw on their considerable experience gained over more than 30 years – an advantage that is greatly valued by our customers throughout the world.

For the VF 300 our specialists have maintained well-proven design principles. At the same time, innovative development and practical experience in application have further improved the operation of our vacuum-filler.

The result: A new generation of vacuum fillers that fulfil, without compromise, all the requirements of the industrial processors.

The new VF 300 – the fulfilment of all our experience

The well known handmann vane-cell meat pump offers every user a whole range of advantages that greatly improve the product quality. Here are just a few benefits.

Filling with vacuum is essential if the product is to be free of air pockets and to be colour stable.

Gentle transport of all meat products, whether it be for fresh or cooked sausage, and the even distribution of larger meat pieces in sausages or cooked meats ensures outstanding product quality and a well-balanced visual effect.

The particularly effective evacuation of air from the product reduces fat oxidation, avoids proteolysis and reduces bacterial action. In practice, this all amounts to better product quality, good retention of colour and taste plus longer shelf life.



Also with soft, less compact fillings, the product is given an even consistency. Compactly filled sausages are not only a question of quality but also of saving in casings.

The hydraulic drive is virtually free of wear and offers high performance with minimum energy consumption.

New hydraulic drive

The sensitive control provided by the newly designed hydraulic drive system, ensures such gentle filling that both, the meat product and the casing are subjected to a minimum of stress. A direct drive and the precision of the control provides unequalled portioning accuracy. Such consistency is maintained even when working at full capacity.

Hygiene and safety

The particularly solid design of the VF 300 itself meets the most important requirements for hygiene and safety. Smooth surfaces facilitate simple and rapid cleaning. All parts that come in contact with the product are easily accessible and can be removed or replaced

with great ease to create good standards of hygiene.

Active safety devices provided on the VF 300 vacuumfiller comply with safety standards. Convenient one-man operation even on product change – over offers considerable operational safety.

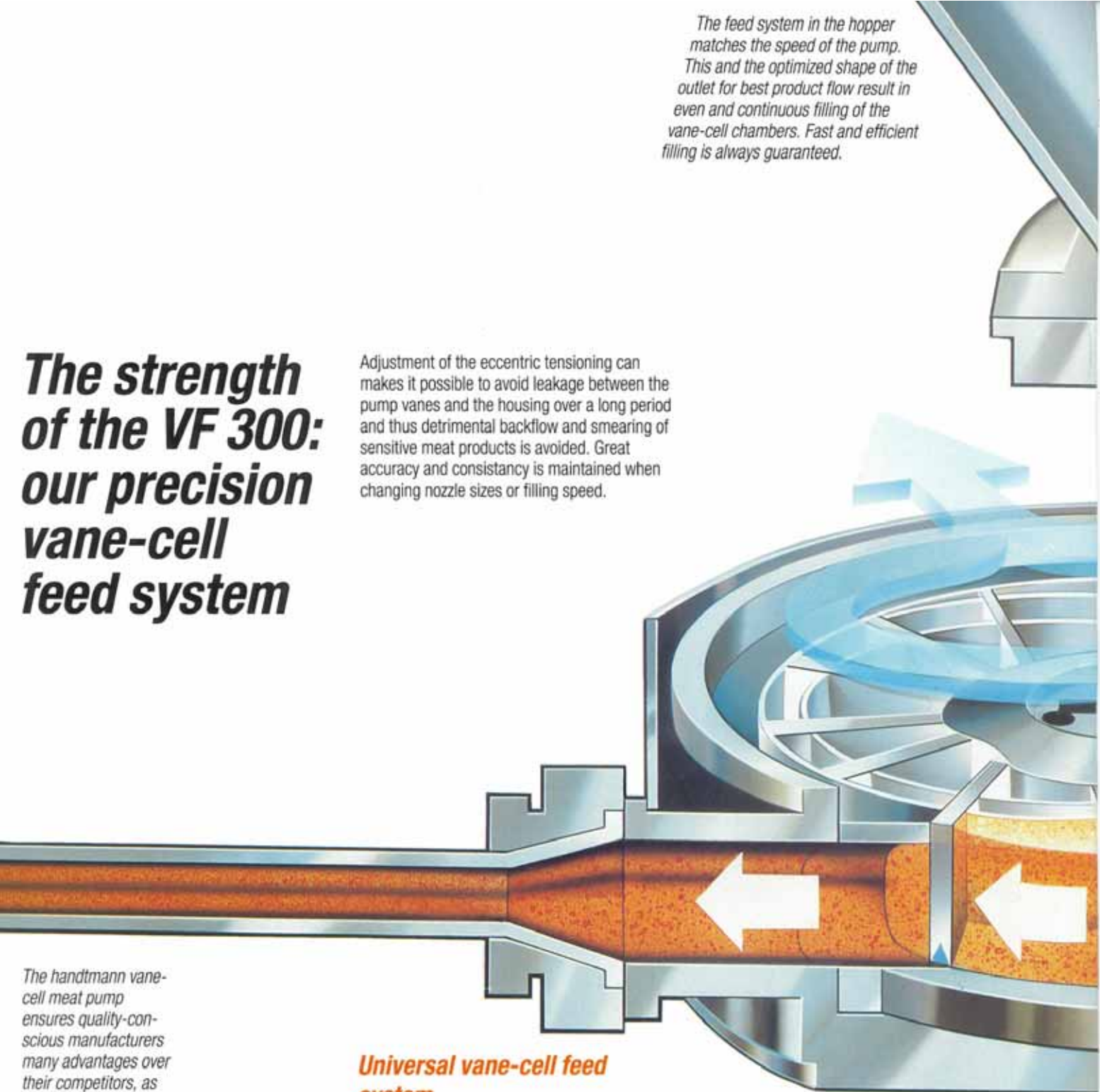
The machine meets the requirements of the German Employers Liability Insurance Association.



The feed system in the hopper matches the speed of the pump. This and the optimized shape of the outlet for best product flow result in even and continuous filling of the vane-cell chambers. Fast and efficient filling is always guaranteed.

The strength of the VF 300: our precision vane-cell feed system

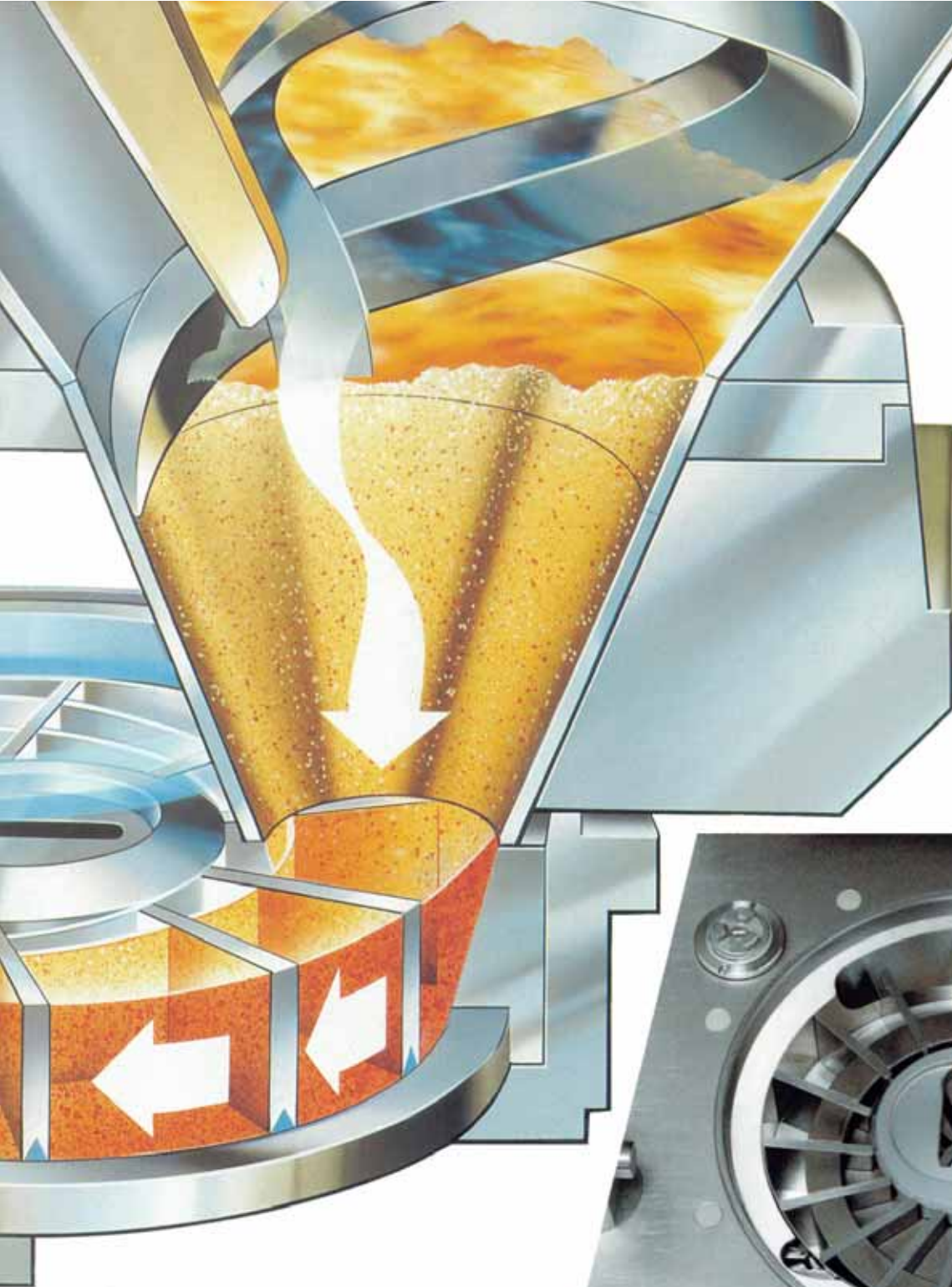
Adjustment of the eccentric tensioning can make it possible to avoid leakage between the pump vanes and the housing over a long period and thus detrimental backflow and smearing of sensitive meat products is avoided. Great accuracy and consistency is maintained when changing nozzle sizes or filling speed.



The handtmann vane-cell meat pump ensures quality-conscious manufacturers many advantages over their competitors, as the VF 300 vacuum filler is suitable for a wide range of applications, always with guaranteed product quality.

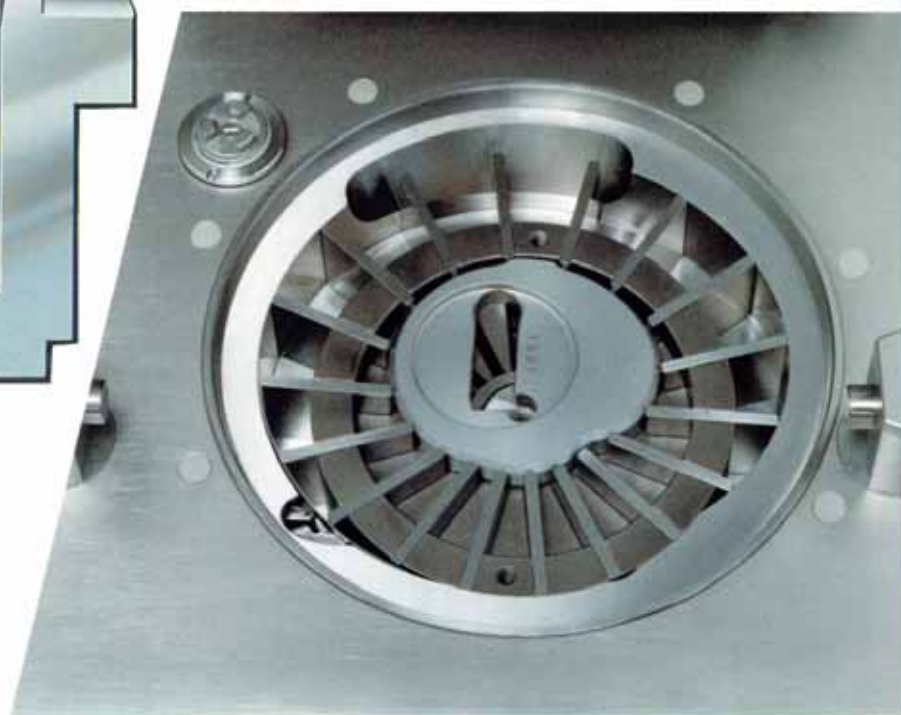
Universal vane-cell feed system

The constant product feed assures good density, best possible portioning accuracy and even distribution throughout product. An ideally located vacuum system effectively evacuates air to further enhance product quality.



A readily accessible lever on the outside of the swing housing starts or stops the feed mechanism. This is a practical advantage, particularly when filling easy-flowing products.

During or at the end of a production run, the feed mechanism can be switched into operation when filling out the hopper content.



Gentle product handling is a recognisable feature of all handtmann vacuum fillers. All types of product, from free flowing to products with large pieces of meat and ham are filled without crushing, tearing or compression.

Easy operation for economic sausage production

The instrument panel is ergonomically designed and is within easy reach and vision of the operator. Without changing position, a single operator can make all the necessary adjustments and checks.

As an option, a microcomputer (MC) control is provided at additional cost. Apart from simplifying operation, such a control unit offers a whole range of production information: the number of portions per casing, the number of portions in a total production run, the total production in liters or automatic shut-off after a specified number of portions. 80 product programs can be stored, recalled and modified as required.

The microcomputer controls are provided with a fault diagnosis function to indicate the operating state of the machine. This LED service display on the instrument panel offers additional safety. It indicates to the user when a service is due or when the operation is incorrect. Every operator can then quickly determine the correct settings and expensive down time is reduced to a minimum.



All VF 300 vacuum fillers can be equipped with Monitor Control, which is available on request. The operator is guided by screen prompts and, in addition to making inputs, can store product data via the monitor's screen. Monitor Control offers the operator a variety of information and allows flexible input and output of product data. In addition, product information can be stored, product names can be assigned, incorrect system operation is indicated in the display, etc.

A knee lever to switch the machine on or off adjusts in many directions for the convenience of the operator.

Advantages of electronic and hydraulic systems

The electronic portioning control of the VF 300 is designed to cover a range of from 5 – 10,000 grams with precision adjustment, down to 0.1 gramm for exact group weights.

Decision for progress



The MC control portions from 5 to 100,000 grammes. It is possible to set the desired weight with accuracy and the precision portioning system with a capacity of up to 500 portions/minute at 2.5 twists per link could scarcely be bettered.

Of particular advantage for clean and rapid working is the product return-suction feature which is standard on the VF 300. The absence of product loss at the filling tube means greater hygiene at the worktable. Weight compensation ensures that the first portion will be an exact weight, also when clipping.

Developed by practical experience: The two-part hopper of the VF 300

The two-part hopper of the VF 300 has a total capacity of 350 liters. The lower half alone has a capacity of 90 liters and so small batches can be fed directly into the lower section of the hopper.

The upper part can be hinged up to provide a gap to observe the level of material in the hopper. A safety switch stops the machine if the upper part is lifted up any further.

A hinged step is fitted on the operator side of the VF 300 to give the operator a firm stand and easy access to the two parts of the hopper. The machine does not stop when the step is hinged down but its low height provides a safe footrest.

The MC control makes it possible to increase portioning capacity when clipping by transmitting an advanced clipping impulse. Connections for a check-weigh system are integrated.

Practical accessories increase the versatility of the VF 300

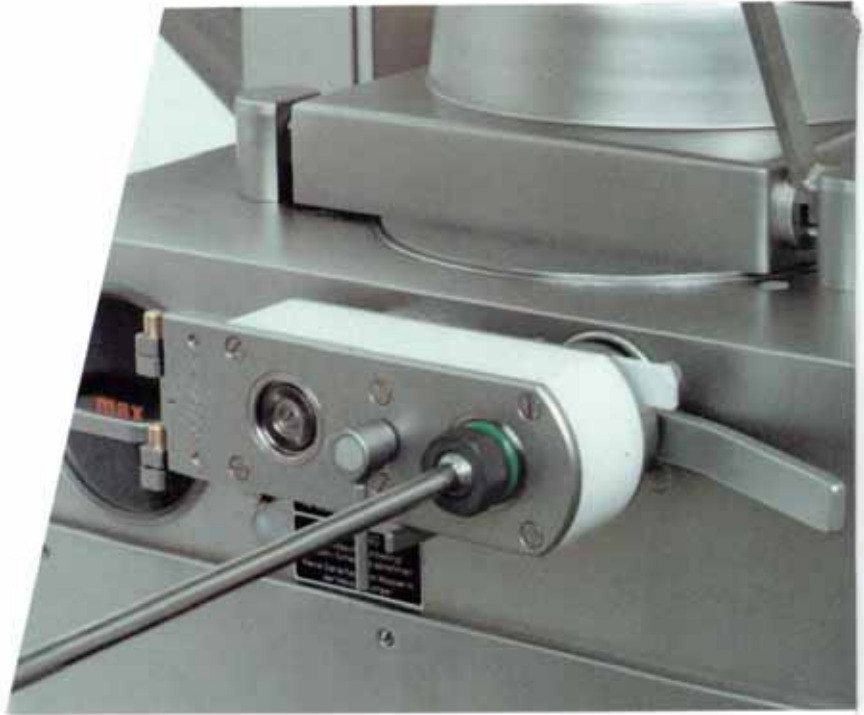
Automatic linking

The linking gearbox type 34-4 is easily attached above the worktable. Its rapid coupling secures it firmly to the filler, whilst at the same time the linking gearbox automatically connects with the linking drive. Alignment and tools are not needed.

Holding device

The automatic holding device type HV 60-6 or HV 60-7 is connected to the linking gearbox. Here again the attachment is effected automatically without the use of tools.

The two holding devices differ in their overall length. Where shirred casings up to 375 mm in length are used, the HV 60-6 is particularly suitable. The HV 60-7 is used for shirred lengths up to 270 mm. The HV 60-7 is recommended for linking products that are firm



and sensitive to smearing. Effortless one-hand operation will improve daily production output.

The operating lever has a special position to retract the linking head over the end of the nozzle to easily grip or close the casing for start-up.

Both holding devices are fitted with an improved, well adjustable and flexible casing brake. The results are practically no bursts, increased performance and excellent calibre accuracy with all artificial and collagen casings. Low weight and compact design make attachment and removal easy. The combined

linking gearbox and holding device is supported on a swivel arm and can be swung to one side for quick changeover from linking to filling or portioning in just a few seconds.

The compact linking gearbox and holding device enables the worktable to be used close to the body of the machine. When changing from linking to filling they can be swung away for easy operation without moving the work surface.

The ergonomic design allows the operator to place the container or caddy of casings well within reach offering more rapid and easy casing changeover.



Quick conversion

The quick release locking nuts provided make the replacement of filling tubes and attachment units simple and rapid. No tools are needed and down time is reduced.



Integrated accessory box

An accessory box is accommodated in the front panel of the VF 300. The accessories are conveniently located within easy reach of the operator, they are kept clean and ready to use. The accessories box also displays service instructions for immediate fault finding.



Casing spooling device type 78-6

The casing spooling device type 78-6 is offered as optional equipment to further increase production of sausages in natural casings. Connected to the machine it facilitates quick and gentle spooling of casings directly on the linking nozzle.

The VF 300 is prepared for easy fitting of the casing spooling device without the need for tools.

Supplementary machines and devices

Portioning and linking machine PA 30-7

The vacuum filler VF 300 is particularly suitable for use with many supplementary machines and devices, including an electrical connection socket to control automatic clippers.

For economic sausage production, one or two type PA 30-7 portioning and linking machines are connected to a VF 300 for a constant feed of evacuated meat product. High output on all types of casings, with exact portion weights and simple operation ensure profitable sausage

production. The portioning range is from 5 – 100,000 grammes.

Further information is available in the handtmann PA 30-7 leaflet.

AL-System

The new AL-Systems can produce a wide variety of shape and size of sausage, including curved sausages, ring-sausages and rope-style sausages in synthetic or collagen casings. handtmann's industrial vacuum filler with special monitor control supplies the line with evacuated sausage product.

The modular design of the system's functional units, from the vacuum filler to the sausage-hanging unit, guarantees that the system can be fully adapted to the production of a particular product. Short and large product passages guarantee smooth handling of the sausage mix. The portioning speed for small sausage production is up to 2,000 portions/minute.

This new technology, efficiency and flexible automation ensures that the AL-System will pay for itself within a very short time.



Vacuum filler VF 300 A decision for progress

The high filling pressure of 35 bar that can be provided by the VF 300 makes it an even more versatile filler, capable of economically filling firm substances in casings of small caliber while still achieving a high output.

The hydraulic drive of the VF 300 is yet a further advantage since it permits such a wide range of adjustment. Effective filling capacity extends from around 2 to 160 liters/min. The constant filling flow is ideal for supplying attachment devices and satellite machines.

A further advantage is the extremely low noise level. The audible noise level is some 50 % lower than that of previous models. At around 70 dBA in filling operation, it is well below the legal limit.

handtmann after sales service

The highly-qualified and reliable handtmann technical service organisation offers fast and efficient service. Long service intervals, service-friendly machine design and the possibility of fault diagnosis by telephone with the aid of the fault display reduces maintenance costs. It is possible for all operators to maintain for many years the technical advantages they gain through the purchase of handtmann equipment — advantages that include proven quality and effective rationalisation, which together mean greater economy.



VF 300

Filling capacity (infinitely variable).

VF 300	10,000 kg/h
VF 300 P	5,500 kg/h

Filling pressure

VF 300	up to 35 bar
VF 300 P	up to 55 bar

Portioning speed

up to 500 portions/min.

Performance table for portioning and linking speeds (tolerance - 10 %)

25 g	500 portions/min.
50 g	500 portions/min.
100 g	450 portions/min.
200 g	380 portions/min.

Portioning range

with MC control 5- 10,000 grammes

Hopper capacity

in lower part of hopper 350 liters

Linking gearbox type 34-4

Product return suction

Compensation for 1st portion weight

Electrical

impulse control for clipping machines

standard
(according to specification)

Electric rating

10.5 kW

Weights and dimensions

VF 300 weight net	1353 kg
weight gross	1638 kg

Case dimensions

VF 300 1460x1900x2250 mm

Standard accessories

4 linking nozzles 12, 15, 19 and 22 mm dia.
5 filling tubes 12, 16, 22, 30 and 40 mm dia.
Rotor extractor
Operating instructions

Optional accessories

Automatic holding device
HV 60-6 and HV 60-7
Special linking nozzles with holding star and brake ring
9, 10, 11, 12, 14, 15, 17, 19, 22, 25 and 28 mm dia.
Clipper attachment set

Double outlet

Type 67-1 manual
Type 67-2 pneumatic
Type 67-4 for portioning

Technical data

