Belt Conveyor

For feed and removal operations. Basic construction is of rust-resistant materials (high-grade steel version), with modern transport belt being installed to comply with current food industry regulations. Belt operation is quiet and smooth.

Overall width: 360 mm
Length: 1500 mm
Belt speed: 0.25 m / Sek.

Dimensions and speed can be changed to meet customer demands.

Revolving Table

A stationary safety ring prevents contact with the revolving top plate of table, swivelling castors with locking device, working height adjustable from 700 – 800 mm (high-grade steel version).

Dimensions: Diameter: 1200 mm
Height: 700 - 800 mm
Rotation speed: 8 r.p.m.

Dimensions and speed can be changed to meet customer demands.
**Packing machinery**

**VS 320**

The fully automatic bag packing machine for sliced and unsliced loaves with a capacity of 30 – 55 packs per minute (continuous adjustment). The universal application for packing and sealing plastic and paper bags means that the VS 320 meets the international, multi-layered packaging requirements. Based on the tried and tested VS 310, changes have been made to the layout of the drive mechanism in order to reduce maintenance to a minimum and to ensure consistent switching point precision in all functions. The machine can be constructed for either left or right-handed operation.

**VBA 40**

Vertical packing machine with integrated clipping device for packing and sealing bulk goods (e.g. bread rolls, biscuits etc.) in prefabricated plastic bags. The robust bag spreading mechanism and bag magazine with up to 6 stations for holding finished bags ensure optimum packaging. This automat can be combined with a counting or weighing machine and is also ideally suited for manually feeding.

**Capacity:**
- up to 50 packs per minute,
- up to 40 packs per minute with paper bags (depending on the product and the type and duration of filling)

**GBK 205 | GBK 220 | GBK 420**

HARTMANN GBK machines point the way to the future in the area of bag packing. Ideal of sliced and unsliced loaves (upright slices, toast bread, etc.). The principle of the vacuum ram developed by HARTMANN and patented at home and abroad has proven itself in practice and has set the standard for many years, especially for bagging upright slices. The well-conceived technology in this machine guarantees optimum packaging for both plastic and paper bags. The packs are sealed with the well-tried clipping device, which demonstrates a high level of reliability and long service life. The machine can be constructed for either left or right-handed operation.

**Capacity:**
- GBK 205: up to 25 packs per minute
- GBK 220: 30 – 45 packs per minute
- GBK 420: 30 – 60 packs per minute

The packing speed can be continuously adjusted.
Selectra 20 | Selectra 30 | Selectra 50

Fully automatic band slicers for toast and mixed rye loaves. The slicing process is executed by means of band blades which are held taut by means of hard-chrome plated drums. The cantilevered, non-distorting tubular steel frame ensures that the machine runs quietly. Generously proportioned doors and hoods permit both good access for cleaning and maintenance as well as speedy blade replacement. The machine can be constructed for either left or right-handed operation.

**Capacity:**
- Selectra 20: up to 2,500 loaves per hour
- Selectra 30: up to 3,500 loaves per hour
- Selectra 50: up to 4,500 loaves per hour

The various performance statistics depend on the product.

Cutting system for bread bars

From bread bars to sealed packs of sliced bread:
- Cutting in a defined block length by means of a rotating blade
- Slicing the blocks into the required slice thickness and portioning them with the band slicer Selectra 30 / 50
- Packing and sealing with the packaging machine VS 320 (or alternative packing solutions)

Combination: Selectra 50 with Cutting system for bread bars
Special machinery

The HARTMANN Pillow-Pack machine is a modular conveying, slicing and packing unit. It is ideally suited for packing hamburger and hot dog buns in welded seam band packaging. It can be used to slice and seal 30 - 40 products per packing unit with the appropriate level of quality. The user-friendly conveying unit can be configured in different ways for conveying, slicing and welding package sizes appropriate to individual requirements.

Autoload

The Autoload packaging unit can be combined with the HARTMANN GBK 220 or 420 packing machines. This unit is characterized by the variable adjustment/formation of the packaging unit in the area of hamburger and hot dog buns. Up to 3,000 packs per hour are individually transported, cut and vacuum-packed using prefabricated bags (PP, PE or paper).

Depending on the area of use, the Autoload packaging unit can be equipped with the multi-head disc slicer or a band slicer system. The combination with the sophisticated, tried-and-tested technology of the GBK 220 and 420 machines guarantees optimum packaging that will satisfy all quality requirements.

Pillow-Pack

The HARTMANN Pillow-Pack machine is a modular conveying, slicing and packing unit. It is ideally suited for packing hamburger and hot dog buns in welded seam band packaging. It can be used to slice and seal 30 - 40 products per packing unit with the appropriate level of quality. The user-friendly conveying unit can be configured in different ways for conveying, slicing and welding package sizes appropriate to individual requirements.
**Special machinery**

**Disc-Slicer**

The disc-slicer can be fitted with 1 or 2 disc slicers. Particularly suitable for baguettes, hot-dog and hamburger buns. The clearance between the disc slicers can be adjusted individually between 2 and 10 mm.

---

**Decrusting machine BS 20**

The four-sided decrusting machine BS 20 was developed to remove the crusts from square and rectangular loaves (sandwich bread, toast bread, etc.) on all four sides continuously by means of 2 vertically adjustable belt slicing stations.

Capacity: Up to 50 packs per minute or up to 40 packs per minute with paper.

---

**Clipping Units**

**EC 101i**

This machine has an integrated, pulse-controlled power source and can be combined with any vertically or horizontally operating packaging machine without difficulty. The clipping unit operates intermittently, which eliminates the need to synchronize the unit with the packaging machine. This also makes it an ideal machine for hand-feeder applications. An integrated vacuum device in the clip station removes excess air from the bags to be closed, which provides an optimum seal for packages.

Capacity: Approx. 60 packages per minute (depending on the type of product)

---

**EC 101k**

Clipping unit for either vertically or horizontally working packaging machines. The continuous operation system employed by this unit requires that the two systems work together simultaneously. The machines can be linked either mechanically or electronically. An integrated vacuum device in the clip station removes excess air from the bags to be closed, which provides optimum seal for packages.

Capacity: Approx. 60 to 100 packages per minute (depending on the type of product and the type of drive mechanism)

---

**EC 104**

The design of this clipping unit means that packaged products (on-tray packs, baguettes, sausages etc.) can be accepted from a horizontal packaging machine in an inline process and fed to the collecting station at table height. The pulse-controlled, self-powered unit is mounted on wheels and does not need to be synchronized with the packaging machine. The products are moved along on conveyors and the speed is infinitely variable. In combination with a blowing-table the unit is also ideally suited for manual feeding.

Capacity: Approx. 40 packages per minute (depending on the type of product)
### Clipping Units

**EC 140**
An extremely versatile filling and sealing machine where prefabricated plastic or paper bags can be manually filled. The blowing unit opens the bag, so that the product can be inserted quickly and easily by hand. The subsequent clipping unit seals the product precisely and securely.

**Capacity:** Approx. 45 packages per minute (depending on the type of product)

**EC 135**
Suitable for sealing bags that are vertically filled with bulk material. The unit is mounted on wheels and has a built-in, pulse-controlled drive mechanism. Feeding can be either manual or by means of a vertical packaging machine. No synchronization with the packaging machine is required.

**Capacity:** Approx. 40 packages per minute (depending on the type of product)

**EC 150V**
This unit is specially used for closing bags that are vertically filled with bulk material. The built-in, pulse-controlled drive mechanism of the clipping unit means that no synchronization is required with the packaging machine. This unit can either be operated in connection with a vertical packaging machine or applied to hand-feed operations. It can be equipped with 4 or 8 bucket shaped guides. The format guides for different product dimensions are very easy to exchange.

**Capacity:** Approx. 80 packages per minute (depending on the type of product)

**EC 130**
The compact design of the EC 130 clipping unit makes it ideal where floor space is a problem. The self-powered, pulse-controlled unit is mounted on wheels for easy manoeuvring. It can be fed manually or by means of a horizontal flow-wrap machine.

**Capacity:** Approx. 40 packages per minute (depending on the type of product)

**EC 155**
This device is suitable for closing large volume bulk goods (e.g. bread rolls, pretzels, etc.). The pulse-controlled independent drive mechanism on the clip unit means that there is no need to synchronize with the packing machine. Gripping tongs place the filled bags directly under the sealing station of the packing machine and transport them to the closing unit. The star-shaped arrangement of the gripping tongs means that the next product can be positioned during the closing process.

**Capacity:** Approx. 50 packs per minute (depending on the product)

### Clipping Units | Printing Units

**HPD Hot-foil Printer**
6-digit add-on printing unit specially designed for printing plastic or paper clips seals. The data is transferred to the clip band from the backing film by means of a hot print process, making it unblurrable (dry printing).

**DWP Printing Unit**
6-digit add-on printing unit specially designed for printing plastic or paper clips seals. The data is imprinted by means of hardened steel numbering dyes and is also visible in colour (by applying ink to the number wheels with an ink roller).