Minced meat process solutions
Automated production for maximum quality and efficiency
Minced meat solutions
Professional automation solutions:
Efficient and cost-oriented minced meat production.

From automatic feeding, through constant vacuum filler product flow and exact portioning using the minced meat portioner, to precise positioning of the product into the tray – automation solutions for minced meat from Handtmann facilitate an automatic process with no non-production times and no risk of contamination.

The perfect interplay of the grinding and portioning process steps in conjunction with the tray feeding automation option or depositing into thermo-forming machines for extremely high production standards.

The line’s integration with the subsequent packaging process and its compatibility with all conventional packaging machines facilitate a range of professional automation options for exacting production demands.

Rationalisation effect thanks to high performance
- High portioning speed of up to 140 portions/min. using the VF 600 vacuum filler together with the GMD 99-2 minced meat portioner.
- Portioning accuracy of +/- 1%.

Rationalisation effect thanks to flexibility
- Various final hole plates can be selected:
  - Segment shape for a more compact product appearance.
  - Eye shape for looser, optically larger filling.
- All standard tray formats and types can be used.
- Cost savings with diversified production for different customers.

Rationalisation effect thanks to optimum handling
- All parameters controlled and set using the VF 600.
- The line can be operated by just one person.

Rationalisation effect thanks to automation
- Available either as a version compatible with all conventional minced meat depositers and tray dispensers or in conjunction with the GEA FlexLoader as a complete solution with collating and depositing into thermo-forming and packaging machines.
- Automatic unstacking and transportation of trays.
- Precise and automatic depositing of minced meat portions.
Grinding

Grinding with the inline grinding system

The quality of end products is dependent on the grinding method. Reduced mechanical handling and very gentle cutting are decisive factors in achieving a perfect product appearance.

Using a Handtmann VF 600 vacuum filler and a GD 93-3 or GD 93-6 grinder head, the product is ground to its final grain size and simultaneously portioned in a single process step. This reduces cutting stresses and shortens process steps. Product protection at its best. Augmented by the automatic and individually controllable GD 93-35 separating device for gristle, the required level of product reliability is guaranteed. The integration of inline grinding technology into compact process solutions provides professional automation options.

The Handtmann cutting concept provides the crucial edge:

- Thanks to state-of-the-art control technology in the VF 600 vacuum filler, independently controlled feed and cutter speeds guarantee flexible adaptation to the cut size.
- The tried-and-tested Handtmann vane cell feed system ensures a constant, positive flow of product. Product is prevented from swirling round at the hole plate. Results in a cleaner cut.
- This gentle cutting system heats the product to a negligible degree only. At the same time, air is removed efficiently from the vane cell feed system on the vacuum filler. The residual air content in the product is reduced considerably.
- The versatile equipment options for cutting set parts guarantee optimum adaptation to the individual product.
Portioning with the GMD 99-2

In conjunction with the GD 93-3 or GD 93-6 Handtmann inline grinding system, the GMD 99-2 is the system solution for economical, high-quality minced meat production.

The GMD 99-2 minced meat portioner is the highly productive process solution for contamination-free production, from portioning to packaging.

Advantages:
- Easy to operate.
- Outstanding weight accuracy of +/-1 %.
- High output of up to 140 portions per minute.
- Ultimate production hygiene.

With GD 93-3 inline grinding system:
Minced meat products up to a width of 130 mm.

With GD 93-6 grinding attachment, connected to GD 93-3
Minced meat products up to a width of 220 mm.

This synchronised line can be integrated into complete automated systems simply and quickly thanks to the flexible control technology.

Handtmann minced meat line and Bizerba scales for maximum portioning accuracy and transparency.

Basic version:
The basic version comprises a VF 600 vacuum filler with GD 93-3/6 inline grinding system, a GMD 99-2 minced meat portioner and the Bizerba CWP Neptune scales.

- Reference weighing of each individual portion with ejection of underweight portions, leading to reduced safety overfilling and so lower costs for the long term.

Process Control version with HCU software:
In addition to the basic version, the high-end version allows central linking of an unlimited number of minced meat line solutions with Bizerba Neptune scales via the Handtmann HCU software.

- Maximum cost-effectiveness, optimised productivity and reduced labour costs thanks to centralised automated control of all processes.
Function modules

Depositing

Tray dispenser and minced meat depositer

Fully automated minced meat production through to packaging. Including safe and gentle depositing in trays.

Connecting the Handtmann minced meat line to compatible minced meat depositors and tray dispensers provides a maximum-efficiency turnkey solution for minced meat production.

Simple synchronisation and a modular design provide flexibility in the choice of minced meat depositors and tray dispensers. Therefore, a diverse range of tray shapes, sizes and types can be used – be they hard plastic or polystyrene.

Advantages:

- Maximum cost effectiveness thanks to a complete solution covering everything from portioning accurate to the gram all the way to packaging
- Top hygiene conditions due to full automation and contamination-free production
- Maximum flexibility in production:
  - Portion sizes 150 g – 3,000 g
  - Tray length 150 – 300 mm
  - Tray width 120 – 250 mm
  - Tray height 30 – 90 mm
Minced meat automation with FlexLoader from GEA Food Solutions

This production line solution is designed to further automate the minced meat production process – portioning – collating – depositing in thermo-forming or other similar packaging machines. The GEA FlexLoader picks up portions of minced meat from the upstream Handtmann minced meat production line up to a width of 250 mm and automatically loads them into a thermo-former.

The minced meat portions coming in one lane from the Handtmann GMD 99-2 are detected by the FlexLoader and are pre-grouped in rows onto a second retraction belt by the first retraction belt. The minced meat portions which have been pre-grouped in line with the configuration of the thermo-former are then deposited in the thermo-forming packaging machine when the second belt retracts. The FlexLoader is synchronised with the Handtmann minced meat production line and the downstream packaging machine by means of signals.

Advantages

- Precise collating and multi-lane depositing of the minced meat portions with GEA FlexLoader.
- Simple operating concept due to synchronisation with up and downstream units.
- Ideal product positioning facilitated by portion monitoring by the intelligent distance measuring system.
- Easy to switch to another format configuration by selecting the saved product programmes.
- Flat products can be shingled or stacked either lengthwise or crosswise.

Product data:

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<thead>
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<tbody>
<tr>
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Minced meat process solutions

Leading process solutions for minced meat from the specialist for filling and portioning systems. Impressive features of the Handtmann system solutions for minced meat are top quality, perfect handling and maximum profitability. Contact the specialists at Handtmann to find the perfect solution for your requirements.

The Handtmann minced meat process solutions. The perfect combination of all process steps thanks to state-of-the-art technology.