



handtmann ConPro-System.

*Constantly superior:
Continuous process for new product ideas.*

The consistent further development of the revolutionary handtmann ConPro-System into complete line solutions is setting new standards in industrial sausage production.

The handtmann ConPro-System: Technology of the future!



Innovation borne of experience!

The handtmann ConPro-System.

The handtmann ConPro-System was launched on the market in 2003 as a revolutionary world first for continuous sausage production. On the basis of globally successful applications and extensive experience, handtmann now presents the next automation step: the process solutions of filling, hanging as well as separating and forming will be expanded by the pioneering technology of collating.

The handtmann ConPro-System combines the advantages of the edible VegaCasing from Ruitenberg with the modular function units of the handtmann systems. The basic components of the handtmann ConPro-System are two vacuum fillers: a VF 628 for the filling and a VF 620 for the VegaCasing. The modular handtmann system also comprises a co-extrusion head, a product slide with drip pan for

the fixing solution and a handtmann AL-System. The continuous co-extrusion process is as simple as it is sophisticated: both vacuum fillers ensure a constant product flow under continuous pressure. The co-extrusion head gently puts a layer of VegaCasing around the product in the process.

The thickness of the VegaCasing can be individually adapted. A product slide filled with fixing solution feeds the continuous sausage string to the conveyor belts of the AL-System, hardening the casing at the same time. The AL-System supports the uniform product flow in the system and in this way permits constant calibre and high weight accuracy in the end products.

The speed of the conveyor belts also ensures uniform thickness of the Vega-Casing.



Major benefits:

- ◆ Maximum versatility and flexibility thanks to the modular handtmann system components VF 600 and AL-Systems
- ◆ Short down-times thanks to continuous product flow
- ◆ Options: hanging, separating and forming as well as grouping and depositing
- ◆ Perfectly filled, high-quality products
- ◆ Cuts casing costs significantly



Fascinating process solutions.

Outstanding: Continuous filling.

1



Continuous filling into a continuous sausage string ensures maximum productivity with superior product quality. The VegaCasing hardens in the fixing solution while the sausage string is being fed to the conveyor belts of the AL-System.

- ◆ Constant product flow under continuous pressure
- ◆ Gentle encasing of the product with a thin layer of VegaCasing
- ◆ Efficient handover to the hanging unit or other downstream function modules
- ◆ Continuous process with no non-productive times



Convincing: Reliable hanging.

2



The interplay of the hanging unit and two vacuum fillers has been further optimised by handmann. The result is a smooth process step that ensures maximum productivity both technologically and economically.

- ◆ Perfect hanging of the continuous sausage string
- ◆ Constant calibre and maximum weight accuracy
- ◆ Smooth, continuous process in downstream processing systems

Performance data:

Belt speed: max. 1.5 m/s

Calibre: 13 mm

Calibre: 720 kilograms per hour

Calibre: 15 - 17 mm

Calibre: 950 kilograms per hour

Calibre: 21 mm

Calibre: 1,250 kilograms per hour



Confident: Precise separating and forming.

3



**Performance data
(separating):**

*Belt speed: max. 1.2 m/s
Calibre range: 13 to 26 mm
Portions: max. 1,500 portions
per minute*

**Performance data
(separating and forming):**

*Belt speed: max. 1.2 m/s
Calibre range: 13 to 32 mm
Portions: max. 400 portions
per minute*

The continuous sausage string is precisely separated into defined units – with the option of forming depending on the product definition. This innovative process step of forming offers an excellent and attractive product appearance for the most stringent of customer demands.

- ◆ Exact separation of the continuous sausage string into defined portions with exact portion weight and uniform length
- ◆ Visually superior portions with individual product design
- ◆ Precise preparation of the products for the subsequent process step of grouping and depositing

Impressive: Perfect collating and depositing.

4



The handtmann ConPro-System perfects the new process step of collating and depositing. With the handtmann collating module 310, portions can be grouped in many variants. Precise depositing on the collating belt 320 or exact insertion in trays conclude the automation process at the highest level. Continuous sausage production knows a new dimension: the new handtmann ConPro-System.

- ◆ Wide variety of grouping options
- ◆ Process reliability from filling through hanging, separating and forming to grouping and depositing
- ◆ High level of automation with high rationalisation effect

Performance parameters:

<i>Belt speed:</i>	<i>max. 1.2 m/s</i>
<i>Calibre range:</i>	<i>13 to 32 mm</i>
<i>Number of portions:</i>	<i>max. 400 portions per minute</i>
<i>Individual portion:</i>	<i>80 to 400 mm</i>
<i>Number per depositing model:</i>	<i>1/2/3/4 groups side by side</i>
<i>Group width:</i>	<i>20 to 200 mm</i>
<i>Number per group:</i>	<i>Freely selectable via the display</i>
<i>Number of layers:</i>	<i>Single-layer</i>



The patented RudinVegaCasing.

The VegaCasing patented by the Dutch company Ruitenberg is based on an alginate which is particularly suitable for continuous production with the handtmann ConPro-System. The profile of the VegaCasing is tailored to today's customers' wishes:

- ◆ Consistent, high level of product quality
- ◆ Perfect product presentation
- ◆ Individual product design
- ◆ Reliable resources
- ◆ Full process control and traceability

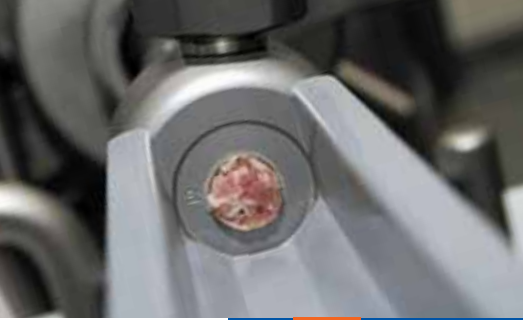
VegaCasing forms the ideal basis for creative product ideas and product developments. The casing thickness and casing surface can be flexibly adapted to the individual requirements. Whether shiny or matt, transparent or coloured, VegaCasing offers the individual solution for the right product surface.

handtmann ConPro-System and Ruitenberg RudinVegaCasing:
Symbiosis for continuous success.



Ruitenberg...
ingredients and more

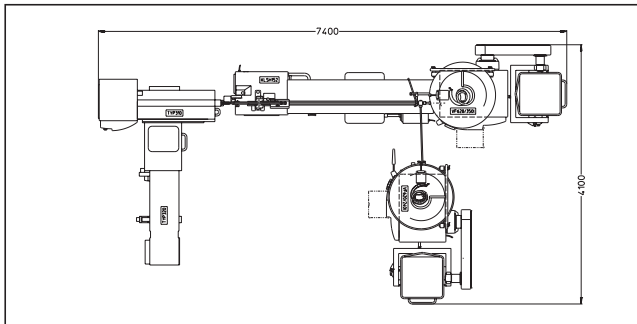
www.ruitenberg.com



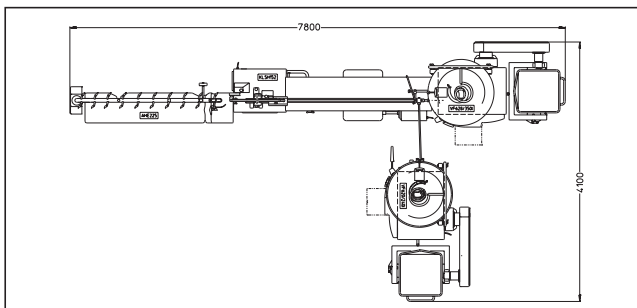
Unique technology for a greater edge.

Facts:

- ◆ Large calibre range: 13 mm to 32 mm
- ◆ Fixing solution remains stable in the production process: no need for additives to stabilise the ph value
- ◆ No rework needed to adjust the line: product is checked and adjusted immediately after ejection
- ◆ Optimum synchronisation and simple operation through centralised control via the monitor control of the vacuum filler
- ◆ Fast cleaning and easy conversion for product changes



handtmann ConPro-System with collating module and collating belt



handtmann ConPro-System with cutting, forming and hanging units

Product benefits:

- ◆ Proper hygiene conditions through reduced manual intervention
- ◆ Elegantly proportioned products and perfect product surface without pressure points through direct collating or admission into the packaging device
- ◆ Gentle product handling through the high level of automation
- ◆ Attractive packaged appearance with the Antti Lindfors tray dispenser design variant

Economic advantages:

- ◆ High productivity and low investment costs allow fast amortisation
- ◆ Significant rationalisation effect through increased capacity and high level of automation
- ◆ Low maintenance costs through the use of servo technology and low operating costs through fewer wearing parts
- ◆ Easy assembling and commissioning
- ◆ Cuts casing costs significantly
- ◆ Low consumption of energy, salt and water
- ◆ Flexibility in production capacity through modularity; vacuum fillers and AL-Systems can also be used for other production processes
- ◆ Basis for future capacity and production adaptations through easy integration in line solutions

handtmann
Ideas for the future.