



handtmann
Ideas for the future.

Food Processing

Simply Smart

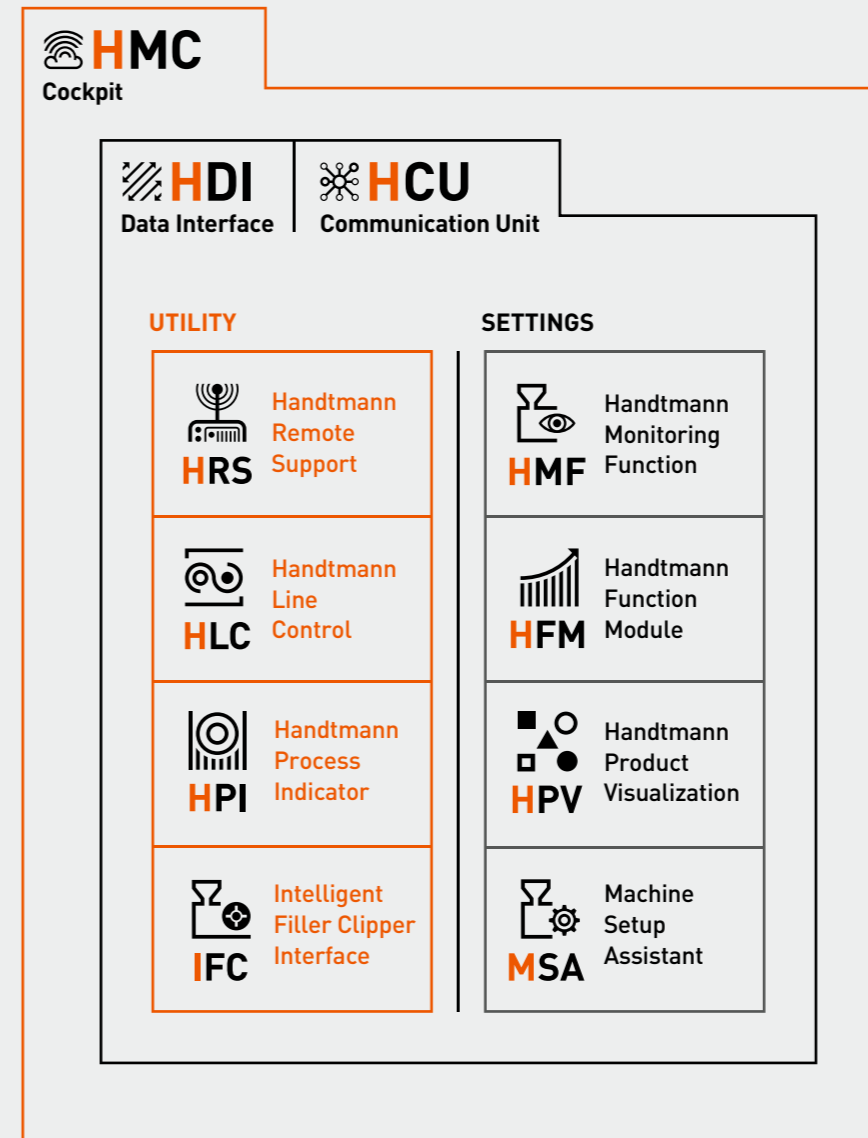
HANDTMANN DIGITAL SOLUTIONS



Food Processing – Simply Smart.

THE FOOD INDUSTRY CALLS FOR THE HIGHEST QUALITY AMID LOW COSTS, fluctuating demand, and complex workforce planning. In addition to high-performance machinery, transparent workflows, and reliable processes are paramount. With its digital solutions, ranging from HCU software to cloud applications, Handtmann delivers smart tools to help you efficiently control and optimize your production. Benefit from greater transparency and productivity. Take the first steps toward a digital future with Handtmann Digital Solutions.

Food Processing – Simply Smart!



LEGEND

HMC
Connecting Handtmann vacuum filling machines with the Handtmann Cloud

HDI
Featuring standardized interfaces for easy communication with data processing systems

HCU
Central control unit for data monitoring, control, analysis, and documentation in real time

HRS
Requesting remote support with the click of a button

HLC
Status monitoring in real time and automatic program change for the line via the control unit of the vacuum filling machine

HPI
Determining the consistency of individual portion weights without an additional weighing system

IFC
Simplifying optimum parameter setting between filling machine and clipper

HMF
Indicating parameters outside the permissible range during production

HFM
Facilitating easy upgrade of many software functions

HPV
Simplifying product setup by visualizing the product shape on the machine control system

MSA
Automatically proposing equipment options and machine parameter settings

Securing future viability with Handtmann Digital Solutions.

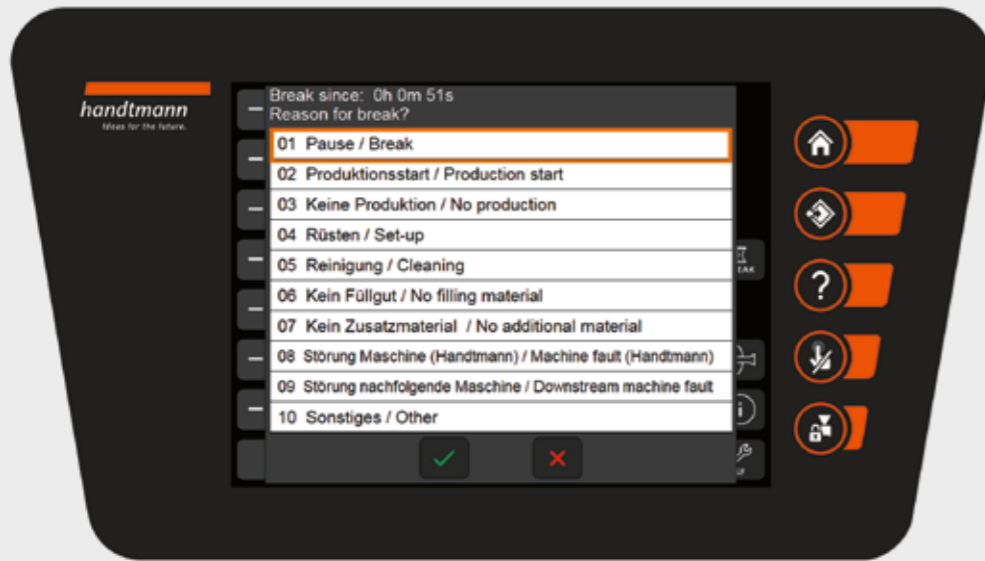
WE TURN VISIONS INTO INTELLIGENT AND PRACTICAL SOLUTIONS.

In concrete terms, we are talking about digital-based operation, automation, control and monitoring modules. These not only enable you to optimize your process management, but also create a transparent basis for sound business decisions. Furthermore, you secure your operation's profitability through high

productivity and consistently high product quality. Simply by relying on us to automate and at the same time digitize your production processes. Eliminate negative parameters and influencing factors and count on our intelligent and adaptive system technologies, digital concepts, as well as smart control and service tools.



HANDTMANN COMMUNICATION UNIT

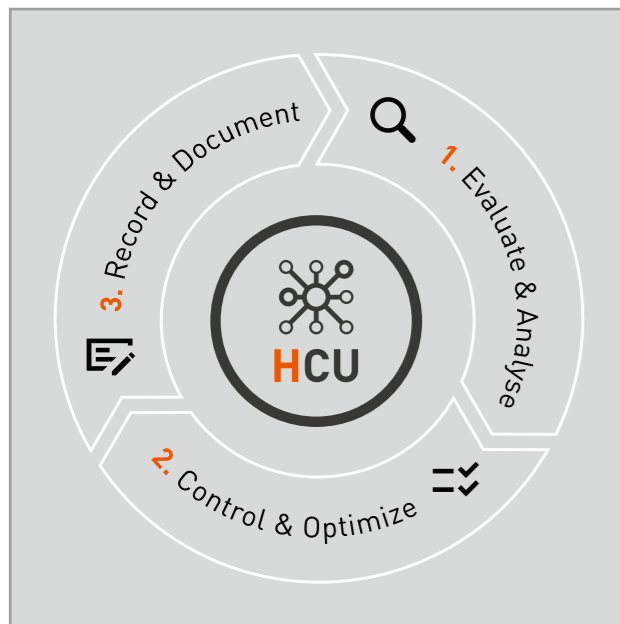


Entering reasons for downtime on the display of the vacuum filling machine

YOUR PRODUCTION CAPACITIES

are monitored and optimized in real time, focusing on targeted weight optimization and the sustained improvement of Overall Equipment Effectiveness (OEE). This innovative software solution links all filling and portioning lines to form an intelligent integrated system and serves as a powerful control tool. It provides comprehensive support to companies in the area of end-to-end documentation, precise analysis, continuous optimization, and efficient planning of all production processes, thus ensuring highest quality standards and sustainable increase in productivity.

Handtmann Communication Unit



FULL TRANSPARENCY FOR HIGHEST QUALITY STANDARDS

State-of-the-art, digital-based process management offers immense potential. It allows optimization of your operational processes, boosts efficiency in production, and provides security in a global environment through transparency, traceability, and compliance with quality standards.

Data monitoring, control, analysis, and documentation in real time

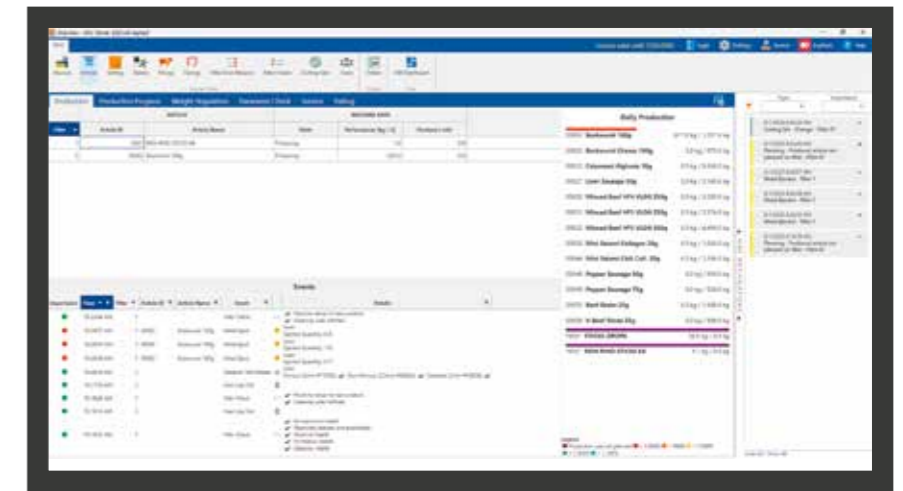
THE HCU SOFTWARE AS THE CENTRAL CONTROL UNIT optimizes your production processes by reducing downtimes and thus increasing productivity.



Downtime analysis and optimization in the HCU

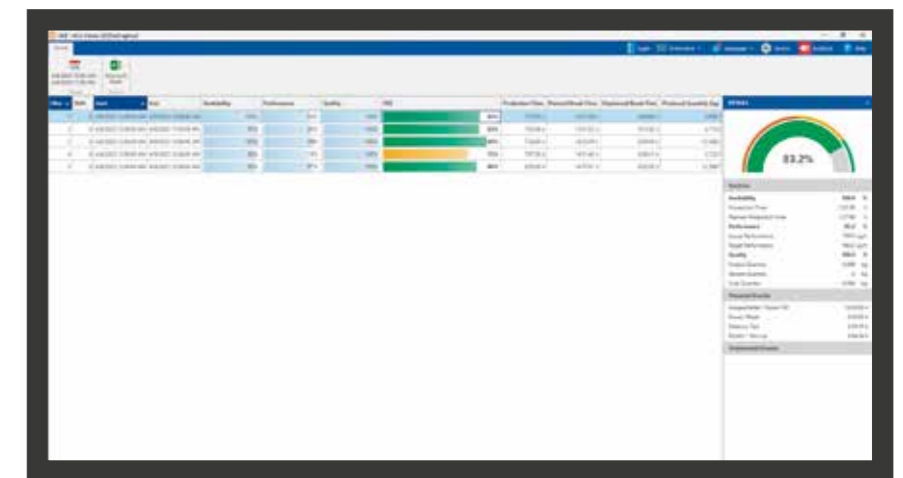
Online dashboard

THE ONLINE DASHBOARD OFFERS WELL-STRUCTURED ACCESS to production data, machine status, control parameters, or daily analyses, and shows performance and capacity, availability, and parameter comparisons. This allows for timely corrective action within the production process, if necessary.



Maximizing efficiency using OEE key figures

THE OEE PROVIDED BY THE HCU OFFERS INSIGHTS in availability, capacity, and quality of your production lines. These key figures help identify weak points and help implement targeted improvements to achieve maximum efficiency.

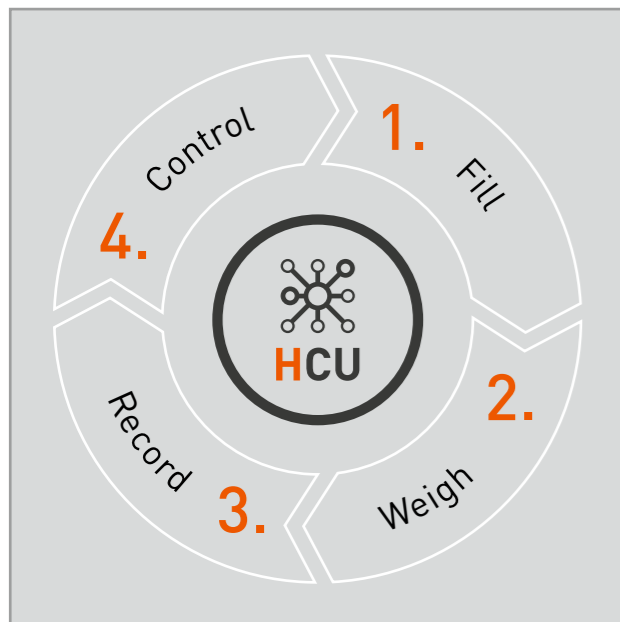




HANDTMANN COMMUNICATION UNIT



We keep an eye on the weight



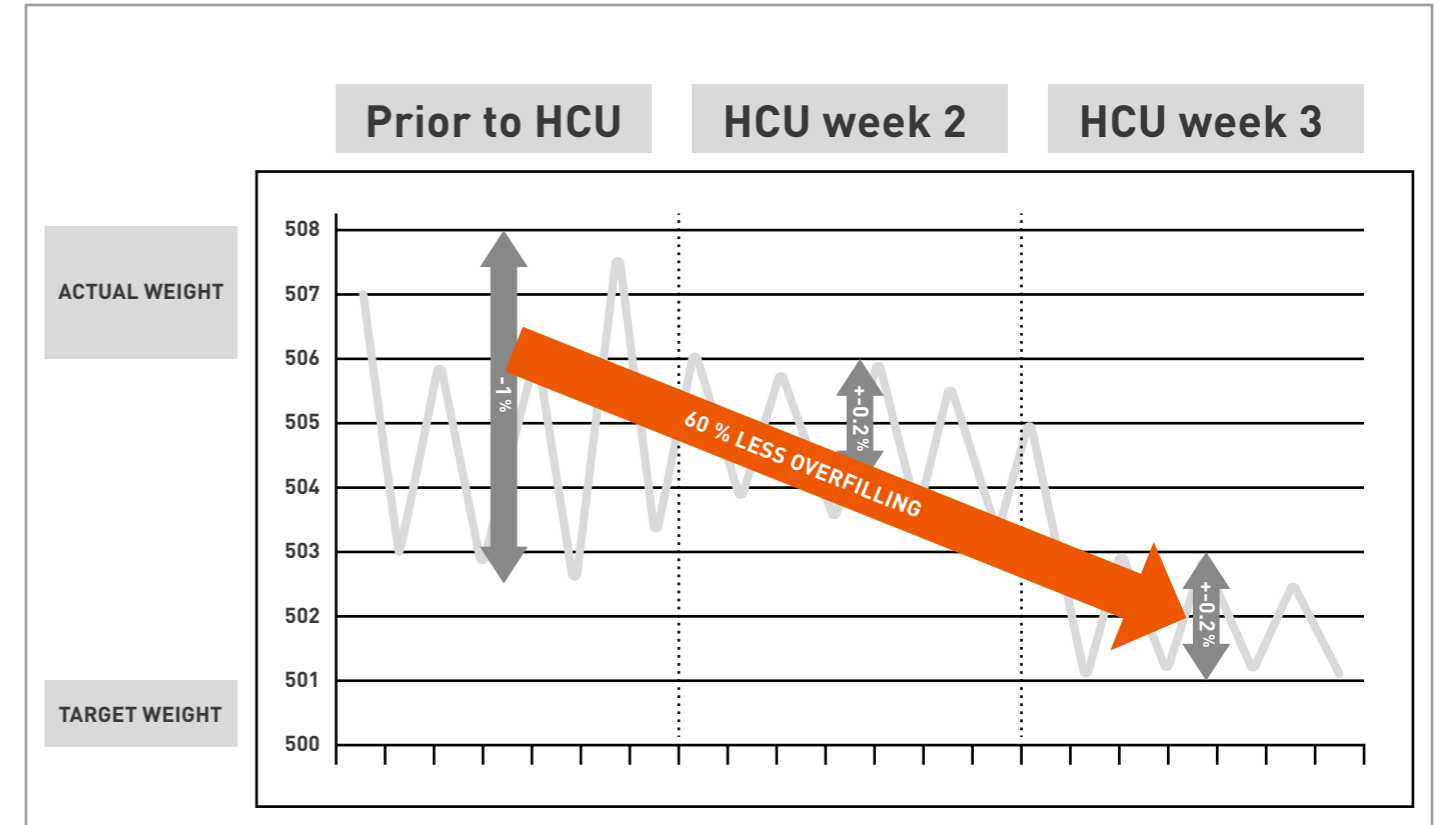
Cost reduction thanks to automatic weight regulation

THE AUTOMATIC WEIGHT REGULATION REDUCES OVERFILLING AND MINIMIZES GIVE-AWAY THROUGH TARGET/ACTUAL COMPARISON.

Weight regulation brings economic benefits and promotes sustainable production through more efficient use of resources. Experience has shown that overfilling can thus be reduced by up to 60%. The weight is ideally regulated using the Handtmann WS 910 advanced weighing system (e.g. for minced meat) or the Handtmann AHE scales (e.g. for sausages).

Handtmann weight regulation

Aiming to cut costs while staying compliant with legal requirements? Reduce give away to a minimum with our dynamic weight regulation, and always operate on the safe side. Achieve highly precise weighing results and transparent weighing processes through integrated data management. On top, open interfaces for line solutions, production networking using HCU software, or process control via Handtmann Line Control.



SAMPLE CALCULATION				
DAILY PRODUCTION (IN KG)	POTENTIAL SAVINGS (IN %)	ANNUAL MATERIAL SAVINGS (IN KG)*	COST PER KG (IN EUR)	ANNUAL COST SAVINGS (IN EUR)
5,000	2.00%	25,000	EUR 2.50	EUR 62,500.00

*BASED ON 250 PRODUCTION DAYS

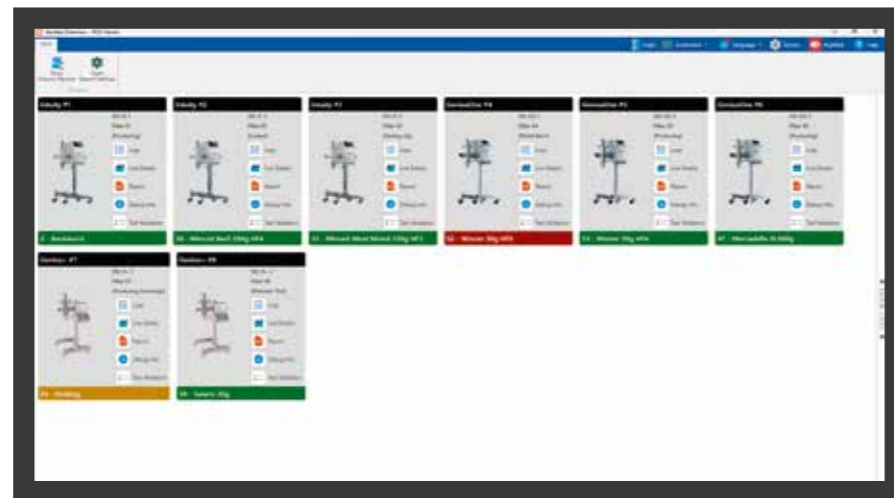
SAMPLE CALCULATION



Success through effective planning

Planning tool for efficient production planning

THE TOOL DETERMINES THE PRODUCTION QUANTITIES OF THE INDIVIDUAL FILLING LINES, factors in machine availability and manpower, schedules automatic metal detector tests and intermediate cleaning cycles, and thus ensures seamless and smooth production flows. With just a single click, you can also determine the production quantities for preparation of the filling material.



PAPERLESS DOCUMENTATION using the HCU through automatic logging and execution of quality assurance-related checkpoints, such as cleaning cycles and metal detector tests. The HCU thus ensures compliance with strict quality benchmarks – certified to IFS standard.



Integration of metal detectors

THE NEXT STEP IN PAPERLESS DOCUMENTATION: incorporating metal detectors, such as those manufactured by Sesotec, directly into the HCU. This offers additional benefits, such as live data from the metal detector, optimized test synchronization and validation, as well as coordinated product synchronization between vacuum filling machine and metal detector.



HANDTMANN COMMUNICATION UNIT

Production networking solution



Intelligent cutting set management

THE HCU MONITORS BOTH CONDITION AND PERFORMANCE of the cutting set tools to ensure the continued production of top quality products. An optimum product appearance is ensured.

Cutting Set ID	Cutting Cycle No.	Cutting Date	Filling Volume (kg)	Duration (Min)	Filling Pressure (bar)	Filling Pressure Min (bar)	Filling Pressure Max (bar)	Grinder Load (%)	Grinder Load Min (%)	Grinder Load Max (%)	Last Filter
10001	1	11/13/2024 13:00 AM	1000	20:00	300	200	300	80%	24%	14%	0
10001	2	11/13/2024 6:50 AM	1000	20:00	300	200	300	80%	25%	14%	0
10001	3	11/11/2024 6:05 AM	1000	20:00	300	200	300	80%	25%	14%	0
10001	4	11/18/2024 7:00 AM	1000	20:00	300	200	300	80%	24%	14%	0
10001	5	11/20/2024 1:00 PM	1000	20:00	300	200	300	80%	25%	14%	0
10001	6	11/23/2024 1:20 PM	1000	20:00	300	200	300	80%	25%	14%	0
10001	7	11/28/2024 8:40 AM	1000	20:00	300	200	300	80%	24%	14%	0
10001	8	11/27/2024 12:30 PM	1000	20:00	300	200	300	80%	24%	14%	0
10001	9	12/11/2024 8:40 AM	1000	20:00	300	200	300	80%	24%	14%	0
10001	10	12/13/2024 9:20 AM	1000	20:00	300	200	300	80%	25%	14%	0
10001	11	12/16/2024 12:00 PM	1000	20:00	300	200	300	80%	25%	14%	0
10001	12	12/16/2024 10:00 AM	1000	20:00	300	200	300	80%	25%	14%	0
10001	13	12/23/2024 11:00 AM	1000	20:00	300	200	300	80%	24%	14%	0
10001	14	12/28/2024 8:40 AM	1000	20:00	300	200	300	80%	24%	14%	0
10001	15	1/3/2025 12:40 PM	1000	20:00	300	200	300	80%	24%	14%	0
10001	16	1/5/2025 9:00 AM	1000	20:00	300	200	300	80%	25%	14%	0
10001	17	1/7/2025 2:00 PM	1000	20:00	300	200	300	80%	23%	14%	0
10001	18	1/13/2025 11:40 AM	1000	20:00	300	200	300	80%	23%	14%	0
10001	19	1/16/2025 9:40 AM	1000	20:00	300	200	300	80%	25%	14%	0
10001	20	1/22/2025 8:40 AM	1000	20:00	300	200	300	80%	24%	14%	0
10001	21	1/29/2025 9:10 AM	1000	20:00	300	200	300	80%	25%	14%	0
10001	22	1/31/2025 10:00 AM	1000	20:00	300	200	300	80%	25%	14%	0
10001	23	2/4/2025 8:30 AM	1000	20:00	300	200	300	80%	25%	14%	0
10001	24	2/10/2025 11:20 AM	1000	20:00	300	200	300	80%	24%	14%	0
10001	25	2/16/2025 11:20 AM	1000	20:00	300	200	300	80%	24%	14%	0
			2,200,000	70,000	100	68	100	80%	24%	14%	0

Automatic reporting function

EVEN EMPLOYEES WITHOUT HCU ACCESS CAN LEVERAGE THE ADVANTAGES OF THE HCU: Thanks to the automatic reporting feature, various reports can be customized and sent specifically to a particular group of people. This significantly expands the range of reporting and analysis options available to your entire company.

Sustainability and cost reduction

ANALYZING AND MINIMIZING MATERIAL WASTE allows for more efficient use of raw materials, energy, and labor. Our analytical tools help identify and reduce losses, resulting in both environmental and economic benefits.

In addition, the centralized digital storage of production data further increases transparency. Information on material usage and production steps is recorded, discrepancies are identified more quickly, and processes are optimized more efficiently.

The combination of data-driven analysis and centralized data storage helps you conserve resources, reduce costs, and achieve your sustainability goals.



Quick remote troubleshooting

Software for efficient support

SIMPLY PRESS A BUTTON ON THE VACUUM FILLING MACHINE'S DISPLAY TO REQUEST ASSISTANCE IF NEEDED.

A member of the Handmann support team can retrieve error data via remote access and, if necessary, remotely control the

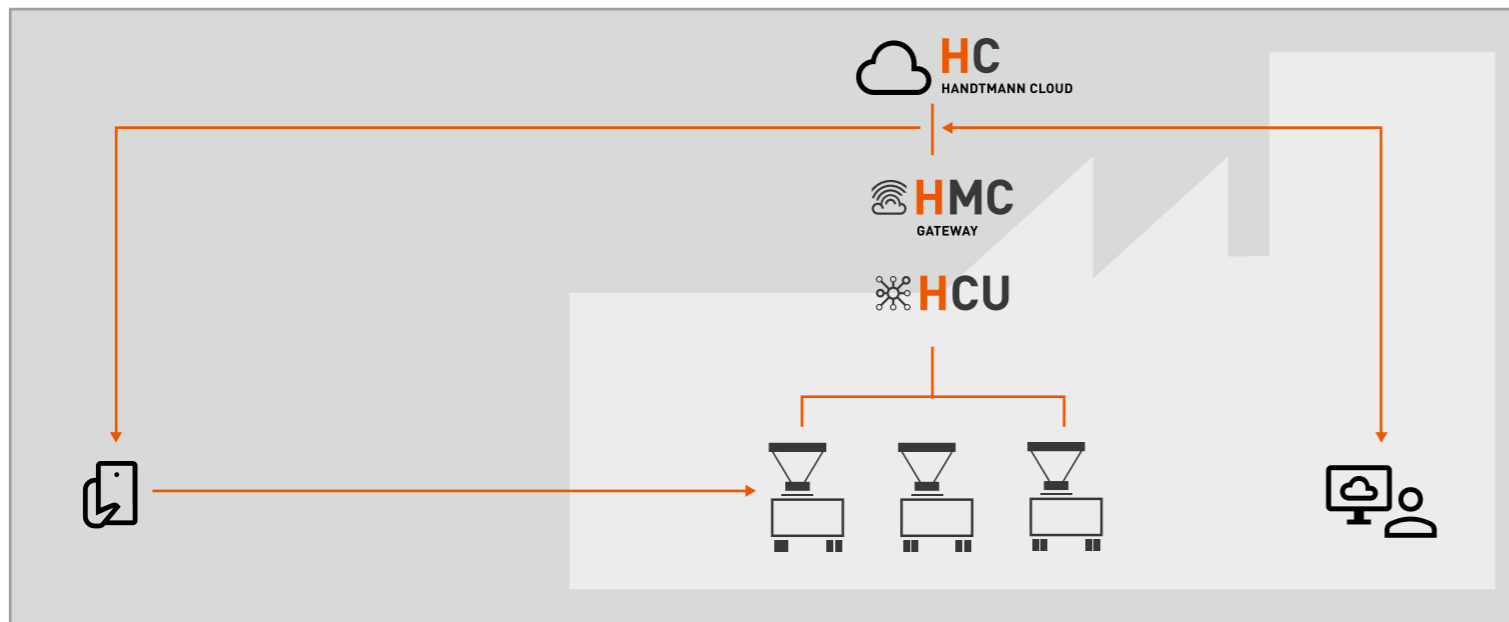
filler to resolve issues quickly and effectively. The deployment of service technicians on-site is significantly reduced, thereby lowering costs. Quick troubleshooting also increases machine uptime.

Centralized and clear data management



Cloud connectivity for Handmann machines

THE OPERATIONAL DATA FROM YOUR PRODUCTION LINES IS STORED IN THE CLOUD, ALLOWING YOU TO ACCESS IT FROM ANY DEVICE, ANYWHERE. Clearly structured error evaluations and predictive maintenance planning help increase machine availability and provide key figures for analyzing weak points.



The Handmann Machine Cockpit

CONNECTS HANDTMANN FILLING AND PORTIONING SYSTEMS TO THE HANDTMANN CLOUD. Important information such as operating hours, pressure curves, error messages, and machine status are continuously stored there. Online access keeps you up to date on production at all times. You are notified immediately, if defined parameters, such as the permissible filling temperature for the product, are exceeded or undercut. Misproduction is thus reduced or prevented altogether. You can also keep an eye on technical issues and upcoming maintenance at all times.



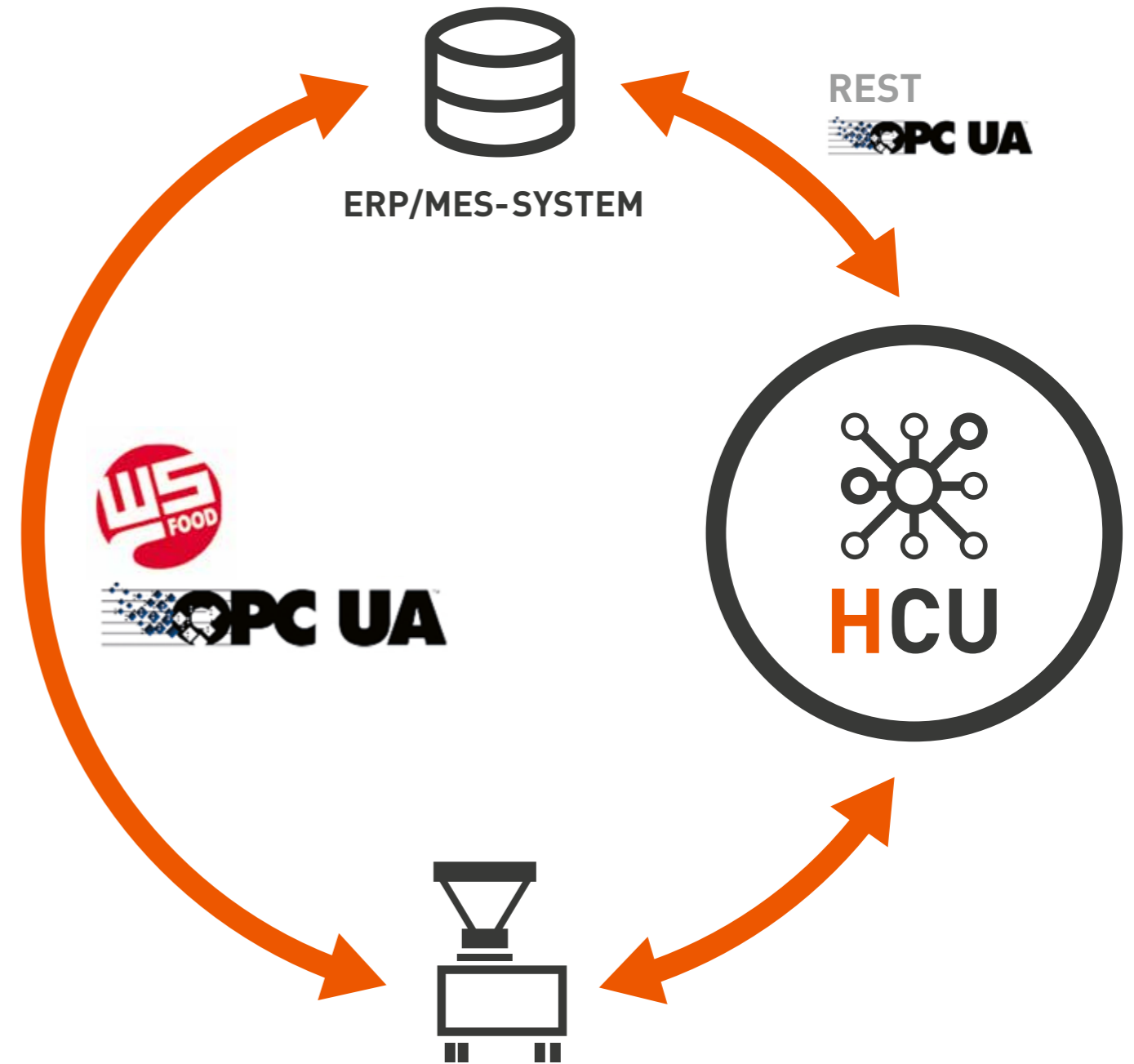
Handtmann Data Interface

**Simplifies communication
with data processing systems**

THE HANDTMANN DATA INTERFACE (HDI) FEATURES STANDARDIZED INTERFACES FOR EASY COMMUNICATION WITH DATA PROCESSING SYSTEMS. You can easily integrate defined data either directly from the machine via the WS Food interface, or by accessing the data via the OPC-UA for WS Food

interface. Alternatively, already processed and evaluated data can be retrieved from the HCU via a REST interface. Planning and article data are simply transferred to the HCU via a defined interface.

HDI HANDTMANN DATA INTERFACE

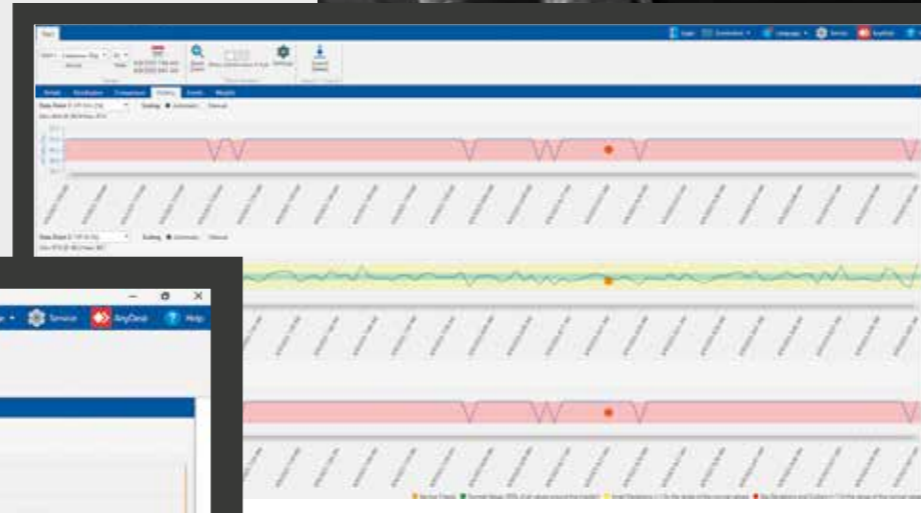
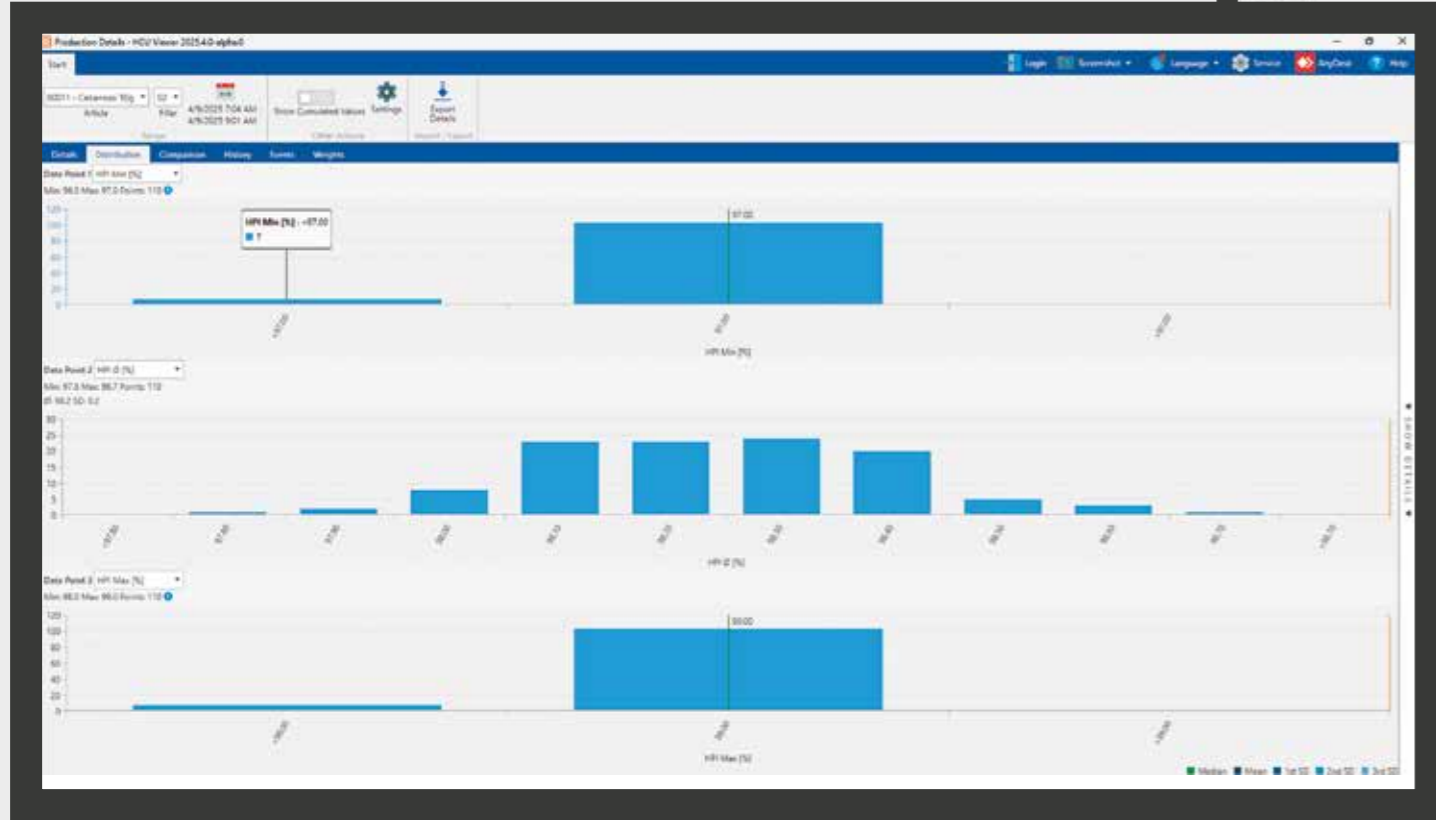


Interface for data recording systems

THE DIRECT COMMUNICATION of Handtmann production lines with data recording systems allows batch tracking, status queries, and program changeovers.



HANDTMANN PROCESS INDICATOR



Intelligent, optimum weight and maintenance planning

DRAWING ON THE INTELLIGENCE OF MACHINES to determine the consistency of the individual portion weights without the need for an additional weighing system or tool. Stabilizing weight accuracy in sausage production can thus be ensured, which results in reduced rejects, fewer B-grade goods, and less give-away, while enabling early identification of inaccuracies, and optimized maintenance planning.





HANDTMANN LINE CONTROL



INTELLIGENT FILLER CLIPPER INTERFACE



Line Control

Central control of overall lines

OUR **PLUG-AND-PLAY SOLUTION OFFERS STATUS MONITORING** in real time and automatic program changeover on production lines directly via the control system of the vacuum filling machine, simple error detection and diagnosis options, intelligent switch on/off for individual modules, and controlled starting up/emptying of the production line. Combined with a Multivac packaging line, the advantages of the HLC are multiplied with those of the Multivac Line Control (MLC).

Filler Clipper Interface

Smoother coordination of filler and clipper

THIS INTERFACE ALLOWS FOR **OPTIMUM SYNCHRONIZATION** of vacuum filling machine and Poly-clip clipper. Easy to operate thanks to automatic product parameter setting and program changeover, which ensures a portioning capacity increase of up to 10%. Controlled portioning and clipping cycles reduce mechanical wear and noise level.





Our software for seamless production



HANDTMANN MONITORING FUNCTION

Digital monitoring of production parameters

PREVENTS PRODUCTION ERRORS by defining upper and lower limits for parameters such as vacuum, filling product temperature, and pressure. If deviations are detected, the machine stops automatically, ensuring efficient and error-free production.



MACHINE SETUP ASSISTANT

Assistant for machine equipment and setting

OFFERS AUTOMATIC SUGGESTIONS FOR MACHINE EQUIPMENT, as well as parameter calculation, and setting of the machines. The MSA provides empirical values for optimal settings, assists new operators in safely starting up or converting the machine, and has consumables such as clips and casing stored for each article.



HANDTMANN FUNCTION MODULE

Activation of software functions and capacity increase

FACILITATES SCALABLE PERFORMANCE AND EASY UPGRADE of many software functions. The filling capacity of scalable VF 800 models can be increased as needed. Functions such as vacuum and pressure regulation or WS Food and IFC interfaces can be activated.



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Ideas for the future.

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