

# / Checkweighers

## Modular Solutions



Discover our world of dynamic checkweighers from a different perspective – **based on packaging types and applications**. Using specific examples, you will learn how **technology, innovation, and flexibility** interact to boost efficiency and enhance process reliability – thus demonstrating real added value for production, quality assurance, and customer satisfaction. Get inspired – by modular solutions that demonstrate how **precise weighing translates into safety and data feeds insights** – thus contributing to your success.

# / Topics at a glance

## Innovations, applications, and solutions

### Wipotec

- 4 Durable checkweighers for your production
  - 5 All skills under one roof
  - 8 EMFR Weigh Cells with AVC technology deliver fast and high-precision weighing results
  - 10 Modular checkweighers: Flexible system, precise result
- 

### Packaging types

- 14 Checkweighers for all packaging types
  - 15 Boxes and cartons
  - 16 Thermoform packages
  - 17 Flowpacks and bags
  - 18 Bottles, jars and cans
  - 19 Shipping cases
  - 20 Bagged goods and canisters
  - 21 Tubes, stick packs and sealed-edge bags
- 



HC-A-EX

## Digitization and options

- 22** Fully networked: Comscale4 for simple, efficient data management
  - 23** Digital data communication for intelligent production processes
  - 24** Safety for production processes
  - 25** Options
  - 26** Supermarket specification: Increased quality requirements in food production
- 

## Other solutions and services

- 28** Marking, checking, transparency: Everything in one system
  - 29** X-ray inspection: Quality assurance and trademark protection as the top priority
  - 30** Used in various industries
  - 31** Reliable expert service tailored to your needs
- 



HC-A (code reading option)

# /Durable checkweighers for your production

Our checkweighers are high-precision measuring instruments that reliably check and document your products, thus supporting your quality assurance processes. Innovative technology ensures accurate weight checking at maximum speeds – with the throughputs that are required by modern production facilities.

Don't make any compromises. Our weighing systems provide you with an efficient and flexible solution that can be easily integrated into your production line. For simple, mid-range, or complex requirements: The E-M-A checkweigher series offers the ideal solution for every production environment.

## Multi-level quality assurance

Our checkweighers detect errors of measurement in the milligram range. This is a prerequisite for accurate filling level and completeness checks.

Persistent underfilling can severely damage consumer confidence in your brand and can even result in fines or other penalties. On the other hand, overfilling reduces your margins. Accurate weight measurement helps to control your production process.

This requires optimal product handling. Depending on the application and type of packaging, we use appropriate product handling systems, such as modules for separating items or special conveyor belts.

Products with incorrect weight are automatically ejected and separated according to their attributes. Depending on the application, this can be done in separate containers. Only products with correct weight go on to the point of sale.

The checkweigher can be expanded with additional space-saving inspection modules. Fully integrated metal detectors check your products for contamination. This ensures comprehensive documentation.

## Perfect for each production environment

Do you work in wet areas? Do you have intensive cleaning cycles? In industries where the highest hygiene standards are mandatory, the design of our checkweighers is compelling. Wipotec uses only high-quality materials such as stainless steel, which is known for its corrosion resistance, durability, and hygienic properties.

Thanks to its smooth, homogeneous surface, stainless steel remains resistant to many chemicals, even under harsh conditions, and is easy to clean making it ideal for long-term use in challenging environments.

Our Comscale4 production management software enables seamless exchange of the data collected between production and inventory management. The use of universal interfaces eliminates the need to adapt individual systems in line.



Range of options and throughput

<b>E</b>	<b>Essential</b> – EC-E Simple applications, optimum price-performance ratio
<b>M</b>	<b>Medium</b> – HC-M High performance in mid-range applications
<b>A</b>	<b>Avantgarde</b> – HC-A Innovative pioneer for complex applications





Wipotec headquarters

# / All skills under one roof: Typical Wipotec.

Wipotec is a leading global provider of intelligent weighing and inspection technology. State-of-the-art systems for Track & Trace, marking and labeling complete this core competence.

Driven by our corporate philosophy "Innovation. Passion. First.," we develop and produce unique machine solutions and technologies for OEM and end users in a wide range of industries at our head office in Kaiserslautern. As a founder-managed, solid company

with more than 35 years of experience, we value long-term partnerships and always put our customers first. "First" as in top priority.

Our integrated solutions cover the entire value chain – from hardware and software development to in-house production with an exceptionally high level of vertical integration and an outstanding after-sales service. Everything is produced under one roof – quickly, precisely and to the highest quality standards.



### High vertical integration and short distances

What makes us special: a unique vertical integration – confirmed by our ISO 9001 certified quality management processes, which ensure the highest standards in all areas of our production and organization.

By covering the entire value chain – from basic research, software and hardware development, electronics manufacturing, design department, and assembly to sales and service – we ensure maximum control and flexibility. Short distances and bundled expertise enable us to quickly implement innovations and precisely fulfill even unusual requirements. True to the guiding principle of our founder Theo Düppre:

**“There’s no such thing as impossible.”**



*A company must contribute to the well-being and advancement of society – not just short term but long term.*

**Theo Düppre**

Founder and CEO of Wipotec Group





# / Globally recognized, independent, flexible, and innovative: Also typical Wipotec.

## **Wipotec weighing technology – a global reference**

As a leading manufacturer of checkweighers, Wipotec presents a world where accuracy meets speed: All our checkweigher systems are not only calibrated for quality, but also designed to excel in a variety of applications.

- A founder-managed company
- A globally recognized partner to industry for more than 35 years
- Global presence thanks to a large network of branches and partners
- Extensive in-house development and basic research
- All expertise under one roof
- In-house production of all key components
- Modular components
- Comprehensive expertise in implementing customer-specific solutions
- High-precision Wipotec weighing systems for maximum product quality
- Outstanding services

## **Come visit our facilities.**

Are you interested in Wipotec's high-tech solutions and would like to visit our state-of-the-art factory? Feel free to arrange a visit to our facilities. Our prominent position in the market is no coincidence. It is the logical consequence of our creativity and competence, which we apply every day to serve our customers. Come and see for yourself.

### **Schedule an appointment:**

✉ [info@wipotec.com](mailto:info@wipotec.com)

# /EMFR Weigh Cells with AVC technology deliver fast and high-precision weighing results

The key benefit of a Wipotec EMFR Weigh Cell is its very short settling time. Compared to the weighing principle with strain gauges, it provides highly precise weights significantly faster. This ensures safe and reliable measurement results even under difficult conditions.

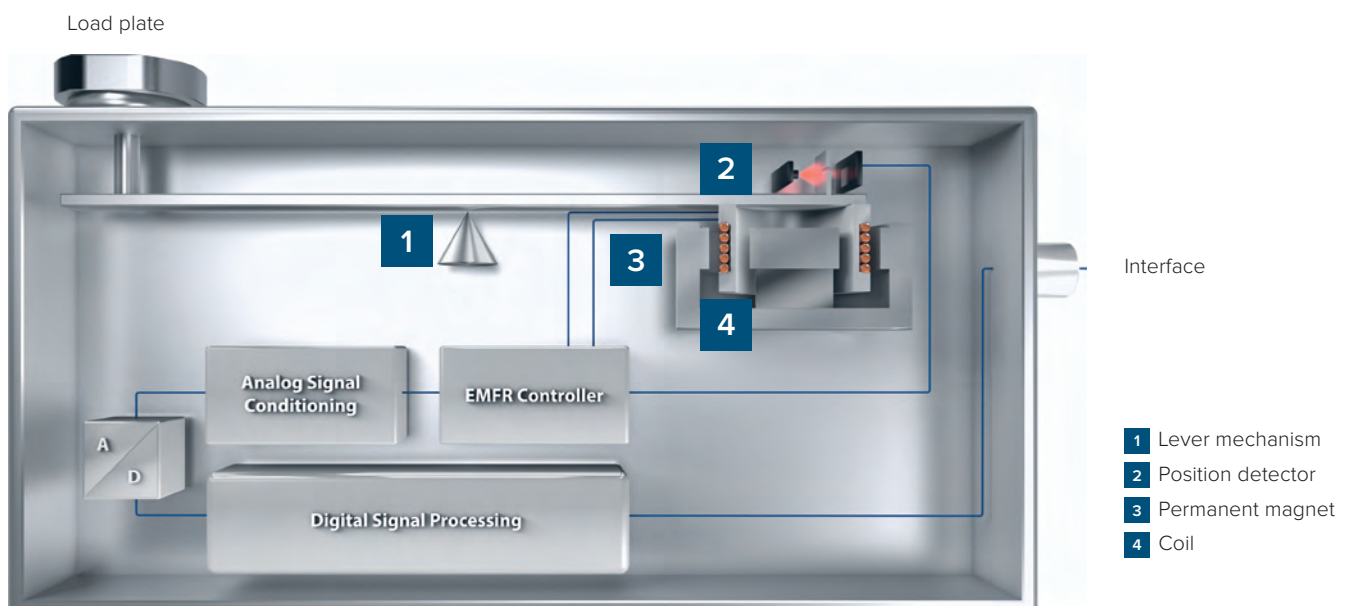
## **EMFR – Electromagnetic force restoration principle**

The basic principle of this type of weighing can be compared to a simple beam balance.

The load to be determined acts on the end of one of the two lever arms. This causes the coil fastened to the opposite end to want to move out of the magnetic field surrounding it.

An optical position detection system perceives any minimal deflection and signals it to a high-precision position regulator that adjusts the coil current so that the lever arm remains in equilibrium.

The coil current is measured using a measuring resistor and further processed in a microprocessor system for direct output as a digital weight. Wipotec checkweighers with EMFR Weigh Cells provide a metrological advantage. Depending on the series, their measuring range is from 1 milligram to 120 kilograms.





**AVC (Active Vibration Compensation):****Effective compensation for disturbance variables**

EMFR Weigh Cells from Wipotec can be equipped with AVC technology as required. AVC (Active Vibration Compensation) filters existing operation-induced disturbance variables out of the measuring results and enables the weighing technology to be used even in environments that are not free of external vibration sources (machine cycling, building vibrations, forklift trucks).

**Marking of automatic scales according to the European Measuring Instruments Directive**

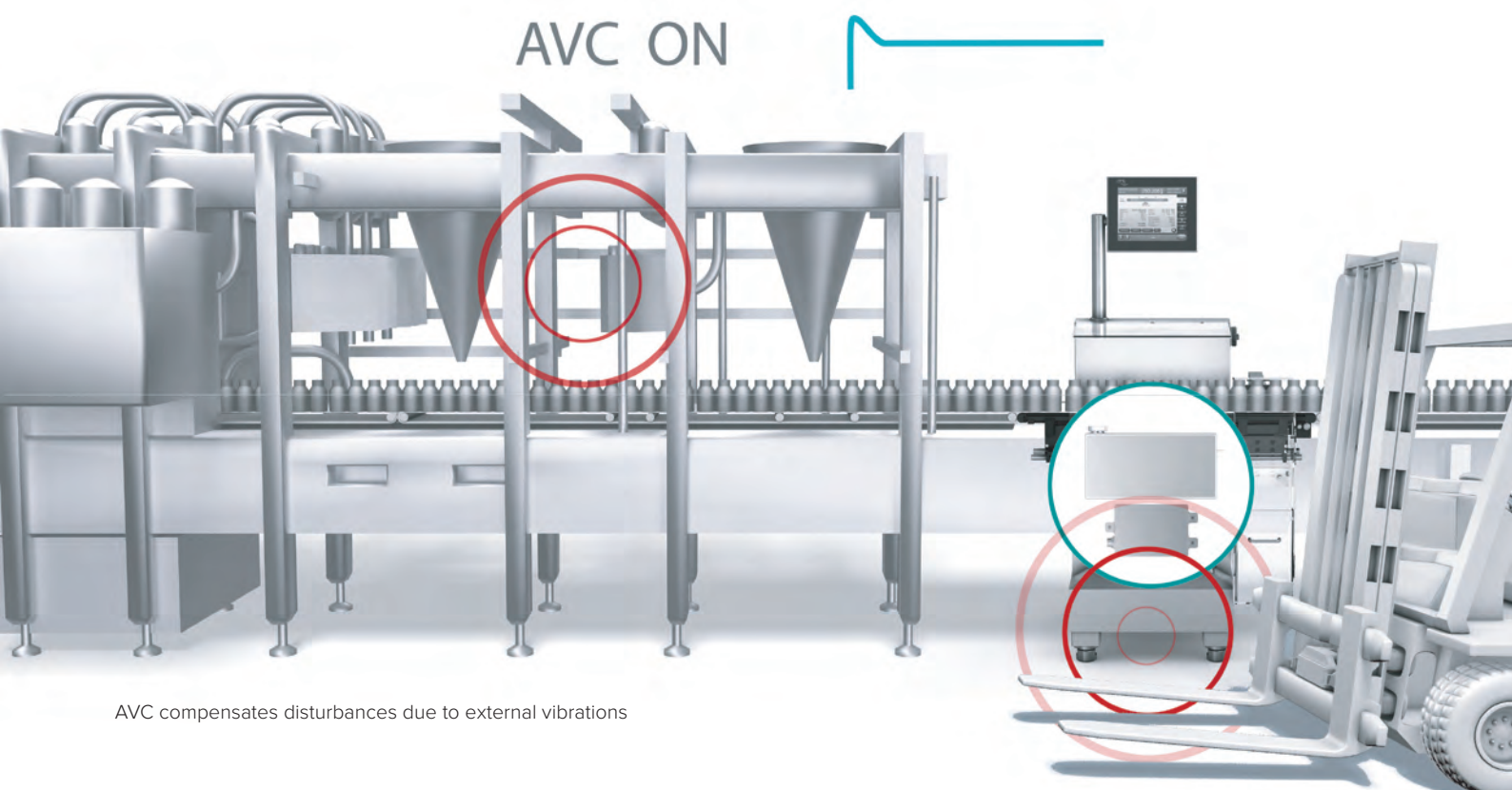
Wipotec is certified according to ISO 9001 and is also authorized to perform the conformity assessment according to Module D of the Measuring Instruments Directive (MID) in accordance with Directive 2014/32/EU itself (formerly manufacturer's first calibration).

The MID regulates the essential requirements for measuring instruments and their commissioning in a binding and uniform manner for all member states of the EU, EFTA and Turkey.

**From product to certificate, everything from a single source**

Wipotec provides you with quality assurance certificates, for example

- factory calibration certificates for our Weigh Cells
- Manufacturer's certificates for our scales, in accordance with OIML R51 as a protocol for initial calibration



AVC compensates disturbances due to external vibrations

# / Modular checkweighers:

## Flexible system, precise result



# Modular

## on all levels

**O**ur checkweighers offer outstanding modularity, allowing them to be tailored exactly to your specific requirements.

Whether you have different production environments, product types, packaging types, or production speeds, our modular design allows our systems to be flexibly configured to your requirements and integrated into existing production lines.

Weigh Cells are at the heart of our checkweighers. They detect even the smallest weights and guarantee maximum accuracy even under challenging conditions.

The weighing results remain accurate at high throughput rates, regardless of the packaging type.

With a vertical integration of over 85 %, we are able to maintain the highest quality standards and achieve short delivery times, even when faced with challenges in the global supply chain.

This independence allows us to develop customized solutions that are tailored precisely to your needs. From standard applications to complex custom designs, we offer you the optimal combination of precision, efficiency, and flexibility.

# /Modularity

## for simple applications



### Stainless steel

- For wet areas up to IP65
- Innovative stainless steel design



### Heavy load

- For precise weighing of heavier product weights
- Gross weight range up to 35 kg



### Strain gauge weighing principle<sup>1)</sup>

- For simple applications
- Gross weight range up to 6 kg



### Features

- The popular entry-level version of our dynamic checkweighers
- Familiar reliable quality assurance
- Compact integration in production lines
- Intuitive operation via touch display
- Legal-for-trade checkweigher for throughputs of up to 150 pc/min.
- Works according to the EMFR weighing principle<sup>1)</sup>
- Protection classes IP54 / IP65

<sup>1)</sup> EC-E with EMFR weighing principle. EC-easy with strain gauge weighing principle.



# /Modularity

## for mid-range applications

VA

### Stainless steel

- For wet areas up to IP65
- Innovative stainless steel design



### Metal detector

- Combination checkweigher and metal detector
- Space saving integrated



### Heavy load

- For precise weighing of heavier product weights up to 60 kg
- Maximum efficiency and highest accuracy

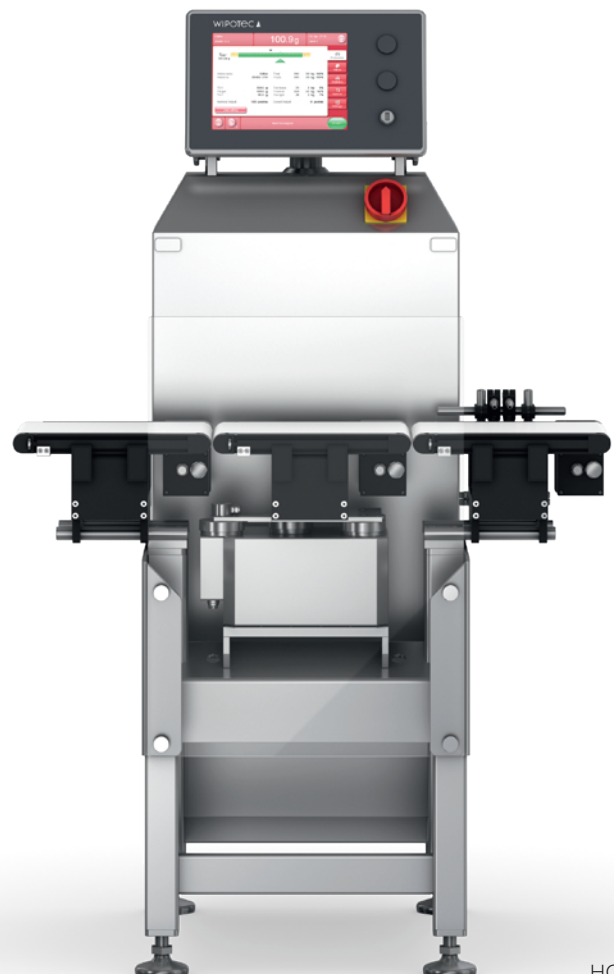


### Wash down

- For wet areas up to IP69k
- Hygienic design

### Features

- Our best-selling dynamic checkweigher worldwide
- Optimized for medium speeds
- Achieves throughput rates of up to 250 pc/min.
- 100 % product monitoring in accordance with Pre-Packaging Ordinance
- EMFR weighing principle
- Protection classes IP54 / IP65 / IP69k



HC-M

# /Modularity

## for complex applications

VA

### Stainless steel

- For wet areas up to IP65
- Innovative stainless steel design



### Metal detector

- Combination checkweigher and metal detector
- Space saving integrated



### Vision

- Combination checkweigher and optical inspection
- Best-before date check, 1D and 2D barcode verification



### EX application

- For potentially explosive areas
- Weight check under demanding conditions



### Variants

- For cylindrical and unstable products
- Multi-lane version up to 14 lanes
- Display resolution from 0.001 g

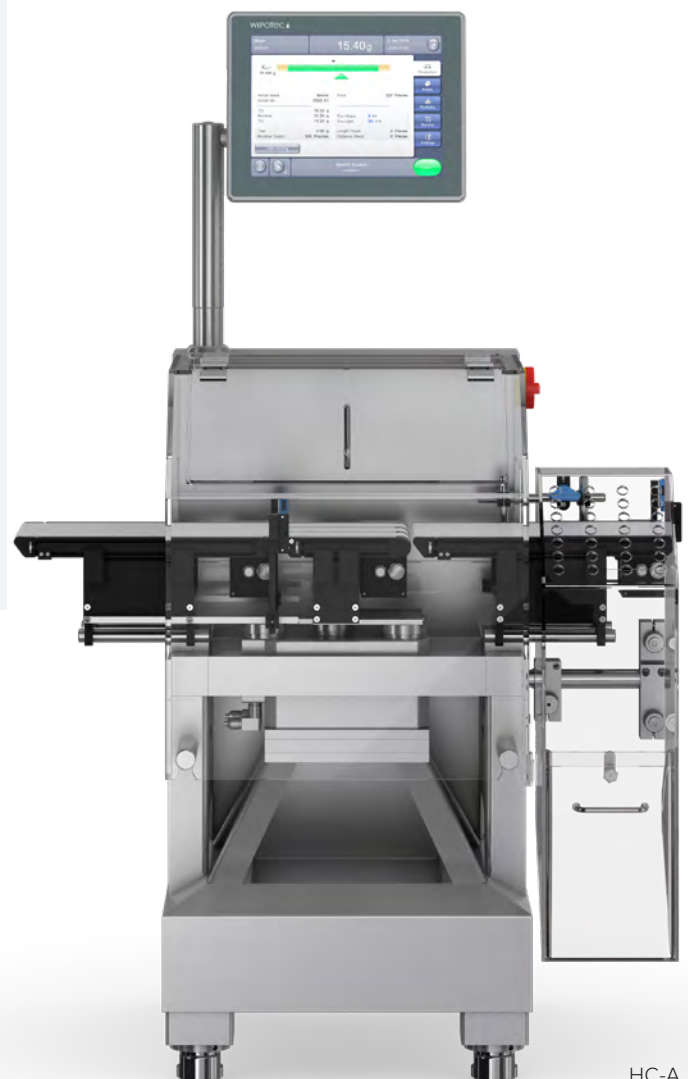


### Tare-gross weighing

- For containers with variable tare weights
- Accurate net content determination

## Features

- The flagship Wipotec checkweigher system
- Highest precision, speed and flexibility
- Maximum modularity of the dynamic checkweigher
- Suitable for demanding multilane applications
- For maximum throughput
- EMFR weighing principle
- Protection classes IP54 / IP65



HC-A

# / Checkweighers

## for all packaging types

Every package is unique – in terms of shape, material, or size. It is precisely this variety that is especially challenging for automated handling, transportation, and weighing. While rectangular boxes usually offer high stability, narrow or asymmetrical packaging is more prone to toppling.

Tubes and stick packs, on the other hand, are sensitive to air movement, while the weight of liquids in primary packaging can shift during transportation. To meet these challenges, checkweighers are needed that are optimally tailored to the respective packaging form.

Thanks to our long-standing collaboration with customers in a wide range of industries, we have developed a comprehensive portfolio of solutions.

The focus is always on one thing: Our checkweighers are tailored precisely to your individual requirements – with special attention on the product and packaging. To ensure reliable quality control at the end of the line, the weighing solution must be designed for this purpose.



The following pages provide an overview of various packaging types, and show examples of possible checkweigher solutions. We would be happy to work with you to develop a customized solution for your application.



# /Packaging type

## Boxes and cartons

### Typical applications:

- ✓ Simple
- ✓ Mid-range
- ✓ Complex

### Discover more.

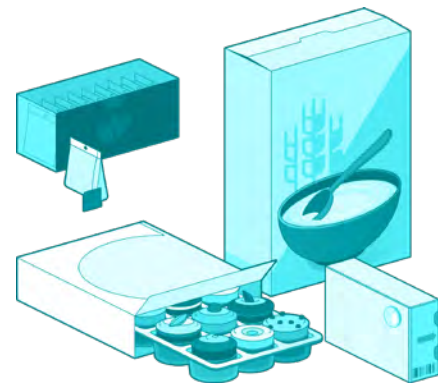
Application examples, videos, and additional information



Cartons are generally of standardized, rectangular shape and offer good potential for high throughput. To ensure reliable quality control at the end of the line, the weighing solution must be designed for this purpose. But challenges also exist:

Tall, narrow boxes tip over more easily, asymmetrical shapes lie unevenly on the belt, and their contents affect the weight distribution. Liquids in primary packaging or moving products inside folding boxes as secondary packaging shift during transportation. Uneven weight distribution can affect the measurement result.

To ensure accurate weighing results and prevent unwanted position changes, precisely coordinated conveying technology and optimal belt transitions are necessary.



### Possible configurations

- |  |  |   |   |
|--|--|---|---|
|  <b>VA</b> <b>Stainless steel</b> |  <b>Strain gauge weighing principle</b> |  <b>Heavy load</b> |  <b>Metal detector</b> |
|  <b>Variants</b>                  |  <b>Vision</b>                          |   |   |



EC-E



HC-M



HC-A

Functions depend on the machine type.

# /Packaging type

## Thermoform packages

### Typical applications:

- ☐ Simple
 ☒ Mid-range
 ☒ Complex

### Discover more.

Application examples, videos, and additional information



A thermoform package is tailored to the individual product and can thus vary in shape and design. The undersides often have thin grooves or textured ridges, which means that the only certain points of the packages touch the conveyor belt. This can cause slippage during transportation, and requires optimized product handling for reliable weighing.

Uniform product guidance and precisely defined spacing are crucial, as this is the only way to guarantee that there is only one package on the weighing belt at any given time. Specially designed separating belts ensure the required spacing between products.

Optimally coordinated conveying technology ensures smooth and stable transport. Optimal belt transitions and suitable guidance ensure that the package movement is controlled, which is an important prerequisite for precise weighing results.



### Possible configurations

- ☒ **VA** Stainless steel
 ☒ Wash down
 ☒ Metal detector
 ☒ Variants
- ☒ Vision



HC-M



HC-A-VI

Functions depend on the machine type.

# /Packaging type

## Flowpacks and bags

### Typical applications:

- ✓ Simple
- ✓ Mid-range
- ✓ Complex

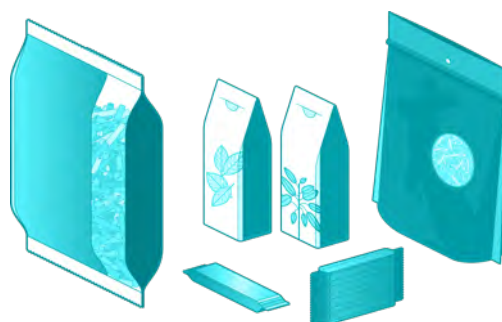
### Discover more.

Application examples, videos, and additional information



Depending on requirements, flowpacks and bags are produced in low, mid, and high output ranges. Different filling contents and materials require individual solutions. Especially in high-speed applications, it is crucial to take into account the different product characteristics and how the product behaves during transportation. Optimal product handling is vital for reliable quality control. Individually selected sensors accurately identify the packages, while side guide rails ensure that the product is optimally aligned for weighing. Since thin packaging films influence transport behavior, conveyor technology and belt transitions must be coordinated to


achieve the best result. This is the only way to ensure accurate weight values and error-free measurements, which becomes even more critical when high throughput rates are involved.



### Possible configurations

**VA** Stainless steel

 Wash down

 Strain gauge weighing principle

 Metal detector

 Variants

 Vision



HC-M-MDi



HC-A

Functions depend on the machine type.



# /Packaging type

## Bottles, jars and cans

### Typical applications:

☐ Simple ☒ Mid-range ☒ Complex

### Discover more.

Application examples, videos, and additional information



The packaging material – glass, plastic, or metal – determines what weighing solution is required. In the case of glass containers, for example, the wall thickness varies considerably, which affects the weight. In this instance, a tare-gross weighing system should be used to accurately determine the net filling quantity. The shape of the packaging is also important. A curved or ribbed base and small diameters can affect the stability of items standing on the conveyor belt.







Cylindrical products with a high center of gravity and a small base may topple easily. To ensure optimum handling, lateral grip conveyors are used to ensure the stability of the products both when receiving them

from upstream machines and when transferring them to downstream machines. In addition, a separating feed screw or a rotary star enables precise separation.

For products that have not yet been sealed, smooth discharge is essential.



### Possible configurations

 <b>VA</b> <b>Stainless steel</b>	 <b>Wash down</b>	 <b>EX application</b>	 <b>Variants</b>
 <b>Vision</b>	 <b>Tare-gross weighing</b>		



HC-A-IS



HC-A (infeed screw option)

Functions depend on the machine type.

# /Packaging type

## Shipping cases

### Typical applications:

☒ Simple
 ☒ Mid-range
 ☐ Complex

### Discover more.

Application examples, videos, and additional information

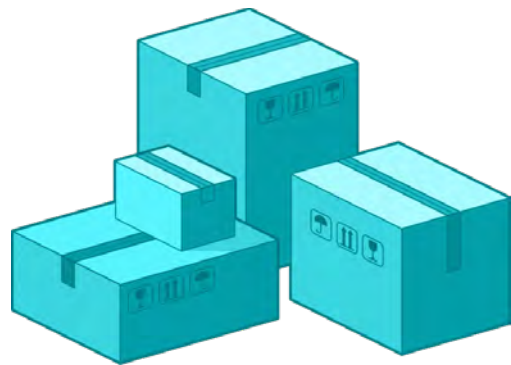


Unlike smaller cases, shipping cases are usually designed to be secondary and collective packaging.

End-of-line control systems must be designed to deal with higher loads. This applies to conveying technology as well as Weigh Cells and sorting. Due to these additional requirements, the checkweighers are specially adapted to these conditions.

When rejecting defective units, powerful mechanisms must be used to ensure this. On the other hand, excessive impact forces can damage cartons or containers. Special surface coatings on conveyor belts reduce friction resistance during discharge.

Powered or gravimetric roller conveyors pick up rejected products. Precise coordination of all components ensures stable movement sequences and accurate weighing results.



### Possible configurations



**Strain gauge weighing principle**



**Heavy load**



**Metal detector**



**Vision**



HC-M-SL



EC-E-SL

Functions depend on the machine type.

# /Packaging type

## Bagged goods and canisters

### Typical applications:

☒ Simple
 ☒ Mid-range
 ☐ Complex

### Discover more.

Application examples, videos, and additional information

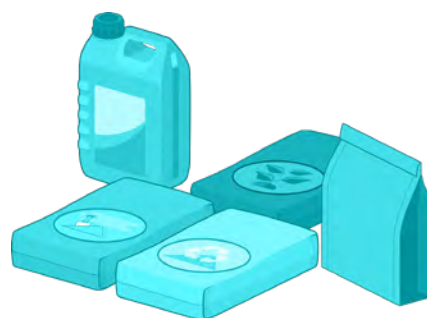


As large-volume packs, bagged goods and canisters also require precise weight measurement and reliable handling. Canisters containing liquids require conveyor technology that transports products at a particularly steady rate. Friction-optimized surfaces and a robust design are essential prerequisites for achieving accurate weighing results.

For abrasive filling materials, coated shafts and a particularly robust machine design ensure the long-term functionality of the scale.

Our checkweighers for heavy-duty applications are designed to reliably and accurately weigh even heavy weights in both bags and canisters.

Stable conveyor technology and flexible ejection systems ensure that defective products are gently removed. Specially designed sorting devices ensure the smooth handling of products and prevent product spillage – regardless of whether the products are contained in bags or canisters.



### Possible configurations



Wash down



Heavy load



Metal detector



Variants



HC-M-SL-MDi



HC-M-SL

Functions depend on the machine type.



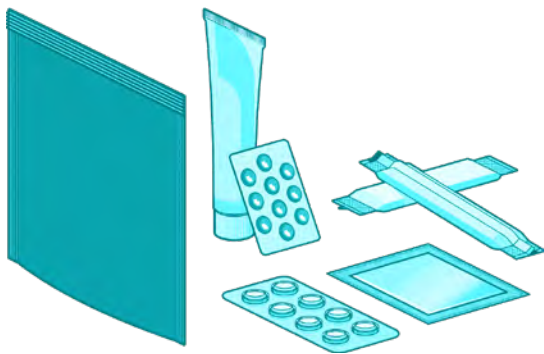
# /Packaging type **Tubes, stick packs and sealed-edge bags**

## Typical applications:

☐ Simple
 ☒ Mid-range
 ☒ Complex

## Discover more.

Application examples, videos, and additional information



Stick packs and sealed-edge bags are among the lightest packaging types. Like tubes, they are produced at high throughput rates.

These packaging types are available in various sizes, ranging from a few grams to several hundred grams. Their low mass makes them particularly susceptible to aerodynamic factors.

Specially adapted conveying technology ensures stability and safe guidance. Troughed belts hold cylindrical products such as tubes in position and enable smooth transportation for accurate weighing results. As many of these packaging types are produced on multiple lanes, we offer suitable multi-lane weighing solutions – for example, 10-lane checkweighers.

High-resolution Weigh Cells are required, especially for filling quantities in the single-digit gram or milliliter range. The ejection process is adapted to the type of packaging, for example tilting belts are used for thin and lightweight products.

The precise interaction of all components ensures reliable weighing results, which is particularly important for lightweight products at high throughput rates.

## Possible configurations



Variants



Metal detector

- Multilane up to 14 lanes
- Lightweight products
- Display resolution from 0.001 g
- For maximum throughput
- Decoupled transport system – pushover instead of conventional conveyor belts



HC-A-Multi

# /Fully networked:

## Comscale4 for simple, efficient data management

In automated production environments, your inspection solutions are frequently in continuous use, constantly generating data about your production. For analysis purposes, we provide you with this data in the form of statistics and graphs, collected centrally and presented clearly. Using this data, you always have an overview and can immediately identify areas where there is potential for increased efficiency.

Comscale4 is a flexible software solution that handles all your data management needs, including the necessary documentation. This saves you the tedious task of manually compiling data. You thus have access to all available data and statistics at all times, can make important decisions for action, and can share them with relevant partners within the company.

Comscale4 offers your company a framework that is indispensable for holistic quality assurance. Comscale4 not only interconnects checkweighers and other inspection solutions, but also integrates them into your internal structures.

### Discover more.

Videos and additional information



## Comscale4 Basic features

### Safety for your business

Thanks to lossless data transfer

### Data transparency

View all integrated machinery from any location

### Dynamic control

Configuration and operation of the software via various terminal devices

### Absolute control

Data analysis, storage and graphical evaluation for higher-level further processing

### Event-driven

Situation-based actions and reactions

### Flexible and scalable

Combination of various Wipotec inspection solutions (static scales, checkweighers, metal detectors, X-ray scanners, marking modules, and optical systems)

# /Digital data communication for intelligent production processes

Our product inspection systems support various interface standards, offering maximum flexibility for integration into your digital production environment.

Whether at the control, process, management, or operations control level, our systems can be easily integrated at all points of the entire automation pyramid using communication interfaces such as OPC UA, XML, Profibus/Profinet, or Ethernet/IP. You thus have detailed data that enables precise analysis and optimization of your production processes.

Error messages, machine status, and statistical data are recorded and documented to make production processes more transparent, allowing decisions to be made on the basis of sound data, thus boosting your operational efficiency in the long term.

## Comscale4

The entire company benefits

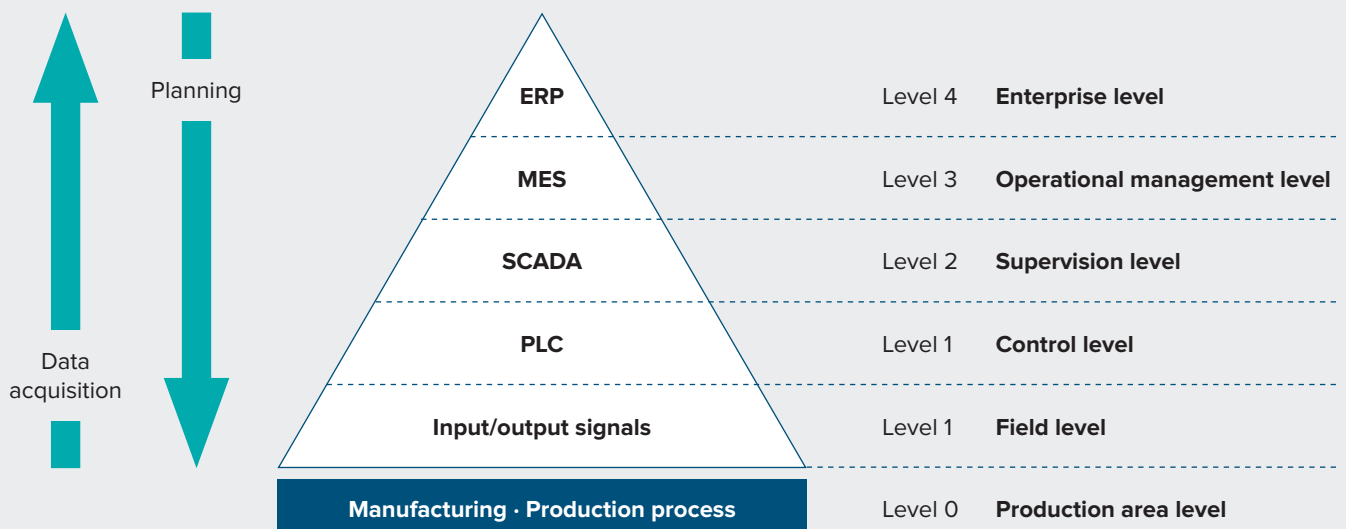
**Production:** Centralized capture of your system data and operating data, including online monitoring with Live View

**Quality management:** Targeted analysis of essential criteria or random attribute and measuring equipment testing

**Planning:** Instructions for your employees based on specific scenarios that trigger individual alerts

**Controlling:** Collection of production-specific data and key figures

**Management:** Overview of production lines to facilitate decisions of maximum priority



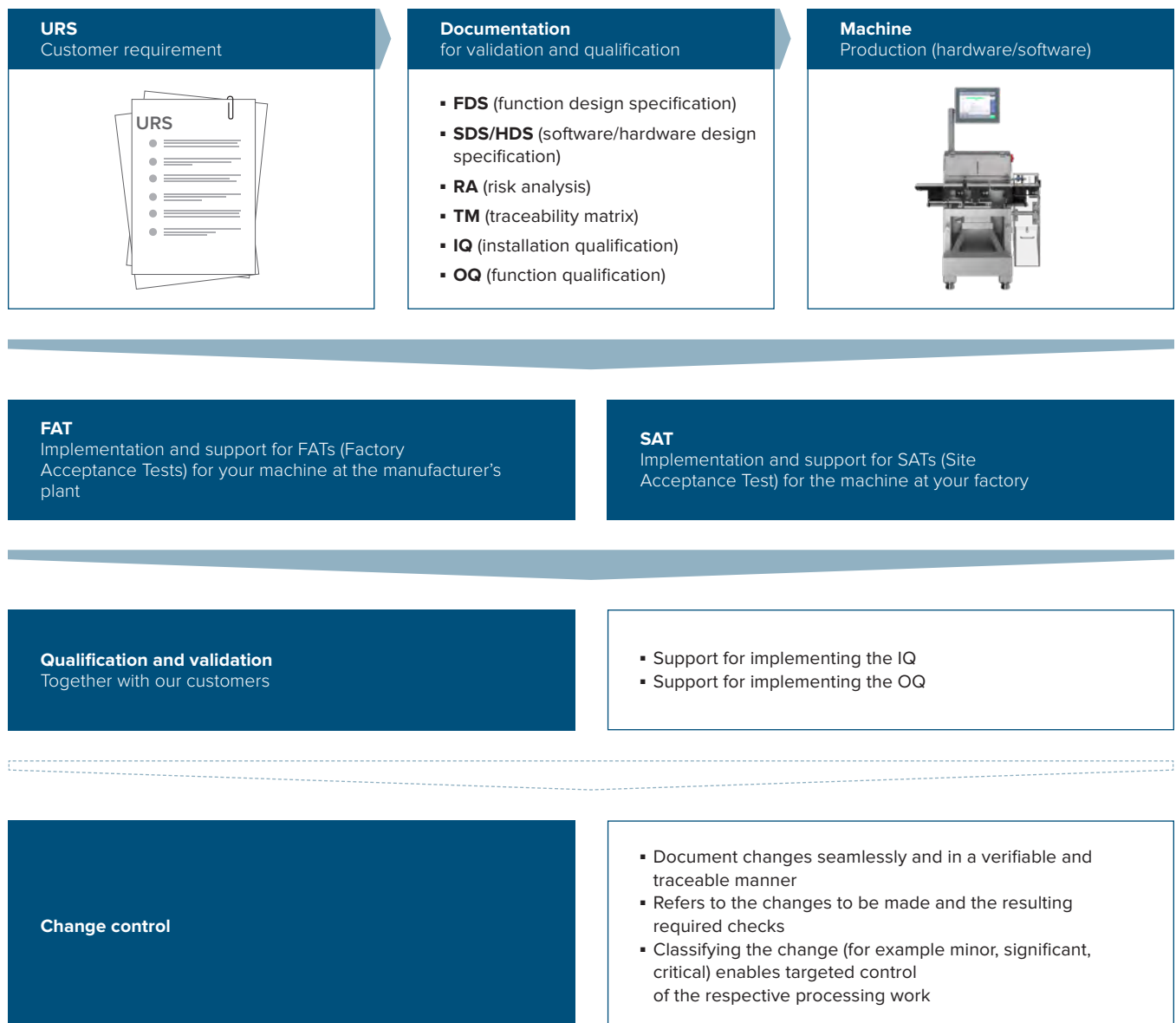
# / Safety for production processes

Our checkweighers and additional inspection and software modules meet the requirements of your industry. Particularly in the pharmaceutical industry or the food sector, where inaccurate combinations of ingredients and perishable contents can seriously impair the physical well-being of consumers, the most precise product controls are critical to the survival of any brand.

After all, any producer who ignores safety breaches in their own production line loses their customers' trust and soon has to face legal consequences.

As a manufacturer, you are responsible for the safety of your products and must be able to rely on your technical partners accordingly.

As a leading supplier of dynamic weighing systems, Wipotec has the necessary experience and technical expertise. Our solutions guarantee your safety through precise qualification, validation, and verification processes, including routine performance monitoring. Thanks to this conscientiousness, your company will continue to meet all requirements in the future.





# / Options

**Data exchange** enables the automated transfer of production-related information via interfaces such as OPC UA, XML, EtherNet/IP, or Profinet between checkweighers and IT control systems – for transparent production monitoring and line automation.

**User management** defines personalized access authorization and the associated user rights on the machine by assigning a unique username/password – for secure operation with transparent responsibilities and maximum security.

**LDAP** (Lightweight Directory Access Protocol) is a network protocol for accessing central directory services, such as Microsoft Active Directory, for managing user accounts, groups, and access rights – for centralized control and transparent permissions.

**RFID** (Radio Frequency Identification) is a technology for contactless personal identification, for example, for logging on to checkweighers using company credentials – for secure and faster user login.

**Backup/Restore** secures data reliably and quickly restores it when needed to prevent data loss and ensure system security.

**Pressure sensor** is a monitoring device that measures the pressure at a compressed air-operated ejection system and only permits operation when there is a sufficient supply – for reliable operation, process stability, and protection against malfunctions.

**Serial error detection** identifies a series of errors occurring in quick succession and warns of a system-related manufacturing problem – for automatic detection of possible filling errors.

**Filling level control** monitors the material level and indicates when the bin reaches a critical fill level – for improved process reliability, timely emptying, and uninterrupted production.

**Product flow control** is a monitoring solution that detects material flow and checks whether products with incorrect weights have actually been rejected – for reliable quality and process control.

**Digital target position display** is a display system that digitally displays the specified target position or set-point of a functional unit and permits operation only when the position is correctly set – for precise settings and safe processes.

**Chaotic product sequence** allows identification of different but similar products without a fixed sequence in the same product flow – for flexible, customized product statistics and process control.

**Tare-gross** checkweigher combinations are used to reliably and accurately determine the net weight of filled products despite fluctuating packaging weights, for example, in the case of glass containers – for correct filling quantities and to guarantee the required process reliability.

**Supermarket specification** refers to the detailed specifications of British supermarket chains (ASDA, TESCO, Marks & Spencer) that describe and define the production standard for end-of-line inspection systems in the scope of process quality – for greater process reliability and dependable control.

**Averaging control** is a control method for automatically regulating an upstream filling machine. The averaging control is used to regulate long-term weight fluctuations in ongoing production. Target weight errors are detected by the machine and can be attributed to the corresponding filling head. This ensures accurate filling volumes.

**Factory Acceptance Test (FAT)** is an acceptance test that is carried out by the buyer at the manufacturer's premises. During the FAT, checkweighers and systems are tested against the order specifications prior to delivery – to ensure functionality, quality, and contractual compliance.

# / Supermarket specification:

## Increased quality requirements in food production

In the interest of increased efficiency and consumer protection, as a manufacturer whose goods are intended for retail sale, you must be able to guarantee absolutely safe production processes.

Particularly in the food industry, this includes comprehensive quality controls. Quality controls are not just in your own interest, but are frequently a basic prerequisite for long-term partnerships, especially with major supermarket chains.

Our inspection technology has been optimally prepared for these supermarket specifications for years. Let us briefly show you how a Wipotec checkweigher meets the highest possible safety standards thanks to advanced features and other preventive measures, such as mechanical door locking or ejection monitoring modules. These features ensure that every single item is thoroughly checked before shipment and that the integrity of the manufacturing process is guaranteed.



**Discover more.**

Video and additional  
information

**1** Touchscreen with feedback

**2** Electronic door locking

**3** Full enclosure

**4** Infeed photogating sensor

**5** Integrated metal detector

**6** Lockable rejection bin

**7** Air pressure switch

**8** Visual and audible warning signals

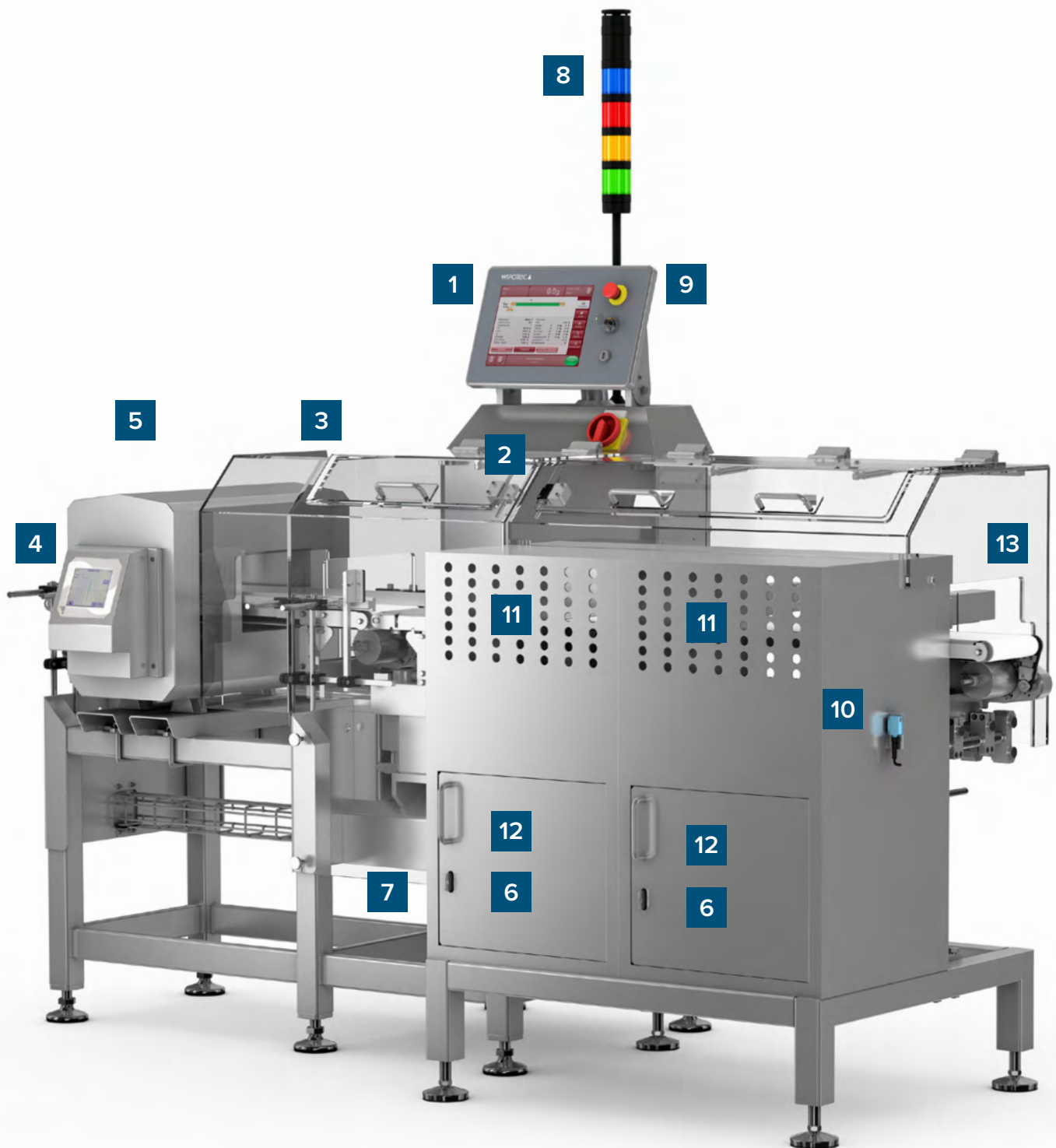
**9** Reject confirmation test facility

**10** Bin full sensor

**11** Product-related sorting device

**12** Reject bin door status monitor

**13** Reject confirmation failsafe system



HC-M-VA with metal detector

# / Marking, checking, transparency: Everything in one system

## TQS combined weighing, marking and quality control

In modern production lines, quality assurance is not limited to weight. Regulatory requirements, traceability, and digital code systems pose new challenges for marking. This is where TQS comes in: our modular system platform that combines all relevant end-of-line functions in a single device.

Weighing, printing, labeling, or camera control: all modules operate under a central control system in TQS. Article changes, layout adjustments, and operation are all carried out uniformly via an intuitive touch display. This reduces sources of error and increases the efficiency of your line.

Thanks to its consistent integration, TQS is ideal for applications involving GS1 Digital Link, batch marking, serialization, or quality assurance via image processing. TQS provides the technological basis for future requirements – from 2D codes to digital product passports.

## Typical use cases

- Printing and verification of best-before dates, batch numbers, and 2D codes
- Applying and checking labels with variable data
- Serialized marking for Track & Trace
- Aggregation of products, cartons, and pallets
- Inspection of label position, print quality, and legibility by camera systems



### Printer and labeler

Labelers and thermal transfer printers are synchronized and form a single unit.

### Weighing

The checkweigher is fully integrated and legal for trade.

### Central control system

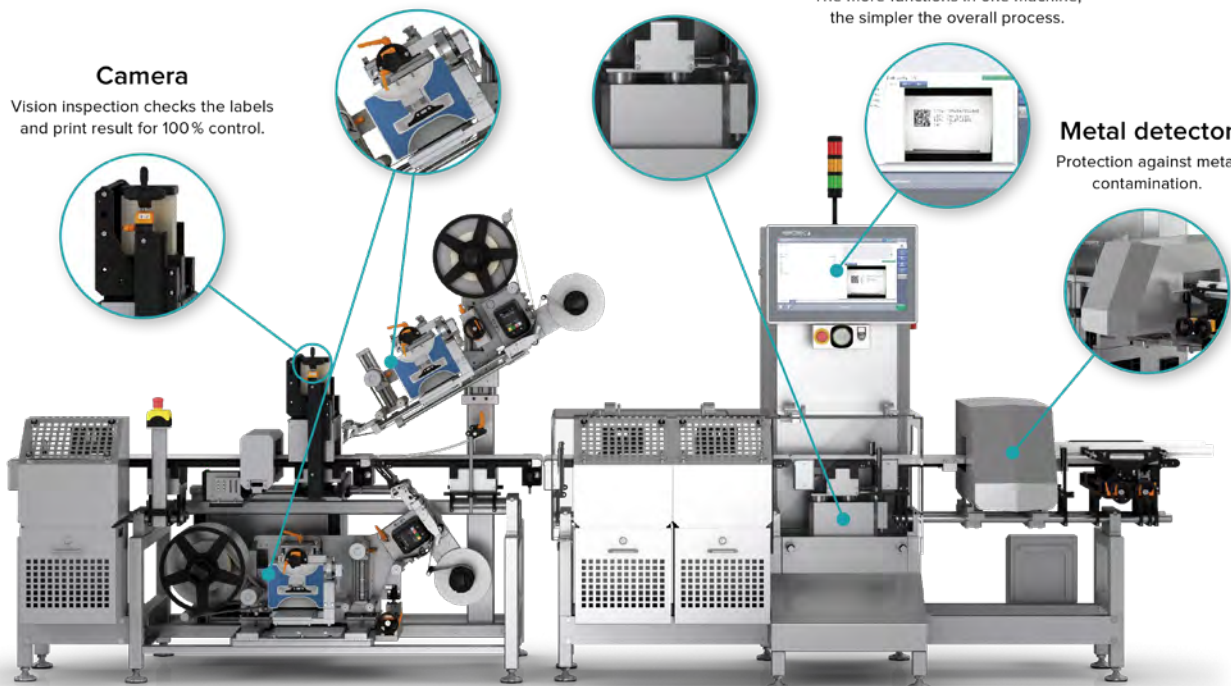
The more functions in one machine, the simpler the overall process.

### Camera

Vision inspection checks the labels and print result for 100% control.

### Metal detector

Protection against metal contamination.





# / X-ray inspection: Quality assurance and trademark protection as the top priority

The quality of industrially manufactured products must be given top priority in all production processes. Against the background of maximum customer safety, distributing defective goods can quickly have fatal consequences. Recall campaigns are extremely expensive and are detrimental to your image as a reliable manufacturer. Even worse are the potential negative health effects on consumers as a result of defective products.

## Inspection systems for maximum consumer protection

To ensure that there is no safety risk to consumers when selecting products from the shelves, manufacturers require modern, fully automated inspection systems that continuously and reliably guarantee the quality of manufactured goods without compromising productivity.

Wipotec is one of the leading providers of comprehensive inspection solutions. With our globally recognized advanced technology and an extensive product portfolio of state-of-the-art, high-performance X-ray scanners, we offer you the assurance that you are best positioned in terms of quality assurance.

This is how we can work together to lay the foundations for lasting customer trust. X-ray scanners support the creation of an efficient quality assurance system using standards such as HACCP, BRC, or IFS.

The high-tech solutions detect foreign bodies made of metal, glass, stone, and plastics of different densities, and also check your products for completeness, correct shape, and filling quantity. Our globally recognized advanced technology ensures you receive the best possible product inspection.

## Wipotec portfolio: X-ray and optical inspection systems



Functionality and performance

E

**Essential** – Simple applications, optimum price-performance ratio

SC

**Scanning** – Premium X-ray inspection in high-performance applications

# / Industries

Our technologies are used in numerous industries world-wide – where precision, efficiency, and quality matter.

We offer customized control and inspection solutions that integrate seamlessly into any production process.



**Aerosols**



**Construction material  
and minerals**



**Chemicals**



**Food**



**Cosmetics**



**Mail and logistics**



**Mechanical engineering**



**Pharma**



**Other industries**

# /Reliable expert service tailored to your needs

If you choose Wipotec as your future system supplier, you will benefit from our many years of service experience with weighing and inspection solutions. From pure advisory service to dedicated line and product support throughout the entire product life cycle, we are your reliable partner. Please feel free to contact us in confidence with your requirements.

We would be happy to advise you in detail about the scope and execution of the individual services during a personal consultation. You can trust our experience and reliability. ▲



## Outstanding services, which benefit you

- 24/7\* – Always available via the hotline
- Global service network with authorized technicians for on-site service
- Professional installation and optimization according to customer requirements for smooth device startup
- Europe-wide conformity assessment and repair when replacing parts relevant to calibration
- Preventive maintenance, refurbishment, and optimization of your systems
- Rapid on-site repairs using original parts
- Verification of calibration and, if necessary, recalibration of entire systems
- General and targeted product training for greater efficiency
- Remote maintenance (with appropriate hardware) for immediate first-hand assistance

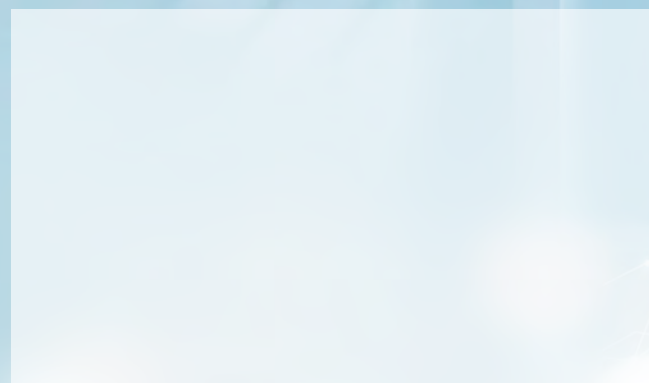
\* Upon conclusion of a corresponding service contract



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and profitable!

Then talk to us!



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