

# Checkweighers

For verifying product weight and completeness



Minebea Intec offers a wide range of checkweighers to suit your individual requirements in terms of accuracy, throughput, hygienic design, regulation compliance and cost.

# The true measure

Minebea Intec is a leading manufacturer of industrial weighing and inspection technologies. Our mission is to increase the reliability, safety and efficiency of our customers' production processes. To do this, we provide high-quality products, solutions and services that ensure a high level of safety.

Minebea Intec's excellent performance is based on 150 years of experience, our distinct German Quality and continuous investments in the development of innovative technologies. Our strong global presence and an extensive network of distribution partners ensure that our customers can rely on top Minebea Intec quality – any time, anywhere. Our goal is to set strong standards in all areas of our company, which is reflected in our brand slogan, 'the true measure'.

By purchasing Minebea Intec products, every day, customers all over the world are choosing more than just innovative technologies: they are also choosing top-quality service performance and comprehensive support throughout the entire life cycle of their product. Our aim is to fulfil our customers' requirements no matter what the industry, and to be the first port of call for weighing and inspection technologies. In short: the best expert you could have!

## Products and solutions from Minebea Intec are firmly established in many sectors







**Minebea**  
*intec*



## The MinebeaMitsumi group

The MinebeaMitsumi group is a global precision electromechanical components manufacturer, providing products for various industries. Minebea was founded in 1951 in Japan, Mitsumi in 1954. The company currently employs around 80,000 people and has more than 120 production sites and sales and service locations around the world. For many products, the MinebeaMitsumi group is No. 1 in terms of its global market share.

# An important contribution to quality assurance

Checkweighers are used in a wide variety of applications in the food and other industries for verifying product weight or completeness. As a provider of pioneering technologies, we know what our clients around the world are looking for when it comes to accuracy, throughput and hygienic design, and we are familiar with the legal provisions and industry standards.

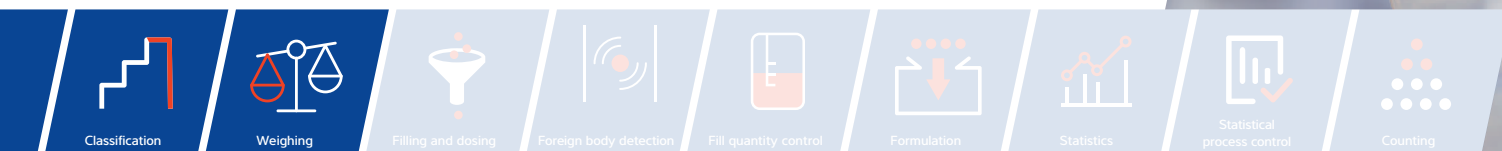
The performance and functionality therefore not only needs to be in line with your present requirements; making sure you do not pay for functionality you do not need but at the same time a checkweigher needs to offer flexibility for meeting future requirements ensuring a secure investment.

Minebea Intec offers a wide range of checkweighers, each configurable to suit your individual requirements. We even offer tailored solutions for specific applications.

## What customers can expect from a checkweigher from Minebea Intec:

- Intuitive and multilingual operator interface. Products can be set up or adjusted fast and error-free by line operators without requiring special training or knowledge and without the involvement of an engineer. This ensures maximum uptime and productivity
- Quick and tool-less belt release for ensuring minimum down time when cleaning or changing belts
- A wide variety of available interfaces allows an easy integration into data networks
- The optional trend control function ensures optimal filling processes and a reduction in cost-intensive over filling
- Supreme weighing accuracy increases economic efficiency and ensures that, among other things, legal requirements are met and separation errors are prevented
- Thanks to German Quality and decades of experience in the development, manufacture and maintenance of checkweighers, we can guarantee reliable operation and a long service life. This makes any checkweigher from Minebea Intec a sound investment

## Always the right solution for each of these applications:



## Why Minebea Intec?

Minebea Intec is a byword for quality and cutting-edge technology. Our innovative German Quality solutions have proved themselves all over the world, handling the very toughest of conditions and the strictest of requirements. We offer on-site support and services throughout the entire life cycle of our products. This means our customers always have the best possible solution for their requirements.



German Quality



*'Minebea Intec checkweighers are a secure investment as they can be adapted to changing requirements and conditions.'*



# In-line checkweighers

With the Essentus<sup>®</sup>, Synus<sup>®</sup>, Flexus<sup>®</sup> and EWK CD VV models, we offer a complete product portfolio in the in-line segment, covering a product throughput of up to 600 pcs. per minute. All of Minebea's checkweighers feature a durable and sturdy mechanical construction with sufficient mass to ensure precise and repeatable weighing results, even at the highest speeds.

## Checkweigher Flexus<sup>®</sup>

The checkweigher Flexus<sup>®</sup> combines hygienic design with flexibility and maximum performance. It was engineered in accordance with the strict hygienic requirements for packaged foods. With its wide range of configuration options, it meets practically any requirement. Further features include:

- Optional weights & measures approval
- EMFC high-resolution weigh cell technology, combining maximum throughput with maximum precision
- Optimised standard configurations for versatile applications
- Can be combined with Vistus<sup>®</sup> metal detectors
- Minimum machine weight: approx. 260 kg, depending on configuration



Hygienic Design



EMFC Technology



To learn more about Flexus<sup>®</sup>, scan the QR code and watch the video

## Easily adjustable thanks to intelligent design

Packaging lines and the critical control points they contain, need to accommodate fast and easy switching between products and changing line configurations. Flexus<sup>®</sup> makes this possible with minimum effort:

- The upper frame construction allows simple mounting of additional modules
- The width of the conveyor belts can easily be altered for different product sizes
- Always at the right level: the transport height can be varied using the adjustable feet



Flexus<sup>®</sup>

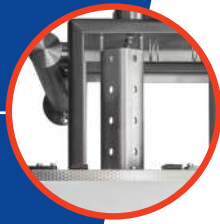
**Flexus® was developed in accordance with the strict hygienic guidelines for packaged food**



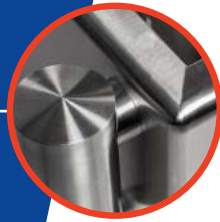
Also available as Flexus® Highspeed for extremely high process speeds up to 2.6 m/s



Quick release of weighing and transportation belts without the use of tools



The open frame, without any hollow parts, enables quick inspection and easy cleaning



Rounded edges, minimal horizontal and contact surfaces between screwed parts reduce contamination and cleaning times



Easy inspection and cleaning through increased floor clearance and reduced floor contact

# In-line checkweighers

## Checkweigher Essentus®

Essentus® is the ideal economic solution for numerous weighing applications, completeness checks and filling process optimization. The checkweigher is extremely user-friendly, is selected according to needs and thus reduces procurement costs. Customers have the choice between

- **Version L** for product weights of up to 6 kg
- **Version H** for product weights of up to 60 kg
- **Essentus® efficiency** for pure classification and individual weight output
- **Essentus® performance** for extended checkweigher functions, such as:
  - An automatic learning function for simple commissioning and setting of the weighing parameters without in-depth knowledge of the equipment
  - A wide variety of options
  - Automatic speed regulation
  - Extended analyses



Essentus® H efficiency



Essentus® L performance



Essentus® L efficiency

Essentus® H – also available as an end-of-line checkweigher!



Essentus® H performance



Want to learn more about Essentus®?  
Just scan the QR code for the product video.



## Checkweigher Synus®

With its modular and configurable design, Synus® can cover numerous applications including those requiring Weight & Measures approvals. Further features include:

- EMFC high-resolution weighcell technology offering a high throughput combined with maximum accuracy
- Maximum throughput of 250 pcs. per minute
- Optimized standard configurations for versatile applications
- Possibility for integrating a Vistus® metal detector, even after initial installation
- Adjustable conveyor height, allowing you to adapt the checkweigher to changing situations due to balcony construction
- Weight: approx. 250 kg (depending on configuration)



Synus®



## Checkweigher EWK CD VV

Fully encased checkweigher for the food industry. Through its IP65 protection class, cleaning with a water hose is no problem at all. Further features include:

- EMFC high-resolution weighcell technology offering a high throughput combined with maximum accuracy
- Optional Weight & Measure approval
- Maximum throughput of 600 pcs. per minute
- Weighing capacity: up to 20 kg
- Optionally available as all-stainless-steel version
- Possibility for integrating a Vistus® metal detector, even after initial installation
- Weight: approx. 320 kg (depending on configuration)



EWK CD VV



Hygienic Design

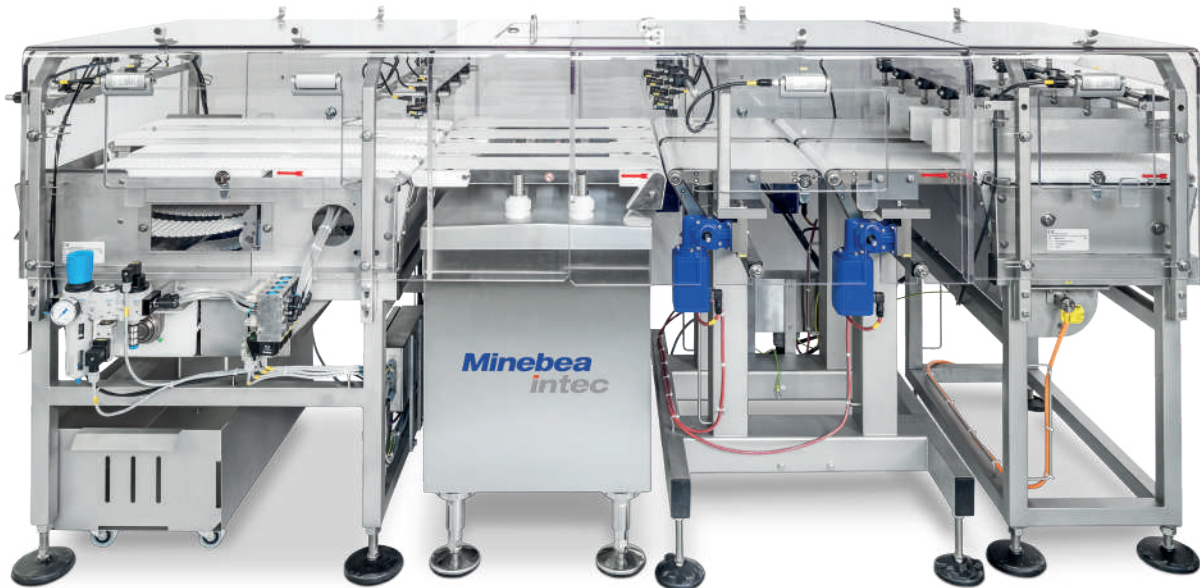


EMFC Technology

# Multi-lane checkweighers for maximum throughput in the smallest of space

Multi-lane systems save a lot of space and offer attractive price and throughput advantages.

- Simultaneous checkweighing in 2 to maximal 6 lanes
- All lanes managed by one central user-friendly operator interface
- Throughput up to 600 pieces / minute
- Track related control and rejection



Multi-lane checkweigher



For more information on our checkweighers or for locating our office and partners in your country, please visit [www.minebea-intec.com](http://www.minebea-intec.com)

# End-of-line checkweighers

Minebea Intec offers a complete range of high capacity checkweighers for a wide range of applications, including end-of-line completeness checks and weighing of large bags and containers in the construction materials- and chemical industry.

## Checkweigher Essentus® H

Version H of the checkweigher Essentus® is a highly economical solution for checking weights at the end of the production line.

- Weighing range up to 60 kg
- Easy to operate
- Robust conveyor technology and construction
- A wide range of belt lengths and widths
- Available in the efficiency version for pure classification and individual weight output and in the performance version for extended checkweigher functions



Scan the QR code and learn more about the benefits and combinations of Essentus®



Essentus® H performance



Essentus® H efficiency

## Checkweigher EWK WS 30/60 kg

The EWK is a high accuracy checkweigher, utilizing our renowned EMFC load cell technology. It features:

- Weighing capacity 30 or 60 kg
- High accuracy combined with high throughput
- W&M approval (option)
- Possibility for integrating a Vistus® metal detector, even after initial installation



EWK WS 60 kg



EMFC Technology



# Combination units checkweigher/metal detector

Our combination units offer you next to the checkweighing functionality, the reliable detection of metallic foreign bodies through integrated Vistus® metal detection technology. This solution significantly reduces required line space and optimizes user control. Both the checkweigher and metal detector are controlled via a common, intuitively-designed user interface.



Flexus® Combi with Vistus®

## Vistus® metal detectors for optimum consumer protection

Vistus® metal detectors are specifically designed for the food industry.

- Multi-frequency technology offering premium detection performance
- Fast and easy switching between product batches via extensive product memory
- Via the automatic learn-function, products can be set up or adjusted fast and error-free by line operators without requiring special training or knowledge and without the involvement of an engineer



To learn more about metal detection  
in general, download our  
**White Paper** here!





# Configuration options and complementary products

## Rejector systems

As part of our checkweigher solutions, we offer a wide range of high-speed rejector systems for reliable and effective removal of products from the in the case of weight variance beyond the set tolerance. The rejector systems include among others pushers, blowers, swivel arms and multi-segment separators. Other configuration options include:

- A wide variety of available data interfaces
- Trend control function for optimizing filling processes and reducing expensive product give-away
- User defined access control
- Product guidance systems, e.g. side-grippers
- Covers and wind protectors
- Collection container



## Software SPC@Enterprise

The pre-packaging and statistical process control software SPC@Enterprise helps manufacturers guarantee product quality, food safety and productivity.

The proven software offers configurable interfaces for recording data from a wide variety of machines, equipment and sensors in the processing or packaging line. It transforms this data into useful information via powerful and comprehensive reporting functionalities, making it possible to react instantly if and when required.

Upgrade  
to 4.0 – expanded  
equipment connec-  
tion, improved  
performance





For more detailed information, please visit our website or contact

**[sales.ac@minebea-intec.com](mailto:sales.ac@minebea-intec.com)**

## Customer individual solutions

Today's wide variety of different products, being offered in an even larger variety of cartons, boxes, pouches, bags, trays, sachets and bottles, each have their individual requirements when it comes to product handling and transportation.

Although our checkweighers are constructed in such a way that as a standard they already offer extreme flexibility, in some cases in-depth consultancy or bespoke solutions are required. Our in-house Engineering Support services provide both. Our staff listen carefully and propose solutions that fully meet all requirements. Our engineers also offer design-in support for the integration of our machines or solutions into production or packaging lines. Product tests that can give a precise answer with regard to achievable throughput and accuracy are also specially carried out for checkweigher applications.

# Our product portfolio



Acceptance and storage of loose materials

## Incoming goods

Acceptance of piece goods

## Automated production systems

Reliable checking of supplied and stored materials

For complete process control



Components and solutions for vehicle weighing (analogue/digital)



Components and solutions for silo weighing



Batching and formulation



Foreign object detection (metal detection/X-ray inspection)



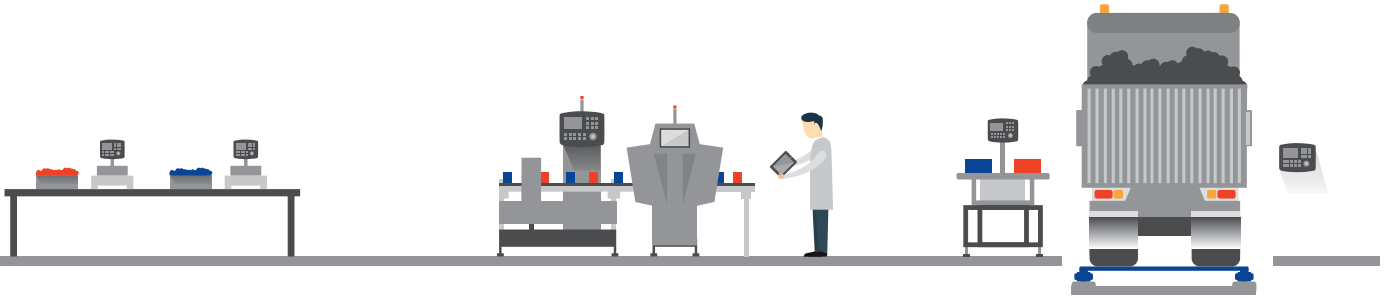
Weighing of incoming goods



Components and solutions for vessel weighing (analogue/digital)

This is a cross-section of our extensive product portfolio. We offer tailor-made solutions for a range of requirements: from simple to complex; from explosion protection solutions to hygienic design.





## Manual production

Solutions that ensure accuracy and traceability



Portioning and checkweighing



Formulation and formulation weighing

## Packaging

Guaranteeing product quality and food safety



Checkweighing/metal detection



X-ray inspection



Pre-packaging checking and statistical process control

## Outgoing goods

Quality assurance of final product



Weighing/order picking of outgoing goods



Checkweighers for heavy loads



Components and solutions for vehicle weighing (analogue/digital)



# Our services

Via our world-wide presence, we and our certified partners stand beside our customers across the globe throughout the entire life cycle of our products and solutions, from choosing the right equipment and systems to upgrades, replacement parts and training.

## Engineering Support and Global Solutions – ensuring optimal solutions

- Consultation on selecting the best products and solutions with regard to the desired performance, precision and costs
- Design-in support for the integration of our products and solutions in existing constructions
- Customer-specific products or solutions – tailored to individual requirements



For more detailed information, please visit our website or contact [info@minebea-intec.com](mailto:info@minebea-intec.com)



**engineering support**  
by Minebea Intec



## Commissioning – for a timely start to production

- Mechanical and/or electrical installation, commissioning and training on set-up and use
- Calibration or conformity assessment of equipment and systems according to statutory requirements for measuring technology
- Equipment qualification (IQ/OQ)

## Upgrades – to update systems and improve performance

- Hardware and software upgrades
- Equipment refurbishment

## Training courses – to improve skills

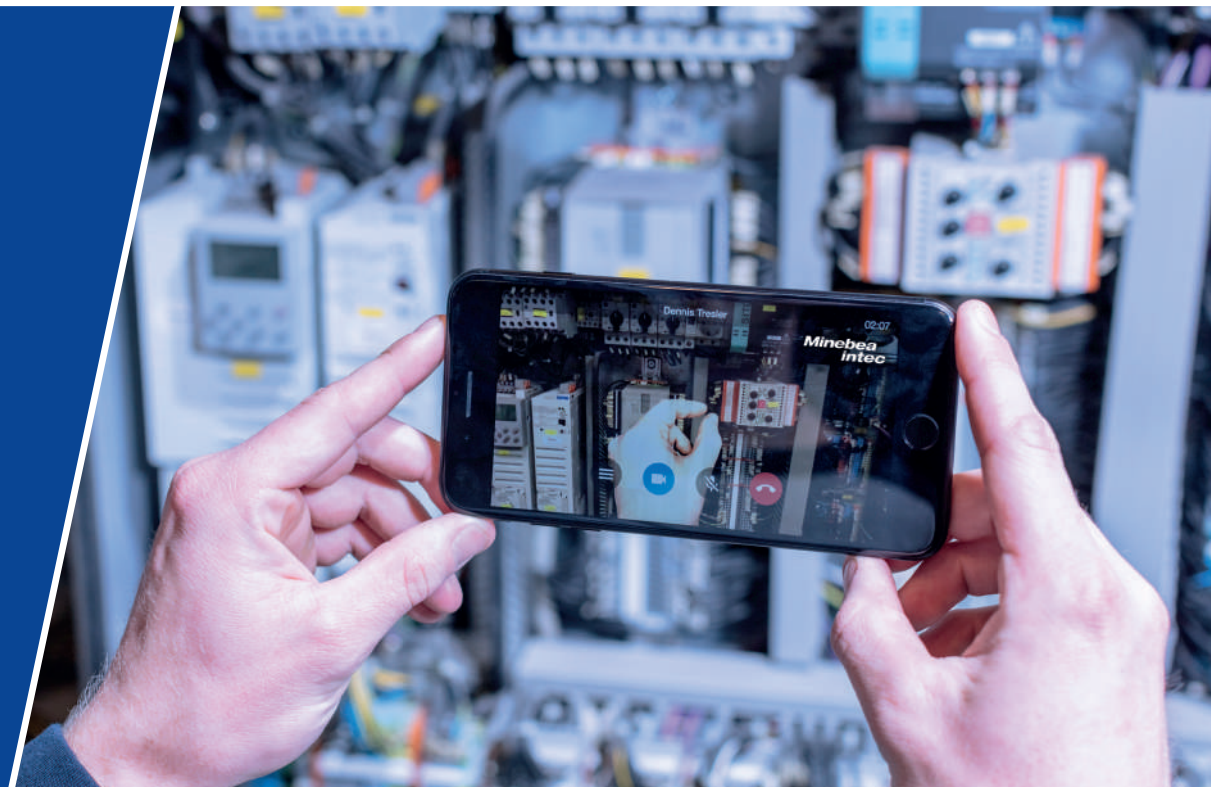
- Practical training content that reduces operating errors, downtime and maintenance costs and therefore increases the performance of the equipment and the efficiency of the line
- Seminars providing knowledge of regulations and technologies

**academy**  
by Minebea Intec



## Maintenance and repair – for guaranteed availability and performance

- Calibration or verification preparation of equipment and systems according to statutory requirements for measuring technology
- Preventative maintenance safeguarding continued availability and performance
- Repair services, including emergency service contracts for a guaranteed response time
- Professional replacement parts service
- Remote services such as the service tool miRemote based on augmented reality – for first-line support on site





# Everything from a single source

Minebea Intec provides products, solutions and services to improve the reliability, safety and efficiency of production and packaging lines in virtually all industries.

From goods receipt to goods issue – our portfolio comprises a variety of automatic and manual weighing and inspection solutions, software and services for a wide range of applications and industries.

## Process weighing and automation

- Vessel and silo scales
- Components for truck scales
- Bench and floor scales
- Batching and formulation

## Quality assurance

- Checkweighers
- Metal detectors
- X-ray inspection systems
- Statistical process control

## Services

- Technical support
- Commissioning
- Maintenance and repair
- Upgrades
- Training courses



**Minebea Intec Aachen GmbH & Co. KG**  
Am Gut Wolf 11, 52070 Aachen, Germany  
Phone +49.241.1827.0  
Email [info@minebea-intec.com](mailto:info@minebea-intec.com)

[www.minebea-intec.com](http://www.minebea-intec.com)



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