

# **Industrial Bench and Floor Scales**



Our portfolio of industrial bench and floor scales offers a variety of solutions for a raft of industrial requirements and applications. The highest levels of precision and dependable 'German Quality' guarantee consistently reliable measurements from the moment goods arrive at customers' premises to the moment they leave from there.

# We make daily life safer

Minebea Intec, previously known as Sartorius Intec, offers products, solutions and services for industrial applications. Our aim is to increase the reliability, safety and efficiency of our customers' production and logistics processes.

This is expressed through the promise that we make to our customers and their consumers: 'We make daily life safer'.

Our key market position as a leading global provider of products and solutions, and our aim of setting high standards in all areas of business are reflected in our company slogan 'The true measure'.

With more than 147 years of experience, we help industry to ensure that weighing, counting and checking processes run precisely, reliably and according to requirements. Our ability to do this is based on the 'German Quality' of our products and services combined with our continuous investment in developing leading technology. As a result, tens of thousands of customers place their trust in our company, having asked us to supply them with millions of products and solutions over the course of our history.

Via our world-wide presence, we stand beside our customers across the globe throughout the entire life cycle of our products and solutions, from assisting them in selecting the right equipment and systems, offering design-in support or providing installation & calibration and maintenance & repair services to performing system upgrades and refurbishment, as well as conducting user training sessions.













## 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 and today has more than 78,000 employees as well as production and sales & service facilities in 16 countries around the globe. For many products, the MinebeaMitsumi group is No. 1 in terms of its global market share.

- Minebea Intec Sales Service
- Minebea Intec Production Sales Service
- O Distribution Partners (size refers to amount of Partners)
  - up to 5
- up to 20
- ) (
- above 20

# As varied as our customers' requirements

Minebea Intec provides innovative products and solutions for reliable weighing throughout the process chain. Our comprehensive range of industrial bench and floor scales, along with individual components and accessories, allows weighing solutions to be configured to the exact usage profile of a given application, from loads of 0.001 g to 3,000 kg, from conformity assessments to hygiene, right thorough to EX certification. The result: the most accurate, reliable measurements at any time and with the ability to meet any requirement.

#### For example:

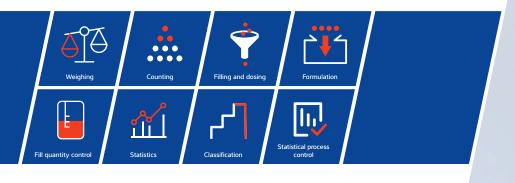
- Weight checks and integrity checking
- Classification, sorting and counting by weight
- Filling and formulation in recipe management
- Checking inventories, production volumes and outgoing goods
- Commissioning for shipping
- Statistical checking of production processes



#### Stepping into Industry 4.0

Scan the QR code and discover the Concept Scale CS 5000 from Minebea Intec. Just like a concept car, the Concept Scale has been developed to determine key future trends and functionality with the help of our customers.

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



#### Why Minebea Intec?

Minebea Intec products and solutions are a byword for quality and cutting-edge technology. Our bench and floor scales have proved themselves over 100,000 times all over the world, handling the very toughest of conditions and strictest of requirements. Throughout the entire life cycle we offer a range of services to support our clients on the ground – from technical support to calibrating test weights. This means our customers will always get the right solution for their requirements.



German Quality



## Industrial bench and floor scales

Minebea Intec has decades of experience in the industrial scales sector. Our proven 'German Quality' scales are robust and highly accurate, and they have exceptionally short weighing times. This means they don't just help our customers to make their processes faster and more accurate - all our industrial scales also ensure accurate, stable and reproducible measurements over the long term.

#### Quality is our best product

Our aim is to deliver products of premium quality to our customers. One way we do this is by checking our quality standards regularly and thoroughly. As part of the final completion process, every device goes through a comprehensive and detailed testing programme. Internal product audits are also carried out regularly. Management systems at all Minebea Intec facilities meet the requirements of DIN EN ISO 9001 at the very least, and are part of our company policy.

#### Adjustment, calibration and verification

Many of Minebea Intec's industrial scales are equipped with a built-in motorised calibration weight. This allows the scales' accuracy to be checked at the touch of a button without the need for an additional test weight. The sensitivity of the scales can also be easily calibrated by touching a button. To ensure that legal requirements are complied with and that weighing results are traceable, we can also provide calibration and conformity assessments of scales during servicing. Our expertise in this area is backed up by the following certificates and accreditations:

- Certificate of recognition for a quality management system according to 2014/31/EU for non-automatic scales
- DAkkS (German national accrediting body) accreditation for calibration of non-automatic scales according to DIN EN/ISO/IEC 17025
- DAkkS (German national accrediting body) accreditation for calibration of weights from 1 mg to 1,000 kg according to DIN EN/ISO/IEC 17025
- Certified QM system according to DIN ISO 9001

Just ask us! We are happy to advise you on our country-specific approvals









#### Bench and floor scale Combics®

The bench and floor scale Combics® combines precision and versatility. All platforms are equipped with proven precision strain-gauge technology, and some models have high-resolution electromechanical force compensation. The modular design allows for maximum flexibility to install the indicator and platform separately as well as targeted replacement of individual components. Choose between:

- Three easy-to-use indicators for various requirements
- A variety of finishes, e.g. stainless steel
- Load ranges of between 3 kg and 3 t
- Readability from 0.05 g to 200 g
- Platforms in various designs and sizes
- A range of resolutions from 3,000 d to 340,000 d
- Verification mode and explosion-proof solutions
- An extensive range of accessories, options and add-ons



Floor scale Combics®



Indicator Combics® 1



Indicator Combics® 2



Indicator Combics® 3





 Easy-to-use application software for a variety of uses, such as counting, checking and prepackaging checking, is pre-installed as a standard feature

#### **Versatile interfaces**

 Optimal connectivity and integration into existing systems, for example via RS 232, RS 485/422, analogue 4–20 mA, digital inputs/outputs, Profibus DP, Ethernet TCP/IP





Bench scale Combics®

#### Particularly suited for uses such as:

- Statistical recording of weights, connection to SPC@Enterprise
- Automatic and manual dosing and filling
- Manual dispensing, production of mixtures
- Totalling and picking of orders
- Classing, classification and sorting by weight
- Part counts for materials management
- Simple recording of weights with logs for documentation
- Checking, for example when checking contents of pre-packaged units
- Weighing containers and vessels for storage management

#### Bench and floor scale Midrics®

The bench and floor scale Midrics® is a proven tough complete scale for reliable quality control, for example in the grocery, pharmaceutical, chemical, electronics and metal industries. Boasting a long product lifetime, they are robust and easy to clean. The indicator can be set up according to the use regardless of location of the platform and can even be mounted on a stand. Choose between:

- Two easy-to-use indicators
- IP65 or IP67/IP68 protection classes
- A variety of finishes
- Load ranges of between 3 kg and 3 t
- Readability from 0.2 g to 200 g
- Platforms in various designs and sizes
- Verification mode
- A range of resolutions from 3,000 d to 15,000 d
- A wide range of interfaces
- An extensive range of accessories, options and add-ons



Bench scale Midrics®

#### Particularly suited for uses such as:

- Manual dosing and filling
- Manual dispensing, production of mixtures
- Totalling and picking of orders
- Part counts for materials management
- Classing, classification and sorting by weight
- Simple recording of weights with logs for documentation
- Checking, for example when checking contents of pre-packaged units
- Weighing containers and vessels for storage management



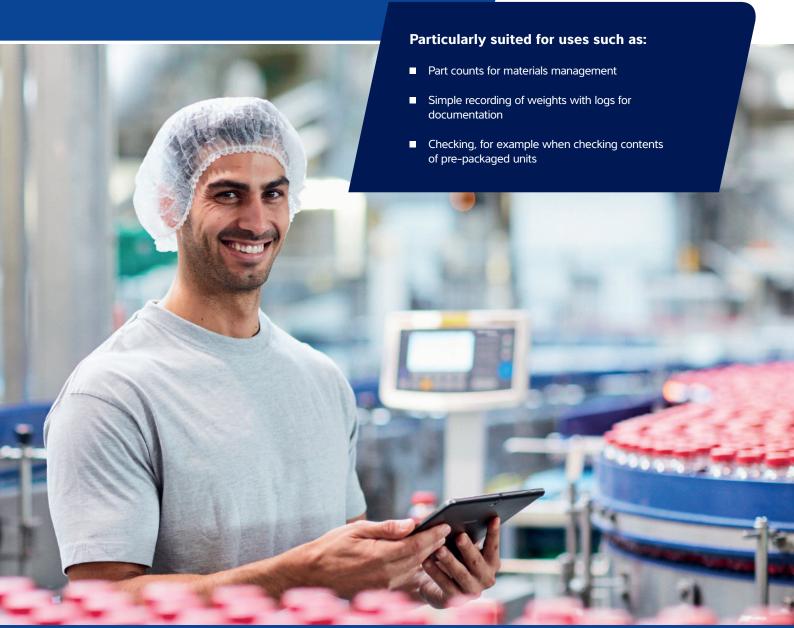


#### **Bench scale Miras®**

The bench scale Miras® can be relied upon to meet a range of requirements. The indicator is mounted on a stand, which is delivered as standard. The specifications and options are as follows:

- Easy-to-use indicator
- Painted frame structure with stainless steel load plate
- Load ranges of between 6 kg and 300 kg
- Readability from 0.5 g to 20 g
- Three platforms sizes
- Resolution up to 15,000 d





#### Bench scale Signum®

The bench scale Signum® has been specifically developed as a compact solution for a variety of industries. All scales in the range are based on strain-gauge (SG) or electromagnetic force compensation (EMFC) technology. Within everyday weighing applications, they stand out thanks to their short measurement times, flexibility and safety. The indicator can be set up according to the use regardless of location of the platform and can even be mounted on a stand. Our customers can choose between models with Supreme, Advanced or Regular specifications, depending on the level of precision required. They can also choose from:

- Three easy-to-use indicators with varying usage levels
- IP43 or IP65 protection classes
- A variety of finishes, e.g. stainless steel
- Load ranges of between 0.6 kg and 65 kg
- Readability from 0.001 g to 10 g
- Platforms in various designs and sizes
- Verification mode and explosion-proof solutions
- A wide range of interfaces
- An extensive range of accessories, options and add-ons



#### Particularly suited for uses such as:

- Automatic and manual dosing and filling
- Manual dispensing, production of mixtures
- Totalling and picking of orders
- Classing, classification and sorting by weight
- Part counts for materials management
- Simple recording of weights with logs for documentation
- Checking, for example when checking contents of pre-packaged units
- Weighing containers and vessels for storage management



#### Supreme, Advanced or Regular?

The bench scale Signum® is available in a range of resolutions depending on the level of precision required:

#### Signum® Regular

- Standard SG weighing system
- High level of built-in overload protection
- Resolution up to 35,000 d

#### Signum® Advanced

- Mechatronic SG weighing system
- Both high-resolution and economical thanks to added electronic compensation
- Resolutions up to 80,000 d or 150,000 d

#### Signum® Supreme

- Monolithic EMFC weighing system
- Precise measurements that minimise product loss and increase profitability
- Precise measurements at all times thanks to the built-in motorised calibration weight
- Resolutions up to 350,000 d or 620,000 d





# Industrial floor scales

Industrial floor scales are characterised by extremely large platforms and are suitable for all sectors in which heavy and bulky loads have to be weighed. In the shape of the floor scales Combics® and Midrics®, along with the flat-bed scale IF and the pallet scale IU, Minebea Intec offers a raft of weighing solutions - including for potentially explosive environments.

#### Flat-bed scale IF

The flat-bed scale IF has been developed for the maximum possible ground-level use in the smallest possible space. It is a high-quality, flexible and mobile weighing station, which can be used anywhere in the production process where reliable measurements and hygienic solutions are required. Its benefits and options are:

- Custom specifications available on request
- A variety of finishes, e.g. stainless steel
- Verification mode and explosion-proof solutions
- IP65, IP68 or IP69 protection classes
- Resolution up to 30,000 d and up to 2 x 3,000 e in situations where verification is required
- Load ranges of between 150 kg and 3,000 kg
- Platforms in various designs and sizes









- Ergonomic design for easy handling
- Hygienic Design, e.g. for use in clean rooms
- Tough and robust for use with aggressive substances
- Easy dry and wet cleaning
- Rollers and steering drawbar for mobility
- Reliable construction guaranteeing low maintenance costs and a long service life



# Various designs and options for customised solutions

#### Standard flat-bed scale IF

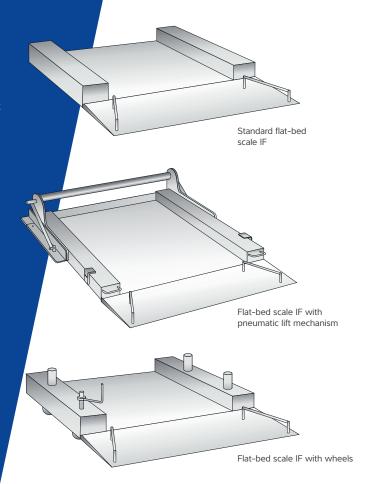
Low platform height and very short ramp with minimal incline to save on space. Available with drive-through protection, additional transport handles and rollers, among other options.

# Flat-bed scale IF with pneumatic lift mechanism

Ideal for stationary use. For complete cleaning of the scale and floor, the platform is just folded up. Available with a second ramp or as a weighing solution for operation by one person, among other options.

#### Flat-bed scale IF with rollers

The version with retractable rollers can be pushed by one person, making it ideal for use in a number of different locations and for easy floor cleaning. Available with retractable rollers or steering drawbar and drive-through protection, among other options.





# Pallet scale IU

The pallet scale IU comes in 48 basic models, allowing us to offer an individual weighing solution for the widest possible range of industry requirements at any time. The range is rounded off by a comprehensive choice of additional options:

- A variety of finishes, e.g. stainless steel
- Explosion-proof solutions
- IP65 or IP68 protection classes
- Resolution from 15,000 d to 30,000 d, 1 x 3,000 e and 2 x 3,000 e
- Load ranges of between 300 kg and 3,000 kg
- Sheet inserts and additional stands available on request
- Custom specifications available on request







#### Why a pallet scale from Minebea Intec?

- Easy handling
- Hygienic design
- Tough and robust for use with aggressive substances
- Rollers for mobility
- Reliable construction guaranteeing low maintenance costs and a long service life

# **Explosion-proof solutions**

For devices to be used safely in potentially explosive environments, their safety levels have to be compatible with local safety requirements. As a reliable partner for industry, Minebea Intec holds international approvals such as IECEx, ATEX, NEC, CEC and NEPSI, as well as a comprehensive range of industrial bench and floor scales for potentially explosive environments. All scales can be used as explosion-proof solutions in EX zones 1 and 21.



Please don't hesitate to get in touch with us! We will be happy to advise you on our explosion-proof solutions, how they can be used and any country-specific approvals.

sales.industry@minebea-intec.com

# The following bench and floor scales are available in an explosion-proof version:



#### Bench and floor scales Combics®

Precision, variety and a modular design for maximum flexibility. Indicators and platforms available as explosion-proof solutions.

#### Bench scale Signum®

The compact solution for a variety of industries, with EMFC technology guaranteeing maximum precision. Platform available as an explosion-proof solution.

#### **Economy bench and floor scale**

The tough complete scale for reliable quality control.

#### Flat-bed scale IF

The high-quality, flexible and mobile weighing station for heavy and bulky loads.

#### Pallet scale IU

Reliable and versatile pallet weighing.



Bench scale Combics®

Flat-bed scale IF

# **Configuration options**

#### **Platforms**

A range of platforms are available depending on the size, weight and environment of the goods and products to be weighed. Together with the indicators, they form an optimal solution for almost every weighing task and

#### A variety of finishes

From stainless steel to powder-coated and galvanised

#### **Load ranges**

From 0.6 kg to 3,000 kg

#### Overall platform size

From 320 mm to 2,000 mm

#### Readability

From 0.001 g to 1,000 g

#### Verification capability/explosion-proof solution

Range of accuracy classes/various EX zones







Weighing platform Combics®

Weighing platform IS

Weighing platform Combics®

#### Accessories/add-ons



#### **Indicators**

A range of indicators are available depending on the resolution, verification capability and use (displays and control panels). Their benefits are:

#### ■ Smart software applications

Easy-to-use application software programmes for a variety of uses, such as counting, checking and pre-packaging checking, are pre-installed as a standard feature

#### Versatile interfaces

Optimal connectivity and integration into existing systems, for example via RS 232, RS 485/422, analogue 4–20 mA, digital inputs/outputs, Profibus DP, Ethernet TCP/IP

#### Indicator Combics® 1

For simple weighing solutions

■ 14-segment display

#### Indicator Combics® 2

For demanding weighing solutions

- 14-segment display
- High-contrast LCD display with backlight
- Also available as an explosion-proof solution

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Indicator Combics® 1



Indicator Combics® 2

#### **Indicator Combics® 3**

For complex weighing solutions

- High-contrast graphic display with backlight
- Softkey-supported application packages
- Traffic light system for checking purposes



Indicator Combics® 3

#### **Indicators Midrics®**

- Midrics 1 for simple weighing solutions, with backlit LCD display
- Midrics 2 for complex weighing solutions, with backlit LCD display, numerical keyboard and comprehensive application software



Indicator Midrics® 2

# Accessories, options and add-ons

All accessories and add-ons for our range of bench and floor scales have been developed with a particular focus on the needs of our customers and they have proven themselves countless times across a wide variety of industries.

#### **Industrial printers**

Several compact, high-performance industrial printers are available for a variety of uses. Their benefits and options are:

- Fast and reliable printing of process, product and weighing data
- Simple and intuitive installation and operation
- Robust, space-saving product design
- Process reliability and quality through comprehensive print data management
- A variety of printing modes, including direct thermal, thermal transfer and 9-dot matrix

# Industrial printer YDP 21 Industrial printer YDP 14

#### Bar code reader

- Optical and acoustic response when reading bar codes
- Processes a wide variety of bar code types measuring up to 120 mm in width
- Green LED for user response

#### Floor-mounted and bench stands

- A variety of finishes
- A variety of heights to support a wide range of uses

#### Frame for pit installation

- A variety of finishes
- Available with installation kit

#### **Ramps**

- Variety of models
- Installation kit included

## Software

Innovate software programmes are available for the reliable integration of our bench and floor scales into production lines. They are continually being updated and expanded. For our service customers, these updates are automatically included according to their agreement level.

#### **Software SPC@Enterprise**

Version 3.0 of the powerful software for statistical process control now boasts even more benefits:

- Efficient networking of a diverse range of devices and systems from Minebea Intec and other vendors
- Fast process control thanks to powerful monitoring programme
- Straightforward generation of production or calibration statistics
- Simple data backup, less risk of data loss





Software SPC@Enterprise

#### **Software ProRecipe XT®**

Intelligent recipe management guarantees reliable processes in a variety of industries.

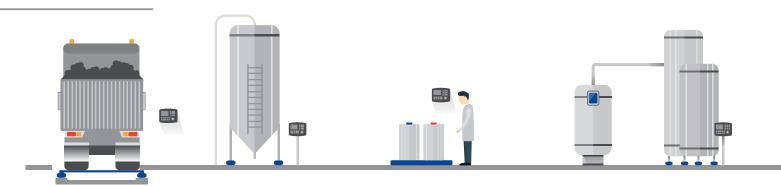
- For intuitive control and monitoring of recipe processes
- Flexible integration into production systems
- Guaranteed traceable product quality
- Meets the validation requirements of the pharma industry







# Our product portfolio



Acceptance and storage of loose materials

#### **Incoming goods**

Acceptance of piece goods

#### **Automated production** systems

Precise control of delivered and stored materials

For complete process control



Components and solutions for truck scales





Silo weighing solutions



Metal detection systems for loose materials



Floor scales



Dosing solutions



Process container weighing (standard/digital solutions)





Process container weighing (hygienic solutions)

We supply industry with products, solutions and services that increase the reliability, safety and efficiency of production and packaging lines. Our portfolio covers all applications from incoming goods inspection right through to goods delivery, including automatic and manual processes as well as filling and packing.





**Packaging** 

# Solutions that ensure accuracy and traceability

**Manual production** 

#### Guaranteeing product quality and food safety

#### **Outgoing goods**

Quality assurance of final product



Portioning and checkweighing



Metal detection



Checkweighing



X-ray inspection



Floor scales

Checkweighers for heavy loads



Filling solutions



Statistical process control



Components and solutions for truck scales





Formulation and manual recipe weighing

## 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 assisting them in selecting the right equipment and systems to performing upgrades and refurbishment, as well as conducting user training sessions.

#### **Engineering Support – ensuring optimal solutions**

- Advice on choosing the best products or solutions with regard to the desired performance, precision and costs
- Design-in support when integrating our products and solutions into existing designs
- Customer-specific products or solutions adapted to individual needs



**Commissioning – ensuring that** 

production starts on time

■ Mechanical and/or electrical installation, commissioning and instructions on

■ Calibration or conformity assessment of

measuring technology requirements

equipment and systems according to statutory

# engineering support

set-up and use

■ Equipment qualification (IQ/OQ)



# Maintenance and repair – ensuring equipment availability and performance

- Calibration or preparation for verification of equipment and systems according to measuring technology standards and statutory requirements
- Preventative maintenance safeguarding continued availability and performance
- Repair services, including emergency service contracts for a guaranteed response time
- Professional spare parts service
- Remote services





# **Upgrades – prolonging equipment life time** and boosting performance

- Hardware and software upgrades
- Equipment refurbishment

#### **Training – enhancing staff capabilities**

- User training covering daily operation and/or minor repair and maintenance work
- Seminars providing knowledge of regulations and technologies





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