

# Software SPC@Enterprise

Statistical process and pre-packaging checking

Upgrade  
to 4.0  
New design  
and enhanced  
features



Safe, legally compliant and easy to use: SPC@Enterprise combines dynamic process controls and pre-packaging checking in one innovative tool. The software efficiently supports the optimisation of production processes and enables seamless, documented control of filling quantities. SPC@Enterprise thus makes an important contribution to increasing efficiency and maintaining consistent product quality.

# We make daily life safer

Minebea Intec provides a range of products, solutions and services to the industry for increasing the reliability, safety and efficiency of production and packaging lines. 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 motto 'The true measure'.

We have more than 147 years' experience in supporting the industry to ensure that manufactured goods have the right quality and do not contain any foreign bodies. 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, offering design-in support or providing installation & calibration and maintenance & repair services to performing equipment upgrades and developments as well as conducting user training sessions.

## Our software SPC@Enterprise makes an important contribution in the following sectors:







## 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.

# Everything in one innovative solution: statistical process control plus pre-packaging checking

Minebea Intec offers a comprehensive portfolio of weighing and inspection technologies for a wide range of industries. This includes innovative software solutions that increase process reliability and optimisation potentials in relation to efficiency and product quality. With SPC@Enterprise, our customers can rely on our decades of experience in the areas of weighing and inspection – and also on the innovative capacity of a leading global technology manufacturer.



## Microsoft Partner

Gold Application Development

SPC@Enterprise was developed using Microsoft tools and therefore conforms to the standard for the production and office software used.

## One of the most efficient tools for quality control and production optimisation

The continuous recording of all relevant parameters in the production process not only ensures conformity with legal regulations, it is also a crucial basis for identifying weak points. SPC@Enterprise (SPC = Statistical Process Control) thus lays the foundations for the ongoing improvement of production processes. SPC@Enterprise benefits users in a variety of ways:

- **Less production rejection**

SPC@Enterprise helps prevent packages/products from being overfilled.

- **Fewer risks**

Safe and legally compliant: with SPC@Enterprise, the monitoring of critical CPs is carried out as per the requirements of HACCP and in compliance with IFS, BRC and other standards. The consistent quality achieved prevents product recalls.

- **Reduced operational hours**

Simplified communication thanks to automated notifications and an individualised checking routine save time and money.

- **Lower operating costs and shorter downtimes**

SPC@Enterprise increases production efficiency. The software also helps to identify and rectify deviations in the production process – caused by defective devices, for example – more quickly.

- **Straightforward integration**

SPC@Enterprise is a modular package. The server-client structure ensures straightforward installation in system environments and a high level of data security in MS SQL databases. The upgrade to 3.0 means that a wide range of devices from other providers can now also be integrated.

**SPC@Enterprise is always the right solution for this application:**





## Why Minebea Intec?

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



German Quality



*"SPC@Enterprise offers me a 360° overview of my production and packaging process, so I can intervene quickly if there are any deviations in the weighing process."*

You can find our full range of process software, product films and much more on our homepage:



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

# No compromises when it comes to efficiency in pre-packaging checking

All over the world, packaged goods regulations govern the checking of packaged food at the producer's premises. The aim here is to demonstrate and document a defined, consistent level of product quality. Without standardised digital inspection processes, it is often difficult to carry out regular checks on filling quantities. Using the software SPC@Enterprise, inspections can be carried out easily and as part of defined checking routines: standardised, needs-based and documented.

Based on samples, the software SPC@Enterprise provides information on:

- All previously detected measurement results
- The process performance
- Any deviations from standards

The user therefore benefits from optimal transparency in the production process and can react quickly to any deviations.



Bench and floor scale CombiCS® with software SPC@Enterprise







Bench scale Signum® with industrial PC and software SPC@Enterprise

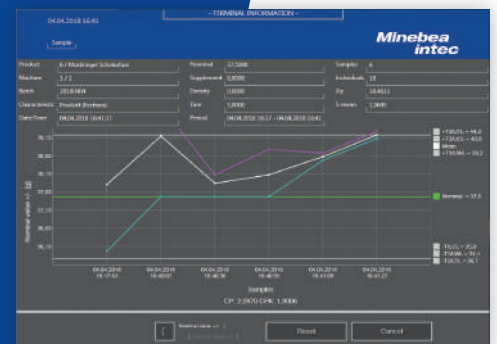


For more detailed information, please visit our website or contact  
[spcenterprise@minebea-intec.com](mailto:spcenterprise@minebea-intec.com)

## Pre-packaging checking with SPC@Enterprise and static scales

For pre-packaging checking with static checkweighers, samples are weighed manually. The measurement data is assessed in SPC@Enterprise, then documented and stored in the MS SQL database.

- Customised display of inspection plans and inspection orders as per the respective requirements
- Workflows for inspection routines with SPC@Enterprise
- Operating processes adapted according to individual requirements
- Simplified operation through display of product images



After samples are weighed, graphical evaluations are displayed to the operator, giving an overview of the production status



Scan the QR code and see how filling quantity control is simplified using SPC@Enterprise and a static scale – includes documentation for government authorities.

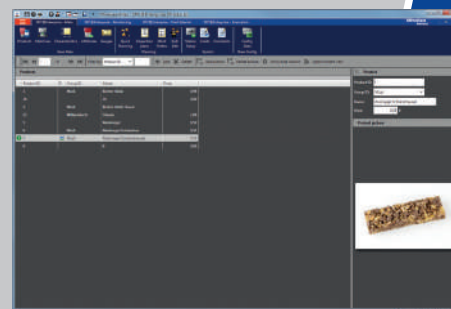
[www.minebea-intec.com/en/videos/SPCindustrialscale](http://www.minebea-intec.com/en/videos/SPCindustrialscale)

# Overview of the features of the software SPC@Enterprise

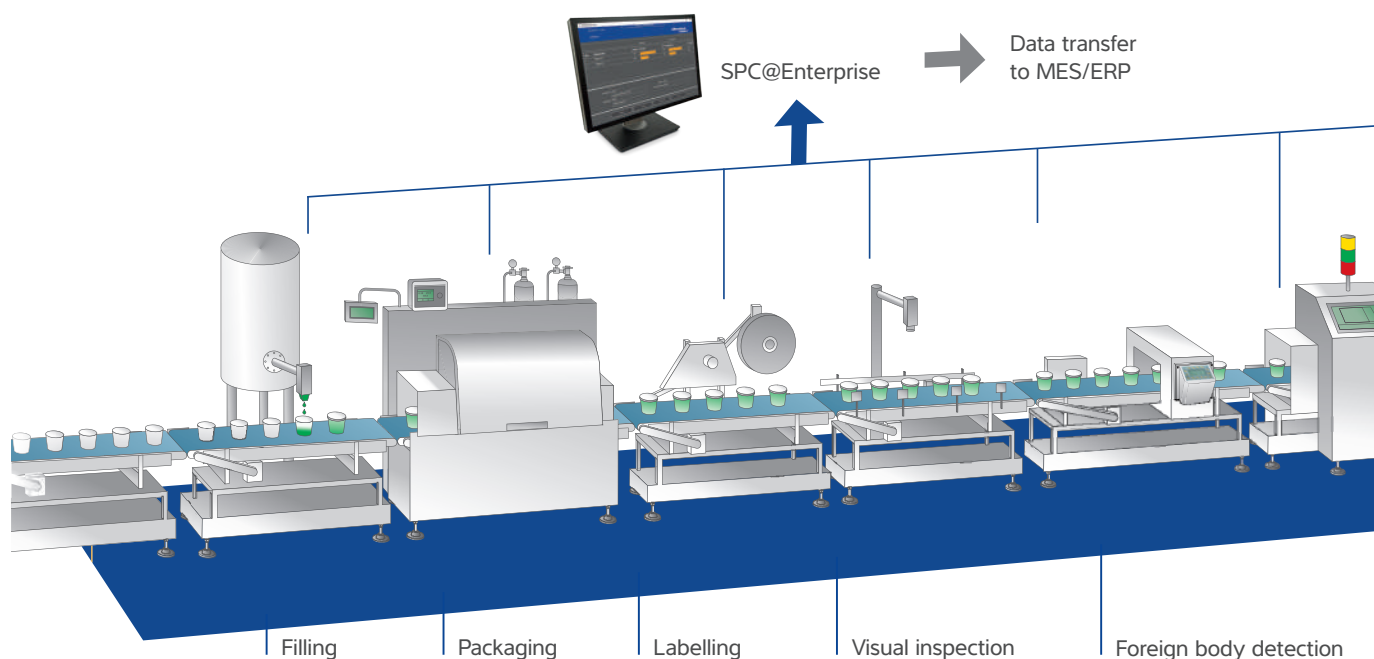
SPC@Enterprise offers a wide variety of benefits for pre-packaging and statistical process control. User benefits include, in particular:

## Pre-packaging checking

- Logging of all kinds of critical process parameters
- Net content monitoring: average weight/minimum filling quantity
- Inspection of solids and liquids (note: density)
- Tare modes: fixed (average) tare, variable tare, destructive tare determination
- Test weighing for setting up batches without official logging
- Definition of standards: tolerances are edited and enhanced to take into account new requirements (legal/product-related)
- Multiple filling head control
- Freely selectable statistics periods and further filter criteria for individual analyses
- Storage of data in various formats (PDF, Excel, Word)



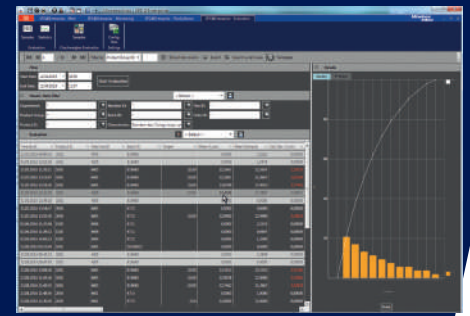
Easy logging of product master data





## Attributive tests

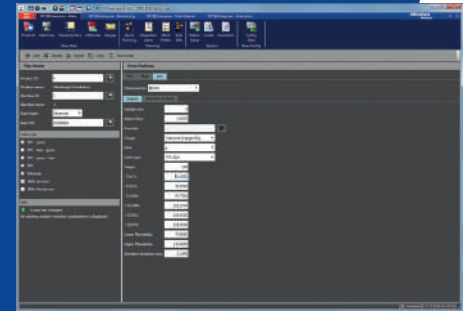
- Packaging and environmental attribute tests for the additional inspection of product properties



Full transparency for ongoing production

## Tests for statistical process control

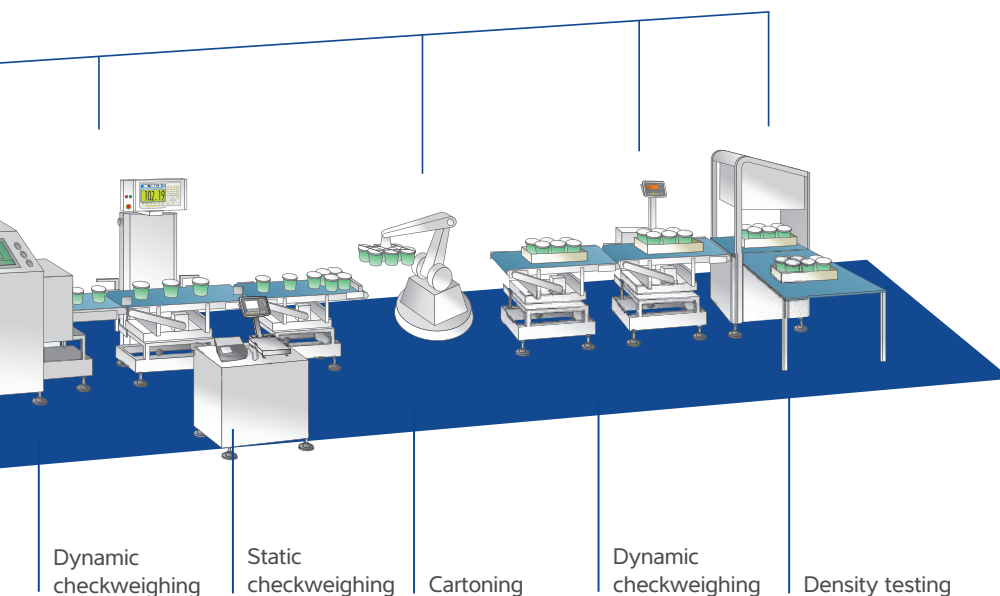
- Data integration via flexible interfaces to HOST systems (MES/ERP systems)
- Statistical process control with freely definable attributes
- Measurement systems with freely definable areas, resolutions and units
- Formula editor for calculating attributes (e.g. component weighing)



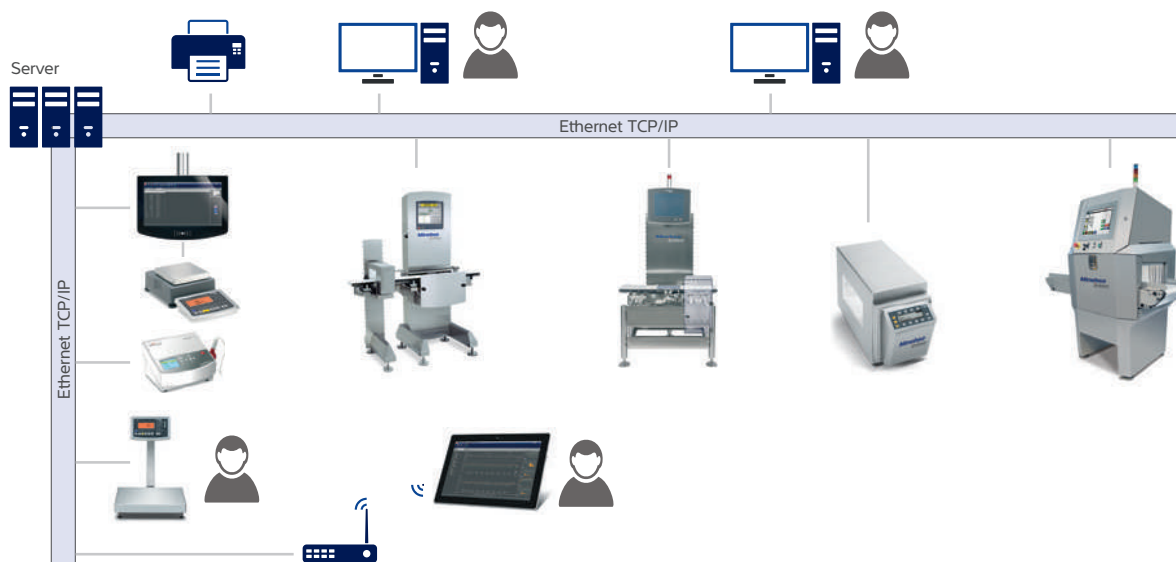
Straightforward creation of inspection orders

## Meets the requirements of the pharmaceutical industry

- SPC@Enterprise was developed in line with pharmaceutical industry regulations (FDA, GAMP)
- Complete audit trail covering all software activities
- IQ/OQ services for software qualification available on request
- Validation handbook supports conduct of performance qualification



# Measurement systems and interfaces for SPC@Enterprise



All measurement systems can be directly networked via TCP/IP for communication with SPC@Enterprise

## Bench and floor scale Combics® 3

- Reliable, precise weighing and filling head-related logging of samples
- Easy recording of attributive tests
- Transmission of all data and statistics to SPC@Enterprise
- Calculation and update of sample tare values
- Density updated via manual entry
- Dynamic adjustment recommendation and statistical summary after every sample



Bench and floor scale Combics®

SPC@Enterprise is supported by the bench and floor scale Combics® 3 with Ethernet interface and option H6

## Bench scale Signum® with SPC@Enterprise PC data acquisition

In conjunction with PC data acquisition, data can be logged in an intuitive, extremely user-friendly and virtually error-free manner.

- Reliable, high-precision weighing of samples
- Simple, intuitive operation
- PC-based logging of values for assessments subject to calibration regulations as part of pre-packaging checking
- Logging of data using bar code reader and product image display on the PC



Bench scale Signum®

All high-resolution bench scales Signum® support SPC@Enterprise



## Dynamic checkweighers

- Straightforward transmission of product data and test data to the device
- Easy logging and evaluation of sample data in SPC@Enterprise



Scan the QR code and see how filling quantity control is simplified using SPC@Enterprise and a dynamic checkweigher – includes documentation for government authorities.

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



Checkweigher  
Flexus®

All Minebea Intec checkweighers, metal detectors and X-ray inspection systems are supported by SPC@Enterprise.

## Metal detectors and X-ray inspection systems

Metal detection and X-ray inspection systems are networked directly via TCP/IP for communication with SPC@Enterprise

- Interval logging of foreign body detections
- Documentation of equipment tests with test specimens



X-ray inspection system  
Dymond



Metal detector  
Vistus®

## Flex Collector – the innovative universal interface for additional machines and sensors

With SPC@Enterprise 3.0, measurement devices from almost all manufacturers can be seamlessly integrated. The following test modes are possible:

- Filling quantity control (e.g. checkweighers or filling machines)
- Attribute testing (e.g. foreign body detection or documentation of device tests)
- Statistical process control (e.g. moisture meters, residual oxygen measurements)

The FlexCollector supports data acquisition of a wide range of measurement values via TCP/IP.

# 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



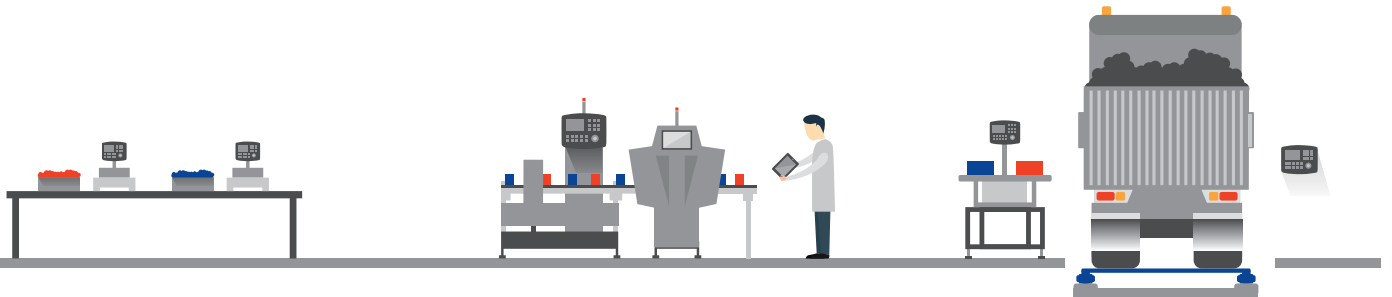
Process container weighing  
(standard/digital solutions)



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.*





## Manual production

Solutions that ensure accuracy and traceability



Portioning and checkweighing



Formulation and manual recipe weighing

## Packaging

Guaranteeing product quality and food safety



Metal detection



Checkweighing



X-ray inspection



Filling solutions



Statistical process control

## Outgoing goods

Quality assurance of final product



Floor scales



Checkweighers for heavy loads



Components and solutions for truck scales

# 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

**engineering support**  
by Minebea Intec

## Commissioning – ensuring that production starts on time

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



For more detailed information,  
please visit our website or contact  
**info@minebea-intec.com**





## 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

**academy**  
by Minebea Intec





We make daily life safer

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The true measure