

# Plant engineers rely on high-quality technologies – including engineering support

In terms of complex production processes, manufacturers in a number of industries count on the expertise of plant engineers. The goal is to create tailor-made solutions which can be seamlessly integrate into manufacturers' production lines and applications. In order to best achieve this, process integrators choose



their suppliers with great care. Consequently, providers such as global industrial weighing and inspection technology makers, Minebea Intec, as well as offering an extensive, high-quality portfolio of products, they also offer engineering services.

In plant and mechanical engineering, components and technologies for highly developed joint systems are being combined all over the world. The industry is constantly growing and accounts for a considerable share of the world's total industrial production. Sales of EUR 280.9 billion were forecast for this year in the mechanical engineering industry in Germany alone and are expected to

reach EUR 294 billion by 2023. There are many challenges – and demands – since bringing together components and technologies from different disciplines means increased responsibility. If a number of suppliers and subcontractors are involved, the plant engineer is often in the place of an intermediary between customers and service providers. "Our customers know that we're there to offer our complete support in their specific situation", explains Matthias Rehren, Global Sales Manager of OEM Business at Minebea Intec. "Aside from providing high-quality, durable weighing and inspection technologies, we offer them not only expert advice when choosing the best solutions, but also design support when it comes to integrating our products into existing constructions, as well as individual, customer–specific solutions".

#### Reliability and expertise – a good partner can offer both

The scope and complexity of projects can be as varied as plant engineering itself. Partners can impress with reliable technologies and precise communication. "We make sure our plant engineering customers are fully informed and have access to competent contact persons at all times whatever the requirement, be it installing a stand alone checkweigher in a clean stable production area or large silo's within a considerable seismic activity region." Handling a plant engineering task is often a one-off project and Minebea Intec takes each one as an individual case. When it comes to designing a new weighing solution, trust in the product and supplier expertise are a must. Process integrators usually aim to establish long-term relationships with their suppliers and want to be sure that the solution they choose will improve the efficiency of their equipment, whatever the circumstances. This is where Minebea Intec's technical support helps – from construction to preventative maintenance after installation. The manufacturer of weighing and inspection solutions for process vessels, bench and platform scales, checkweighers and foreign body detection systems supports system integrators in every stage of their project. This involves considering scale and detection accuracy, environmental impact and data communication. Matthias Rehren gives two examples of this.



#### Installation-safe weighing solution - made in Germany

The weighing module Novego from Minebea Intec offers a good example. One of its key USPs is its imperviousness to transverse forces, which can lead to undesirable measurement uncertainties in many weighing processes. Transverse forces like these can occur, for example, when switching on rotating mixing devices and lead to erroneous weighing results. This weighing module can negate these effects to the minimum and guarantee precise measuring results in manufacturing processes, even with transverse forces of up to 20% of the load. Novego doesn't only impress due to its imperviousness to transverse forces, it has a whole package of other impressive features to offer.

Since its market launch in 2018, a number of notable process integrators, such as Italian company Logica Progetti or Pharmatech, have opted for the hygienically designed weighing module – not least because of how easy it is to install. "The weighing module Novego can, along with other features, be supplied with a built-in adapter for height adjustment of up to 8 cm and tilt correction for sloped surfaces with a gradient of up to 3°, thereby rendering additional constructions largely unnecessary." Matthias Rehren points out. "In many facilities, above all in the food, pharmaceutical and chemical industries, equipment like this significantly reduces the work involved in installation." Thanks to the converter Connexx, the weighing module Novego can also be designed as a digital weighing solution, which offers additional process control possibilities.

#### Practical dosing solution with two scales

Before individual ingredients can be added to the mixing container, precise dosing can ensure the recipe is correct. MIXACO is a company based in the German town of Neuenrade which specialises in producing high-quality mixing technology for a number of industries. In order to adapt to customer needs, the plant engineer also includes a dosing and weighing station which features Minebea Intec technologies.

The dosing station has two scales: a high-precision bench scale from which the ingredients can be dosed into the mixing container and a floor scale onto which the mixing container is pushed. With this combination of bench and floor scales, the mixing station enables dust-free weighing of up to 30,000 g, as well as up to 1,000 kg for reliable dosing.

Both the bench scale and floor scale are connected to the weight controller Maxxis 5. In addition to ensuring precise weight display in both weighing ranges, the weight controller uses bespoke software applications to facilitate multi-component dosing and allows for connection to master systems. For more complex recipe requirements, the software ProRecipe XT offers a number of additional options – also available in a tablet-based mobile version. "In Minebea Intec, we've found a reliable weighing technology supplier, who shares our commitment to quality", said Guido Brand, Sales & Marketing at MIXACO, in summing up the successful cooperation with Minebea Intec. MIXACO have customers from the most diverse of industries. In the meantime, the precise dosing stations have proven invaluable to numerous companies in the chemical, pharmaceutical, plastics and paints industries.



#### Support in multiple areas

Minebea Intec products boast an impressively broad range of services: for the processing of packaged foods alone, the global provider offers hygienically designed load cells and platform scales, indicators and transmitters with PLC and PC network connections, as well as statistical process control software and compliance with packaged goods regulations. In the packaging line, checkweighers from the broad portfolio are integrated in combination with metal detectors or X-ray inspection systems. Important aids to decision-making here include the possibility of adapting the equipment to customer-specific and performance tests with real product samples. The Minebea Intec "virtual showrooms" provide the perfect platform and opportunity to clarify specific questions. Sessions are held online, in real time and in person with an experienced applications specialist.

Minebea Intec has built up particular expertise in providing engineering services for projects in the petrochemical industry. The Minebea Intec engineering team is able to provide tailor-made packages for projects across the world, for all temperature zones, as well as for use in potentially explosive atmospheres or areas with high levels of seismic activity. The company is currently involved in a variety of projects which have been running for several years now. "The effort is always worth it, when finally, a silo with 500 tonnes of plastic granulate provides the measuring results the customer had expected, we can sign off on the assignment with pride", said Matthias Rehren, summing up one of his recent successful projects.

Minebea Intec has decades of experience in developing and manufacturing innovative industrial weighing and inspection solutions. Its product portfolio includes platform scales, load cells, container and silo scales, checkweighers, metal detectors, X-ray inspection systems and user-friendly software solutions. The company is a global player in its field. With over 90,000 inspection systems, 350,000 industrial scales and indicators sold worldwide, as well as around 1,000,000 industrial load cells and services, customers and partners in a whole range of industries can rely on Minebea Intec.



# Image material



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Minebea Intec is a leading manufacturer of industrial weighing and inspection technologies. For system integrators, the company provides products and solutions based on around 150 years of experience



# Novego\_Installation.jpg

A good example of successful development. The weighing module from the Novego series provided by Minebea Intec offers unique benefits in terms of installation and application



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Minebea Intec offers sophisticated engineering services for scalable solutions and almost all needs, especially for the petrochemical industry





## Mischstation\_left

German plant engineer MIXACO integrates Minebea Intec technologies in its dosing and weighing stations

## Sources

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