

Best Practice

From delivering raw materials to checking pre-packaging, Minebea Intec's weighing technology ensures optimum productivity





A sealant manufacturer didn't just want to rely on extremely precise weighing technology for their tank farm, they also needed a software solution for statistical process control. The result was both reliable weighing results and optimum productivity.

Key facts

"Connections that stand the test of time" isn't just a slogan that encapsulates Ramsauer GmbH & Co KG, it's also the company's philosophy. Ramsauer is the Austrian market leader for sealants, adhesives and PU foams, and they rely on Minebea Intec's expertise to deliver raw materials and check pre-packaging.

Application

After weighing the raw material tanks, dosing it into floor scales, mixing and filling, a sample check is carried out for the finished products.

Products

- Precision load cell PR6201/24D1 with MaxiFlexlock PR6001/..S
- 4 lift up floor scales with frame for pit installation
- SPC@Enterprise with 3 Combics 2 scales

Customer benefits

- Using extremely precise weighing technology combined with software for statistical process control ensures optimum productivity
- Professional consultation during the engineering phase with clear demo equipment
- Compact products, which are robust and easy to install and operate
- Quality product with "German Quality"

The customer

Founded in 1875 by Ferdinand Ramsauer, the company started producing silicon-based sealants in 1972 and manufacturing PU foam in 1976. They filed an in-house patent for 2-component systems in 1998, which cemented their reputation as an innovative company. Today, the business manufactures a wide range of high-quality sealants, industrial adhesives, PU foams and special products, selling them to clients around the world



Project goal and implementation

Ramsauer GmbH & Co KG planned and developed a tank farm with engineering firm WK-Tech, which consists of eight 50m³ stainless steel tanks, as an integral part of the production system. At the bottom end of the tank system, it's possible to fill up Raw material from lorries is unloaded and distributed to the respective tanks, at the top end of the system, raw materials are dosed into the dedicated mixing tanks, based on a formula from the Enterprise Resource Planning (ERP) system.

One requirement of the raw material input process was to be able to compare the weight of all incoming quantities of raw

material with the weight specification on the order. The stocks in the ERP system are maintained based on this information. Depletion can be calculated accordingly.

In addition, the solution used should guarantee that no raw material is inadvertently conveyed into an incorrect tank during delivery. To ensure

that this doesn't occur, the plant manufacturer placed each of the tanks on three load cells (PR 6201/24D1), and introduced a hose system marked with barcodes. The tanks' fill level can be measured at any time with the system's 1 kg measuring accuracy, and the marked hoses ensure that the conveyor lines never get mixed up in the process.

With regards to raw material sampling, it was crucial for the various raw materials to be dosed into the mixing tanks - to a specific formula. It was also necessary to be able to take samples at multiple stations simultaneously.

To meet these requirements, three floor scales (CAAPS4-3000RR-I) with a measuring accuracy of 0.1 kg were used to assist the control software in monitoring the dosing process.

"Minebea Intec's precise weighing technology had already won us over, but using it in combination with the software SPC@Enterprise hugely surpassed our expectations. The whole package just worked wonders."

Dipl. Ing. Kornelius Kurz (Ramsauer Management Team)

The quantity actually sampled is logged during the process and then compared with the ERP system. This means that the quantity stated on the production order can be compared with the sampled quantity from the tank farm.

Even after the finished products have been filled up,

Ramsauer continues to rely on Minebea Intec products. The software SPC@Enterprise (PC logging) can be used to check the finished products on three lines using calibrated sampling scales, which then transmit the data to the ERP system.



The mounting kit MaxiFlexlock makes installation simple and safe



The newly constructed tank farm



Are you interested? We'll make you an offer! Simply send an e-mail to sales.hh@minebea-intec.com

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