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Safe weighing despite storms and earthquakes

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How can a production plant that relies on weighing technology carry out its processes accurately and safely when sudden lateral forces such as gusts of wind, vibrations or seismic activity subject tanks and vessels to great stress? This question arises for many production managers who are confronted with the particular challenges of such environments. Minebea Intec explains how.

In many regions of the world, managing a production plant is like a constant balancing act: in addition to the everyday challenges of production, production managers have to keep an eye on the risks posed by possible lateral force influences in weighing applications. Storms, vibrations or earthquakes can occur suddenly and expose tanks, silos or other containers to large lateral and transverse forces. Conventional weighing solutions quickly reach their limits here: decreasing measurement accuracy, increasing safety risks and unreliable data impair the entire production process. In addition, constructive approaches often prove to be oversized and expensive.

To meet these challenges, Minebea Intec has developed the weighing module Novego® . With its integrated 360° guide arm, it offers a solution that removes concerns of production managers by minimising measurement errors even under extreme lateral and side forces and significantly reducing the risk of damage to weighing components. At the same time, it ensures precise measurements that make production processes safe and efficient – with minimal planning effort thanks to sophisticated adapter options that do not require an external mounting kit.

Maximum precision thanks to innovative technology

The Novego weighing module® is specially designed for use in demanding environments such as

earthquake-prone areas. Its innovative design makes it particularly resistant to lateral forces that occur during seismic movements. The module has an integrated self-centring function, which ensures that the load cell automatically returns to its original position after displacement. This ensures that the measuring accuracy is maintained even under extreme conditions.

Moreover, the weighing module is made of high-quality, corrosion-resistant materials that meet the requirements of the Food, Chemical and Pharmaceutical industries. With a maximum capacity of up to 2,000 kg and a protection class of up to IP69, Novego® offers a perfect combination of load capacity and hygiene. The IP69 protection rating ensures that the module is completely resistant to the ingress of dust and water, even during intensive cleaning with high-pressure or steam jets. This makes it ideal for use in demanding production environments where reliability and durability are crucial. The module is also easy to install and can be used without additional mechanical components such as self-aligning bearings or cross-load compensators, which significantly reduces installation costs and time.

Additional solutions of Minebea Intec

In addition to weighing technologies such as the weighing module Novego ,® Minebea Intec offers inspection solutions that are specially designed for extreme conditions. Checkweighers, Metal detectors and X-ray inspection systems deliver highly reliable results even under demanding environmental conditions such as temperature fluctuations or strong winds. With over 70 years of experience in container and silo weighing and a customised range of services – from consultancy Assistance and commissioning to maintenance – Minebea Intec supports customers worldwide. This gives production managers peace of mind, even when working under challenging conditions.