

3M

3M checks high-value outbound batches by weight

3M produces semi-finished products and raw materials for a variety of specialised materials. Due to the high value of the materials, accurate weighing is a requirement.



About 3M

In the Antwerp harbour area, 3M produces semi-finished products and raw materials for a variety of specialised materials, such as films for the aviation industry and surgical tapes for medical applications. As these materials often represent a high value, deliveries are carefully checked for weight using RAVAS weighing systems on stackers and pallet trucks.

Intended results

The additives 3M works with are expensive and so a simple weight check on a third party delivery becomes a demanding process. 3M plans to use mobile weighing systems to weigh IBCs to an accuracy of 100 grams. In addition, they want to increase efficiency by equipping stackers with a weighing system for weighing boxes and residual materials.

Investment in hardware and software

To achieve the intended results, 3M invested in RPW ST weighing stackers for box weighing and ProLine EXi hand pallet trucks for accurate IBC weighing.

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How does it work?

At the end of a production line, 12 kg packages slide down a roller conveyor. They go to the customer in 50 pieces in large blue plastic boxes. Stackers with a reach mast not only stack the boxes, but also weigh them, to check if the correct quantity is delivered. For this purpose, the stackers are equipped with calibrated weighing forks. The display shows the exact weight of the box on the forks. The stackers also weigh the residual material leftovers from production. This residual material can be reused for production: before it is transported back to the warehouse on the stacker truck, the weights are recorded for stock management purposes.

In a building at the other end of the 3M site, inert fluids are produced for cooling and cleaning electronics. These engineered fluids represent a high value and the IBC containers in which they are stored are therefore weighed very accurately. This is done with RAVAS ProLine hand pallet trucks that deliver high precision, thanks to the patented FlexBolts in the forks. And because highly flammable substances are used in some areas, some of the mobile weighing systems are also ATEX explosion proof.



Certified calibration

At 3M, the entire fleet of mobile weighing systems is included in maintenance contracts. Once a year the RAVAS calibration truck, equipped with certified calibration weights for OIML verifications, rolls onto the 3M site. For three days, maintenance is carried out and all mobile weighing systems are recalibrated and, if necessary, recertified. This ensures the accuracy of the systems and optimises their service life.