



Vincent van der Wel (PENKO Engineering):  
moving in the direction of smarter  
production with a minimum of  
losses.

## Control of total flow of goods

*Vincent van der Wel (PENKO):  
direction to intelligent production with a minimum loss*

Tracking and tracing is an issue that is topical for many years in many segments of the processing industry. The ongoing product liability is forcing manufacturers to link their production processes to their administrative processes. Although all of them are active in doing so, Vincent van der Wel of PENKO Engineering notices the high investments form a barrier for some of them.

PENKO Engineering develops and manufactures highly accurate weighing systems for among others the food processing industry. This weighing is becoming faster and more accurately. Where end of last century a frequency of 50 samples per second was very fast, today 1600 readings per second are not an exception anymore.

"This provides by example new opportunities for dosing systems," explains Vincent van der Wel, manager of PENKO Engineering. A dosing system with a feed rate of 1 kg / s can when measuring with 50 readings per second switch with an accuracy of 20 grams, at 1600 measurements per second this switching accuracy improves to 0.6 grams. "We have made tremendous progress in this area. And due to the high number of measurements, we are now able to incorporate dynamic filters, which, for example, filter out the effect of vibrations of the floor. Therefore, the customer can dose and produce faster or more accurate. "Despite the progress made, the limits are not reached. It may even go faster. And because of the increasing memory capacity of the weighing equipment, the number of process parameters can be increased.

#### Controlling Total production

However, the real innovation according to Vincent van der Wel should be sought in another direction. The market namely increasingly demands the link between the production and administrative environment. "They want control over the entire process. When the product comes out of the plant, they want to know which raw materials are used, from which supplier and which operator made the product." That's why PENKO Engineering has developed its own ERP system, but connects the weighing equipment to other ERP packages as well. The reason why companies need grip on the entire production chain, from raw material to finished product, is the more stringent product liability. They want to avoid errors. And if something goes wrong, they want to be able to react quickly. "The bigger companies have this completely

under control. The smaller have more difficulties," van der Wel says. Mainly the high investments for such solutions can form a barrier.

#### Producing smart

Yet not only laws and regulations force the companies to do these investments. Indeed things like quality, durability and productivity play a role. "Proper weighing equipment prevents for wrong mixtures, so wrong products. Customers demand reliability and reproducibility, since they thereby reduce their cost and thereby remain competitive." With regards to the concept of smart industry, Vincent van der Wel also notices immediately for him it is not the question how to make smart weighing systems, but how helping customers to be smart. The tools to monitor the production process are there. The systems are smart enough to correct when frictions occur in a process without wasting any resources. "Smart industry is about making optimum quality final products and lose as little as possible."

*De weeg- en doseerinstallaties in de fabrieken maken steeds vaker deel uit van het totale productienetwerk.*

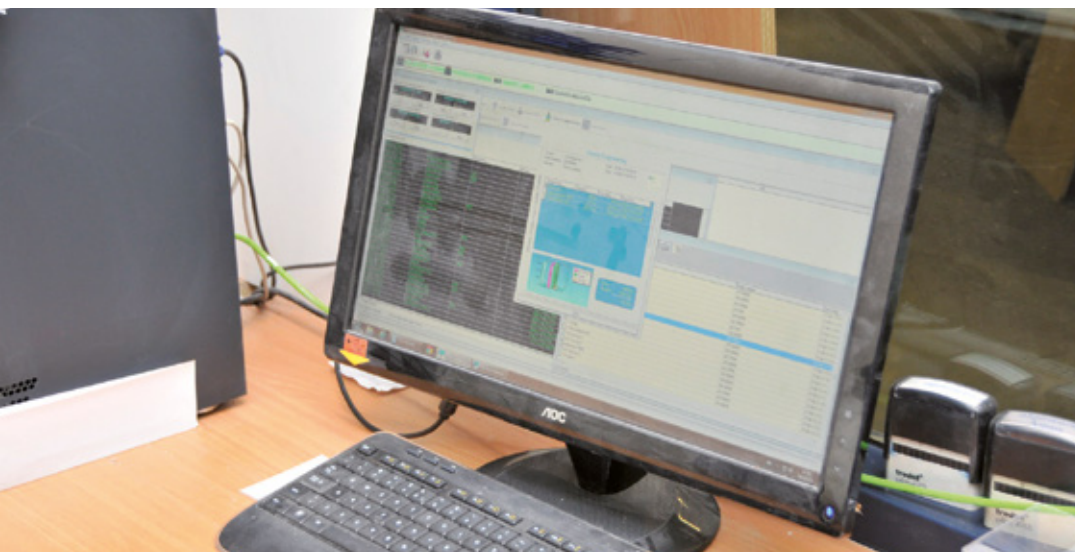






Sorting is based on weight measurement

*Sustainability, legislative and regulatory changes and globalization: these are three topics having a lot of influence on the business operations of the sector, the Machevo & Bulk members say in the market report of 2016. It offers simultaneously opportunities. In addition to the development of new products (42%) they say to emphasize in particular on the far-reaching service (42%)*



The integration of measurement systems in the ERP systems often requires customization of Penko.

#### **Custom Solutions**

That's the direction that the industry is heading for. In addition, he absolutely does not worry about competition out of other parts of the world. Differently from the retail sector industrial weighing processes always are customer-specific solutions. "Close contact with customers is important. Building control technology also requires an understanding of the culture and the process of a manufacturing company. Therefore you find in general small and medium sized companies in our sector; operating close to the customer. "And they are well aware of local laws and regulations. Because, Van der Wel says, no sector has the amount of laws and regulations of the weighing industry. Every ten years, there are revisions of the recommendations and directives the weighing industry has to deal with. Legislation by the way which is created in consultation with the industry. "As a branch we see it amongst others as our job to protect the legislature for stupidities. Legislation is there to improve the society. "

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