

The Chronicle

PENKO Engineering B.V. www.penko.com • Telephone 0318 525630 • Schuttersweg 35 • 6718XC Ede

Yesterday, Today, & Tomorrow

HISTORY OF PENKO

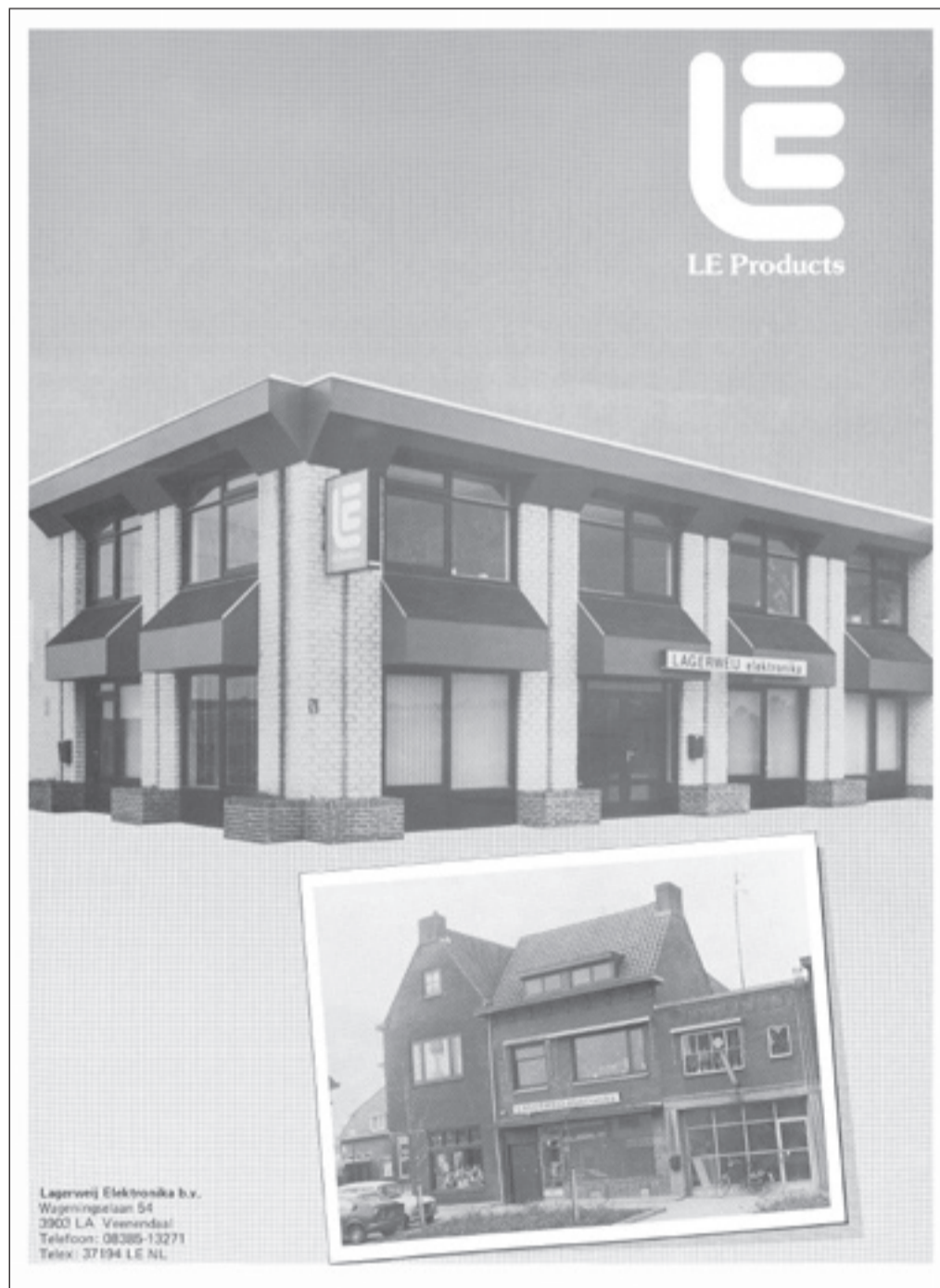
In 1975, electrical engineers Willem B. van Huët and Vincent M. van der Wel came up with the idea of opening a trade company in weighing. Existing brands, such as van Berkel, were not doing too well in those days. The transition from mechanical weighing – the well-known lever constructions with dials – to electronic measuring systems was slow. Both men realised that the downturn in this field opened up a market gap. Weighing is a necessity and mass is a primary unit, after all!

Their company would sell load cells and electronics from Belgian brand Penkotronic. Vincent registered the enterprise at the Chamber of Commerce in Maastricht on March 7th, 1977, and things got busy from there. In the summer of 1978, an entire process control on PLC became the basis for a concrete factory. Early 1979 saw the sale of a complete computerized control system for a fluid soap manufacturer. The company was gaining traction, so Willem and his wife, Ely, joined PENKO a few months later. Soon after, the young company moved to its own property in Mgr. Frenckenstraat in Roosendaal. The building was purchased from a bicycle mechanic and contained an office, the previous shop, a warehouse, and workspace.

Unfortunately, Penkotronic's deliveries were unreliable during its early years. Systems were often delivered late, and didn't quite match the state of the art technology available at the time. The company began searching for a replacement supplier, and selected Lagerweij Elektronica, or LE Products, from Veenendaal. This company designed and manufactured PENKO's first self-branded weighing instrument type NPE 4 in May 1978.

The collaboration with Lagerweij came at a good time, as Penkotronic went bankrupt in May 1980. The market gap for load cells was only truly filled in March 1982, when PENKO started representing the Huntleigh brand, now known as Tedeo Huntleigh. This collaboration is still ongoing. Lagerweij had nine employees, whilst PENKO had three, so PENKO moved to Veenendaal. The company stayed there until 2009.

At the beginning of 1983, PENKO launched its own programmable dosing and SPS type-sequencing controller, suitable for a fully automated weighing process. As SPS in German is the abbreviation for a freely programmable controller (PLC), it was quickly changed to PDS. At the same time, an employee began designing and constructing dimmers for stage lighting in his own home.



Along with the PDS, a five- or ten-line controller of the MBS type was released in 1985. That same year, their customer, Verstegen Specerijen, basically forced PENKO to switch to the IJkwezen, the current Dutch Metrology Institute, as Verstegen required electronic weighing and verified filling controllers. As their preferred supplier, PENKO had to address the matter, and did so successfully. An approval for a non-automatic weighing instrument was obtained in September 1985, followed by one for automatic weighing applications in August 1987. Thanks to the constant development of instruments with high dissolving properties and a high measuring speed, PENKO, along with a process automation specialist, became an expert on filling and checking trade packaging. PENKO received its largest order ever in July 1989: a fully automated system with weighers and sequencing controllers for a factory that made photograph material. The

order required twice as much workspace, which the landlord helped add to the premises. Almost simultaneously, a collaboration began with one of the Stork group companies to develop rotating filling and dosing machines. This collaboration is still ongoing today.



In the following years, technical developments happened in quick succession. PENKO introduced the DSP, HVC and NPX-dy instruments in 1991. All three of them were suitable for trade, and were thus verified. Furthermore, they complied with the just-implemented European regulation for non-automated devices, MID (Measurement Instruments Directive). In 1995, the collection was complemented with the AMI- and

SAL instruments, which were both outstanding, thanks to their high measuring speed. In 1996, they added new dosing controllers, MixMate and Mixmaster, to their product selection. Meanwhile, the employee who had been producing and selling lighting controllers for stage lighting applications also saw an increase in business. Production of the lighting systems quickly expanded and was incorporated into PENKO on February 2nd, 2002. Shortly after this merger, the best lighting controller for lightbulbs and gas discharge lamps was introduced. It controlled the entire sine wave, just like the variable transformer. This way of dimming has huge benefits, because there is no contamination of the power supply and the lighting does not cause background noise. It was the ideal solution for theatres and concert halls, and was soon selected for a number of notable projects. It became the standard dimmer for all BBC studios.

That success certainly did not go unnoticed. Thanks to the lighting controllers, the company began discussions with ETC Inc., which resulted in PENKO becoming an ETC company on May 26th, 2004. This strong parent company provided security for the future. Willem van Huët retired soon after this acquisition. ETC is skilled at entrepreneurship and strategic investing. Despite the large economic downturn that began in 2008 and lasted several years, the company built a new facility in Ede, and PENKO moved into it on November 9th, 2009. The building was officially opened by ETC CEO Fred Foster during a celebration on January 27th, 2010. The new building looked rather empty at first, but because it is both PENKO's factory and warehouse, as well as one of ETC's central European offices, it has filled up nicely. The trend toward LED stage lighting has meant that high-power dimmers are becoming unnecessary, so today ETC manufactures the majority of its lighting products in its factories in Wisconsin (USA).

At PENKO, a new series of FLEX instruments was launched in 2010, followed by SGM700 digitizers in 2014. SGM800 digitizers and type 1020 indicating instruments followed a year later. Certification in accordance with ISO900-2008 was granted in January 2016, which was a big accomplishment. PENKO's history certainly does not end there. You can expect a lot more from this innovative and customer-oriented company in the years to come. PENKO congratulates all its customers on their achievements and thanks them for placing their trust in the brand. To help PENKO celebrate these successes, its valued customers, partners and dealers are invited to join its employees for a prestigious 40th anniversary event on **November 8th, 2017**, at the factory in Ede.

INDUSTRY 4.0 – WHAT IS IT ALL ABOUT?

Think back to the first industrial revolution where steam engines made a significant impact predominantly in the heavy industry sector such as steel mills and the first mechanical loom in 1784. In just 300 years, the speed of industrialization has grown exponentially, presenting us with the first assembly lines in the late eighteen hundreds, followed by the "robotic age and PLC's, the so called programmable logic controllers to perform simple, standard, repetitive tasks. Now we were able to manufacture products faster, which in turn allowed us to increase output and sales, standardized, consistent accuracy and high quality was the order of the day. However the speed of output and high accuracy was not all pomp and glory. The downside was that this very heavy industrial process was difficult to change.

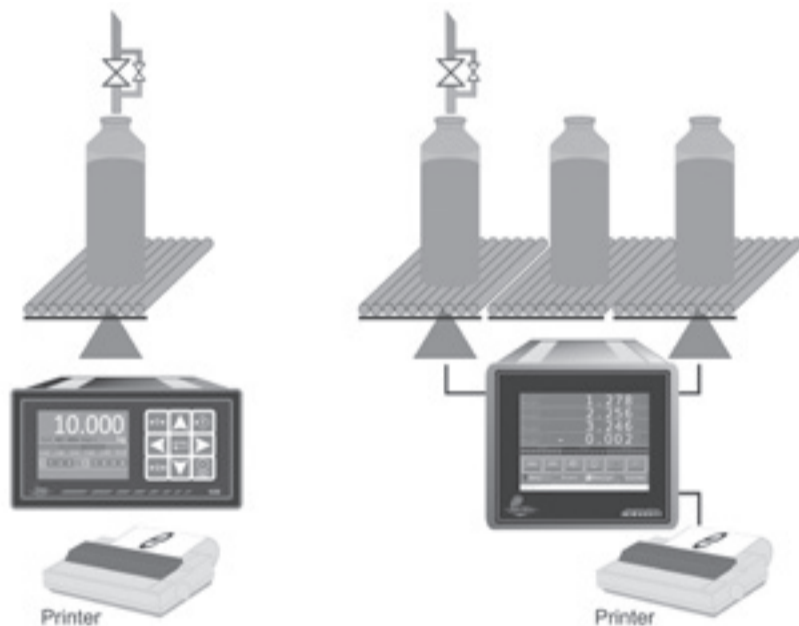
This led to the third industrial revolution and IT became the buzzword of the century, reaching deep into the personal lives of individuals, nurturing the concept of immediate gratification. The succession from one phase of industrial technology became increasingly shorter, while at the same time, the degree of complexity expanded equally fast. So where the shift from the infamous steam engine toward the first assembly line took a small century, as did the step IT Systems and Robotics, the fourth industrial revolution practically happened over a few years. Industry 4.0 stands in the light of intelligent, flexible and individualized production. Think "3D-Printer" and you get the jest. Industry 4.0 is not a new or special technology, but it is a new approach. We at PENKO

are excited to be standing at the cusp of a new way of doing business where Industry, Economy and Society experience a fundamental digitizing process that is called Industry 4.0. The idea of "SMART Factories" should allow for intelligent, flexible and individualized production processes, which calls for SMART Buildings, SMART Products, SMART Grids, SMART Mobility and so on, inherently including a dynamic value add.

So what does this Industry 4.0 mean for the process automation industry – and more importantly – what does this mean for a weighing process? In simple terms, weighing during a production process, is becoming more intelligent and more communicative. The challenge for metrological regulatory bodies is that legislative measuring standards are now no longer a National matter, but need to integrate on a much grander scale.

Join us at our anniversary celebration on **November 8, 2017**, to find out more about key technologies around weighing principles. Experts in their field of knowledge will share what Industry 4.0 means for the Process Automation Industry, how system interconnectivity can be done and what the economic effects of this new approach means for businesses in the European region. Finally, you will witness the PENKO Industry 4.0 show case products in motion. To find out more and register:

penkoadministration@etcconnect.com



Filling data from approved installation – directly to „e“ registraton. No check weigher needed.

THE PENKO APPROACH

As there is a variation in products and types of packages it is not surprising that every industry uses its 'own' type of filling equipment, ranging from simple single head fillers up to advanced multihead high speed automatic filling lines. All of them have their own characteristics, which means that a "standard" filling controller does not exist. This is the strength of PENKO Engineering B.V. PENKO offers a custom solution for every type of gravimetric filling application.

All systems start with a combination of high speed measuring ability (1600 conversions/s) with a high internal resolution of 24 bits, smart filters and sufficient computing capacity, enabling a perfect 'cut off' point calculation. All instruments are certified in accordance with the Measurement Instrument Directive (MID) 2014/32/EU and OIML recommendation R61, dated 2004. This allows the systems to be used for legal trade applications. Free programmable controllers are able to fulfil all "not standard" requirements, such as bottom up filling, fine-coarse-finefilling, compacting in between and so on.

FILLERS

Finished products are sold in bulk or in packages. All packed products therefore are filled, by adding products into the package. This can be done manually or automatically. Controllers for filling processes are designed in such a way that the exact amount of a package content, based on weight, is dispatched. The filling process is usually found at the end of a production process in any given process flow.

November 8, 2017

PENKO 40 YEAR ANNIVERSARY



- Guests arrive at 11:30
- Welcome and Opening
- Industry 4.0:
What does this mean for process automation?
- Industry 4.0 on the factory floor:
The connection between concept and reality
- Economic Effect of the 4th level idea
- Show & Tell
- Networking

Watch the PENKO website for more details of the agenda program.
www.penko.com/About/PENKO-40-Years-Anniversary

INVITATION

You are cordially invited to PENKO's 40 year anniversary event on 8 November 2017 on the premises of the factory Schutterweg 35 Ede.

DATAREPORTER MAKES DATA ACCESSIBLE

It's all about DATA ... Big data, qualitative data, hard data, quantitative data, integer data ... What is the big deal? Fact of the matter is that EVERYTHING revolves around data and businesses are increasingly making decisions based on data analysis – be it their own – or from a different source. The emphasis behind all processes lies in software and the accessibility of data. DataReporter, is a tool developed by Penko that makes data of automated industrial processes accessible and usable.

DataReporter installation: How does the installation of DataReporter happen? "The installation of DataReporter is not complicated. Basically, the customer does it himself. We are referring to the fine-tuning of the DataReporter. It comes down to entering basic information. In any case, the customer does not need to program anything. If customers prefer to leave the installation up to us, we are happy to oblige. We always follow through and pay the customer a visit, to see how DataReporter is used. And, to the extent necessary, we provide advice on how certain things can be done easier or faster." More information is available: www.penko.com

26-28 September 2017



POWTECH 2017

DID YOU KNOW THAT ...

- We have a product selector on our website to help you/your customer identify the best PENKO product for your application
- PENKO is 40 years old
- Our products have a measuring speed of 1600s/s
- We can scan, read and print out bar codes
- We are represented in 24 countries worldwide
- Your software can be customized
- PENKO is a process automator