

Abriso-Jiffy pioneers inline quality monitoring system from Hammer-IMS based on radio waves



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- It all started in 1994.
The former Bubble and
Film Industries had
just been transformed
into Abriso nv.



The company wanted to refocus, coming from mattress products and towards the promising XPS insulation material. Johan Naessens, now still production chief at Abriso-Jiffy, was lucky enough to start up the first line at the time. After three months, there was stable production, but no more than a few pallets of insulation material per day. Today, after three decades and a takeover of major competitor Jiffy-Packaging later, the company produces more than 200 000 cubic metres of XPS insulation boards a year. "That's 8 to 10 trucks a day," it reads. These large production volumes provide the company with the necessary margin, giving them room to bet on ecologically-responsible production. Thus, the company upholds its zero-waste philosophy. In concrete terms, this means that the 35% shavings, a typical loss linked to the customisation of the XPS insulation boards, are recycled and converted into granulates to be reused in the production process. Abriso-Jiffy is a pioneer because it is ahead of the regulatory curve. Indeed, there is currently no regulation from Europe regarding waste recycling for XPS products.

As part of this green philosophy, the company also recently purchased a measuring machine from Limburg-based company Hammer-IMS. This machine endorses the West Flanders producer's ecological mantra, and is responsible for real-time monitoring of product quality directly at the source, on the production line. The company's managers and operators now know at all times and in real time the amount of material passing on the production line. Maarten Goeminne, process engineer at Abriso-Jiffy, explains: "This aims to provide the customer with a stable XPS insulation board quality across seasons. The fact that the Hammer-IMS measuring machine can detect variations in the XPS insulation board early means that production batches that consume excessive amounts of material are avoided as much as possible. Moreover, 'the Hammer' makes the changeover between products smoother, as we get a very quick view of the flatness profile of the slab. All this has made the Hammer-IMS measuring machine pay for itself in the first year and a half. The integrated laser for thickness measurement and Hammer-IMS' radio wave sensor for density thus stand for a performant payback."

Watch the testimonial video



This makes the West Flanders-based manufacturer of XPS insulation boards a leader in the market of Belgian insulation manufacturers. It shows that a company with 17 production plants across Europe, incidentally a 100% Flemish company, is very agile with regard to new opportunities.

Lander Vanassche, inspirer of the project within Abriso-Jiffy, himself worked out hands-on a dashboard that displays production KPIs in an intuitive overview. The dashboard is fuelled by measurement data from the Hammer-IMS measuring machine made available via Microsoft SQL and real-time Ethernet. The project with Hammer-IMS and the in-house development of the dashboard is therefore the company's answer to Industry 4.0. Lander Vanassche: "We can be proud of such an automated company. In China, such production lines employ a dozen people, and product quality leaves much to be desired. Here, automation allows us to function with just two people on the line. Moreover, we have better quality, and we can better deploy our people in other functions that maximise the impact of their employment."



Notwithstanding these successes, the company, a 2020 laureate at EY for Company Of The Year, has traditionally kept its two feet on the ground. Thus, the following anecdote from Johan Naessens shows: "20 years ago, youth movements came by to collect XPS insulation material for making rafts. After a while, it took on too large proportions and people came here with the trailer. We still think that's how the garages and attics in Anzegem got insulated to a large extent at the time." A bonus for locals in times of energy scarcity.





