

Global Textile Alliance Belgium

"Without BMSvision's EnergyMaster we would never have been able to calculate our savings"

Martine Baele

Safety & Environment
Manager at GTA Belgium

Produce energy efficiently with EnergyMaster

At Global Textile Alliance Belgium, manufacturer of mattress and bed fabrics, sustainability is very high on the agenda. Next to developing eco-friendly products, they also constantly research how they can make their production process more sustainable and more efficient. BMSvision's energy management system helps them achieve and monitor these goals.

Managing energy rationally: measuring is knowing

One third of the total energy consumption in Flanders is consumed by industry. Through the Energy Policy Agreement (EPA), Flanders is trying to introduce energy management in exchange for tax reductions and free energy audits.

To understand a company's energy balance, there is a need for lots of data. The energy audit at GTA Belgium revealed that their existing monitoring system did not gather enough information, as it only monitored

electrical consumption. This system did not meet EPA demand to identify the current and historical energy consumption of the production processes and the different utilities. Since GTA's production had already been monitored for over 25 years by BMSvision's MES system WeaveMaster, their energy management system EnergyMaster was chosen. With this, the different energy flows (water, gas, compressed air, electricity, ...) could be mapped accurately and energy saving measures could be calculated numerically.

"Our previous system did not measure different consumption items, so EnergyMaster meant a huge leap forward. We now have a real-time overview of how much energy is consumed, by which machines and when. Before, I had to manually record meter readings on a periodic basis. Fortunately, this time-consuming work is no longer necessary because EnergyMaster automatically stored this data, I can fully focus on analyzing energy consumption and much quicker react through automatic alarms and reports."

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Reducing costs and CO₂ emissions

Being able to intervene immediately in case of excessive energy consumption and, above all, having insight into the company's biggest consumers, is now more important than ever in the current energy crisis. The biggest production cost in the textile industry is compressed air consumption. It was therefore very important for GTA to be able to monitor the exact cost of this per department. With the installation of strategically placed compressed air meters, it is now possible to precisely break down and monitor the consumption per

department. Consequently, these Energy Performance Indicators (EnPI's) are closely monitored. If they no longer follow the usual pattern, any new compressed air leaks are sought during maintenance.

By having accurate data on the energy consumption of their production processes and the base load of the current compressors through EnergyMaster, they were able to work with the manufacturer to calculate the investment in new compressors more precisely. Due to market evolution, the compressor fleet was no longer dimensioned for the current production processes,

which meant that the optimum efficiency of the compressors was no longer achieved.

Investing in new frequency-controlled compressors including dryers, increased energy efficiency by 10 and 72% respectively, saving 800 MWh or 320 tons of CO₂ annually. In addition, the new compressors required less cooling, allowing the cooling tower to be switched off, saving additional 280 MWh or 110 tons of CO₂ per year. Today's energy crisis means that this investment was repaid even faster.



Conclusion: energy management pays off

Since the EPA story and the investment in the compressors, senior management has been convinced of the energy-saving possibilities monitored by EnergyMaster. Based on the production and energy figures, ideas arise during the weekly production meetings to optimize processes without sacrificing quality. Insight into energy consumption not only pays off financially, but it was also necessary to obtain the STeP certificate (Sustainable Textile Production) in which energy performance and energy management are two important pillars.



"EnergyMaster ensures that energy-saving efforts can be measured immediately, which is very motivating. Not all the tests we perform are immediately useful, but they do provide insights on which we can build further.

Meanwhile, our savings have been phenomenal: we have already implemented about ten successful energy-saving measures, good for 2200 MWh or 800 tons of CO₂ annually.

Every morning, the production managers receive the energy performance indicators for their department in their mailbox. Deviating data are immediately noticed and then we can figure out how to avoid them in the future.

Thanks to EnergyMaster, we are constantly aware of our energy consumption."

Martine Baele

• E M P O W E R I N G •
• Y O U R •
• P R O D U C T I V I T Y •