

Four insights into how Flemish manufacturing companies are investing in smart production technology

21 August 2026, 09:00

Bart Verlinden
Pascal Pollet

Smarter manufacturing starts with making the right choices

Digitalisation, automation and AI are high on the agenda for the Flemish manufacturing industry. But greater productivity requires more than just technology. It requires a combination of robust processes, well-considered investments and a clear long-term vision.

The Smart Manufacturing Barometer sets out how Flemish manufacturing companies are currently investing in smart production technology. These four insights from the barometer highlight the choices companies are making to organise their production in a smarter, more efficient and forward-looking way.

Discover the other articles in this series

- Smart Manufacturing Barometer 2026
- Bespoke solutions make us strong, but they’re complex
- Four insights: how Flemish manufacturing companies are investing in smart production technology
  ? *Current article*
- From fixed automation to flexible, smart manufacturing
- How to make your shop floor smarter through digitalisation
- AI in manufacturing: hype or a driver of progress?
- The factory of tomorrow begins today: five choices that determine your competitive edge
- What Factories of the Future do differently
- P&V Panels automates intelligently in a setting of predominantly bespoke output

Robust processes remain the starting point

A well-organised production process forms the basis for every subsequent step. Technology makes robust processes more efficient, but it does not automatically solve underlying problems. This is why Flemish manufacturing companies continue to invest heavily in traditional principles of improvement, such as:

• **Lean Manufacturing** to eliminate as much waste as possible
• **Standardised work**, visual management and daily stand-up meetings to streamline processes more effectively and make adjustments more quickly
• **Quick Response Manufacturing (QRM)** to reduce lead times and respond more quickly to customer requests

Companies that consistently apply these principles create greater stability on the shop floor. This also makes it easier to integrate new technology step by step and to measure its impact objectively.



Work preparation is becoming smarter, too

Even before a machine starts production, there are plenty of gains to be made. Increasing variety, smaller production runs and unpredictable circumstances make it increasingly important to prepare and optimise processes digitally in advance. This is why more and more companies are moving towards advanced planning systems and production simulations.

In a high-mix, low-volume environment with a great deal of variability, production planning is a real challenge. Although experienced planners used to be able to maintain an overview, today the number of variables has simply become too great. Smart planning tools and dashboards take care of the calculations, without planners losing control. With the right, up-to-date data to hand, planners can draw up a feasible schedule more quickly, keep a close eye on progress on the production floor, and make immediate adjustments in the event of a malfunction or a rush order.

Solutions such as digital twins (virtual models that enable companies to simulate and optimise production processes) are also becoming increasingly important. They enable companies to test

various scenarios in advance and make more informed decisions, even before production begins. By carrying out simulations in advance, companies can better assess which changes will actually make a difference. This reduces risks and prevents costly interventions on the shop floor.

Nevertheless, many applications are still in an exploratory or limited operational phase today, as developing a model like this requires a great deal of time and data. But it doesn't necessarily have to be a 'full' virtual factory straight away: even basic simulation tools allow planners to run through 'what-if' scenarios and avoid bottlenecks in advance. The trend is clear. As technology becomes more accessible, companies increasingly aim to organise production processes in a smarter and more predictable way.

Investment is shifting towards digital support

The investment plans, too, point in a clear direction. Flemish manufacturing companies are increasingly opting for technologies that support operators and make information available more quickly.

For example, **connected machines**, **digital production management (MES or Manufacturing Execution Systems)** and **digital work instructions** are among the key priorities for the coming years. In this way, companies are gradually investing in a production environment in which machines provide data, processes are monitored digitally and operators have access to the right information at the right time.

Nevertheless, the lion's share of the budget still goes towards new machinery and production lines. These remain essential to ensure quality and flexibility. That is precisely why it is becoming increasingly important to tailor digital support to the company's specific operational needs. This is the only way that technology also generates a demonstrable surplus.

What is still holding companies back today?

Companies are eager to take digitalisation further. At the same time, they are coming up against a number of clear obstacles.

This means it remains difficult to estimate in advance how long it will take to recoup the cost of investments in technology. The shortage of suitable candidates and the integration of new applications into existing systems also play a significant role.

It is striking that resistance in the workplace is hardly ever perceived as an obstacle. It is not ambition that poses the greatest challenge today, but making the right choices.

Conclusion

The Smart Manufacturing Barometer confirms that smart manufacturing goes beyond simply investing in new technology. Companies that first strengthen their processes and then digitise them in a targeted manner create more flexibility, productivity and future-proofing. The barometer thus serves as a valuable guide for those wishing to make well-informed investment decisions.



"Many companies are wondering which technology they should invest in first. The Smart Manufacturing Barometer shows that adopting technology successfully usually begins with understanding your own processes. Only then will it become clear which investments really make a difference."

Do you have any questions about the results, or are you wondering what this means for your company?

Contact our expert



ring

Download the Smart Manufacturing Barometer and compare your company with other Flemish manufacturing firms. This will help you find out where the sector is investing today and where the opportunities lie, as well as providing you with an objective benchmark allowing you to take informed investment decisions.

Download the Smart Manufacturing Barometer

Authors



Bart Verlinden



Pascal Pollet