Big data and analytics can make industrial production more sustainable

Through the SDG Accelerator programme, Eltronic has successfully connected production data with the Sustainable Development Goals. The result is a whole new level of transparency.

Danish engineering company Eltronic has, amongst other, traditionally offered automation solutions to the mass production industry. Today, the company has an entire department working exclusively with data intelligence. And better data are needed! On average, global production companies only utilise about 50 per cent of their capacity. At the same time, there is a great need to reduce waste and limit resource consumption. Eltronic has a solution, says the company’s QHSE Manager Jacob Krolakke Ljungberg:

‘Today, software is built into virtually all types of mass production, from counting machines and production control to advanced quality monitoring. The challenge, however, is to monitor the overall production line and thus make the process more sustainable from A to Z. This is exactly the software we have developed.’

Eltronic has created a so-called DIAP – a small box that monitors and collects vital data. It is no bigger than a home TV box but has great potential to optimise production.

‘The advantage of the DIAP is that it collects all available production data and makes them available in real time. This means that the company can make immediate adjust-
ments if the set tolerances are not met. Moreover, the software calculates key figures for accessibility, performance and quality. As a production manager you get a complete overview and 100 per cent transparency throughout the entire production,’ says Jacob Kroløkke Ljungberg.

Real-time production data are not a new invention per se. What is new is the direct link between utilisation and the Sustainable Development Goals.

‘The big revolution here is not just software and black boxes but actually linking production efficiency directly to specific Sustainable Development Goals. It could be targets for energy utilisation, which is goal 7, or waste reduction, which is part of goal 12. Of course, the individual company decides which goals to measure, and then we set the parameters to measure in real time. It is actually like getting a full sustainability analysis of the entire production every second of the day,’ Jacob Kroløkke Ljungberg explains.

According to Jacob Kroløkke Ljungberg and Eltronic, analytics has a tremendous potential to make the world’s industrial production more sustainable.

‘For companies that are ready to connect their DIAP to the Sustainable Development Goals, we expect an average increase of capacity utilisation of up to 30 percentage points. At the same time, we can reduce the carbon footprint, production errors and waste. To the individual company, this could mean getting a competitive edge. For the global industrial production, it could be one of the biggest productivity improvements in decades. We have created the foundation for a whole new level of transparency.’

Today, Eltronic has approximately 1,000 DIAP boxes in operation at client sites. Jacob Kroløkke Ljungberg believes the number will grow exponentially in the coming years:

‘It is no longer enough to just talk about sustainability. You have to show proven results to meet customer, partner and stakeholder demands. This is exactly what we have been working on in the SDG Accelerator programme: taking the data from the DIAP and using them to provide real-time sustainability metrics. This means that companies can finally deliver on their promises and prove that they do. The sustainability agenda should be about continuous improvement, not just empty words.’

Lars Jensen
CEO, Eltronic

This is how Eltronic contributes to the Sustainable Development Goals

• Eltronic has developed a device called DIAP that collects all available data from a production line and makes them available in real time.
• The DIAP box can be directly linked to the Sustainable Development Goals, allowing a manufacturing company to pursue its own set of sustainability goals at any time.

Facts about Eltronic

• Founded in 2000
• One of the pioneers of Industry 4.0 and digitalisation
• Head office in Hedensted, Denmark
• Approximately 550 employees
• Sites in DK, CH, UK, GE, BG and US

‘At Eltronic, we use technology that reduces energy consumption, minimises waste and increases the capacity of our clients’ production facilities. By automating production lines and introducing more intelligent and efficient mass production processes, we help create a much more sustainable manufacturing industry where resources are better spent.’

Lars Jensen
CEO, Eltronic