OPENING THE BLACK BOX

Belgian company VMA specializes in ready-to-use automation solutions. Their customer, an electric vehicle bumper supplier for a major European automotive group, needed to update to a cost-effective, just-in-time production line. atvise® delivered a clear visualization.

Spread-out Production Plant: bumpers "just-in-sequence" thanks to atvise®.

The expansion and migration of an existing assembly line installation for French automotive supplier Plastic Omnium required a new SCADA system. Functionality had to be as close as possible to the former solution so that employees would require minimal retraining. The existing PLC had to be updated, but not replaced. "The risk of a production delay was unacceptable for the supplier," explains Dirk Stradiot, Software Engineer at VMA.

Openness Grants Flexibility

Up until now, the supplier had relied on a propietary SCADA system. "The existing system was a black box for us," Stradiot explains the challenge. Accordingly, a lot of flexibility was required when it came to integrating the new solution. A number of customer-specific solutions also had to be integrated, and communication with data-

bases, barcode scanners, and other systems ensured. "We quickly realized that we were barely able to achieve our goals with a standard SCADA solution," says the engineer. Ultimately, control logic accounted for 90% of the total development costs in atvise®. The remaining 10% was attributed to classic visualization. Stradiot is pleased: "Thanks to the openness of atvise®, we were able to create custom-designed, clearly comprehensible user interfaces based on pure web technology for every step of production. atvise® automatically scales to different display sizes without any losses."

Clear Communication, Reliable Delivery

With direct API accessibility, orders and production details, including the current position of individual bumpers in the production line, can be exchanged between the manufacturer and supplier in real time. Sequence control factors

in various production times of individual parts and takes care of reliable, just-in-sequence delivery at the right time and in the correct order. "This industry does not forgive mistakes or delays. With atvise®, control logic, database access, and data exchange have so far run without errors and with total reliability," says a clearly satisfied Dirk Stradiot.

Deadline: 2 Months

The installation covers an area of about 2,000 m². "This was not by any means a small project. It's due to the scalability of atvise that we were able to dismantle the entire plant, build new expansions, and start it up in less than two months." The software specialist is convinced. Online engineering was particularly helpful for the engineers during start-up. They were able to make all changes directly during continuous operation, without having to stop or restart the system. "That was a major benefit for us."
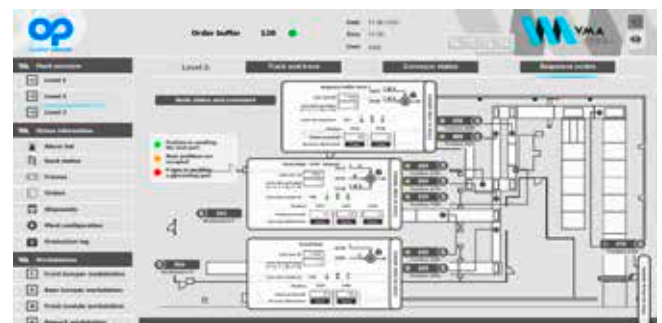

VMA

– Around 850 employees worldwide

– Develops and integrates complete electrical and mechanical solutions in industrial production, for infrastructure projects, and technical building installation

– Turnover of 170 million Euros in 2018

www.vma.be/de

A clear tracking system for all stands and car parts was one requirement for the new SCADA.

Sequence Overview: both the individual parts of a vehicle and the corresponding vehicle models are automatically sorted into the correct order before delivery with the logic integrated into atvise®.