

PRODRIVE TECHNOLOGIES COMBINES AUTONOMOUS ROBOTS WITH SAP EWM IN NEW DISTRIBUTION CENTER

Prodrive Technologies has a passion for technology. The Eindhoven manufacturer develops and supplies high-tech electronic and mechanical components and systems. Prodrive involved Ctac, its long-standing SAP partner, in a challenging task: the implementation of SAP Extended Warehouse Management (EWM) as the basis for a new distribution center with fourteen autonomous robots (AMRs) and eight automated narrow-aisle trucks (AGVs).



Prodrive Technologies manufactures the technology and the electronic products that are the key links in many essential systems. These might be components of MRI devices, fine dust sensors for cars or motherboards for industrial machines. With branches in America, Israel, and China, Prodrive has been working hard since 1993 on how to supply the whole world with its products. "We grow by around twenty percent every year", says Mark Menting, Logistics Global Process Owner at Prodrive Technologies. "That demands plenty of flexibility, especially in the systems you work with."

From SAP ECC to SAP EWM

In 2017, Prodrive wanted to add more flexibility by tackling their warehouse management systems. Menting: "In the Netherlands, we were still running on SAP ECC, with SAP's standard warehouse management integrated with it. This was complemented by software we developed in-house to ensure that it was a better fit to

our activities. At the same time, we were working with a different SAP system in our new factory in China. As a result, it was difficult to operate in a consistent way. We then made the strategic choice to switch to SAP EWM in all countries."

All our locations aligned

Ctac had been supporting Prodrive for years with the management and maintenance of SAP. "We started working together on the implementations of SAP EWM", says Menting. "First we migrated China and then we moved onto a greenfield implementation in America. A fire at one of our sites brought the project to a halt for a while. In 2020, we started the implementation in the Netherlands. That was much larger and more complex than in the other countries, with greater flows of goods between multiple sites. Challenging, but worth it. Now we have a future-proof system with many more features, and all our sites are on the same page."



Communication between SAP EWM and robots

Thanks to SAP EWM, Prodrive has now built a powerful foundation for its warehouse management. This provides scope for new and ground-breaking projects. "SAP EWM is allowing us to move forward rapidly with our automation", explains Menting. "In Eindhoven, we're building a new and fully-automated distribution center with storage space of more than 20,000 square meters." The distribution center is equipped with fourteen AMRs (autonomous mobile robots) and eight automated narrow-aisle trucks from Jungheinrich, a supplier of indoor logistics solutions. "The narrow-aisle trucks collect pallets from the warehouse, and the AMRs then take the pallets to the pick stations. Our pickers then put together what they need manually. When the picker is finished, the robots also return the pallets back to the store again. This combination of narrow-aisle trucks with AMRs and pick stations is unique in our market. To ensure that the robots know what to do, their operating system has to be able to communicate with SAP EWM and vice versa. Following the successful implementations of SAP EWM, we also involved Ctac in this project."

Connection via Material Flow System

"Ctac was the logical choice for us for the automation of the new distribution center", says Menting. "We enjoyed working with the people from Ctac, so we've got those consultants involved again." The project has been running since the end of 2021. "SAP EWM has a standard interface for creating an automated warehouse, known as the Material Flow System. Ctac has a lot of experience with this, so after a few brainstorming sessions we knew what the ideal link between EWM and the robots' operating system looked like. Now we can move forward quickly."



Deep dives with Ctac

Speed is of the essence, as the first part of the distribution center is due to be delivered as early as August 2022. "I have every confidence in them", says Menting. "Ctac can switch gears quickly and helps us to think things through. We demand a lot of them. Because we're growing so fast every year, our projects are regularly overtaken by events once underway. This means that we often have to adjust projects in mid-process. That's not an issue for Ctac. They are extremely flexible because they know our business and our market well. Ctac allows us to take a deep dive, which means that we can make choices rapidly and keep a project right on track."

Better delivery and improved warehouse layout

Menting expects that Prodrive Technologies will gain a lot from SAP EWM and the new automated distribution center. "We can deliver more output with the same number of people, which makes us much more productive. This is partly because the robots make it easier to keep working through the night. This allows us to supply our factories better. And the robots collaborating with SAP EWM ensures an improved warehouse layout." Although this project is still in full swing, Menting already knows what he wants to do next. "We'll then start a similar approach for individual boxes, as a follow-up to the pallets. And yes, we may also work together with Ctac on that, too."

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