

Retrofit: energy savings of 37 percent for esco

- The German door fitting specialist is making its intralogistics fit for the future with TGW expertise
- Replacing the storage and retrieval machine will enable a 28 percent increase in performance
- The modernisation project will ensure long-term system availability and lay the foundation for reliably delivering on customer promises

(Marchtrenk, Austria, 13 November 2023) Over the past months, the German door fitting specialist esco invested in a retrofit project for its logistics centre in Ditzingen. This modernisation project was divided into three phases and encompassed not only the replacement of a storage and retrieval machine but also a controls and IT upgrade. All work took place during live operation and was successfully finished by January 2023. TGW expertise is helping esco to make its intralogistics fit for the future, increase performance and profit from energy savings of 37 percent.

esco Metallbausysteme has been equipping doors and windows with innovative fittings since the company's founding in 1965. Alongside their commercial activity, they have been focusing on the development and production of high-quality products for window and door automation for nigh on 60 years. The company, headquartered in Ditzingen in the German state of Baden-Württemberg, employs roughly 250 people and has locations in Germany, Austria and Poland.

Decisions based on thorough analysis

TGW Sales Project Manager Klaus Kollmann describes the initial situation of the project thus: "The existing system was nearing the end of its lifecycle. Many of the components were out of support and there was therefore the danger that if worst came to worst, they would be more expensive or not available at all. That could have led to challenges in terms of system availability and, in the worst case scenario, to delayed customer deliveries. We therefore evaluated various options together with esco as part of an intensive analysis process and finally opted for the latest generation of the Mustang E+ storage and retrieval machine."



Performance increased by 28 percent

The Mustang E+ storage and retrieval machine boasts a bolted mast and intelligent drive technology, and also weighs significantly less than the previous model. It relies on a modern generation of system controls and has no need for an anti-sway drive. The anti-sway function implemented in the control system makes it possible to increase throughput and shorten positioning times, and facilitates particularly material-friendly operation. Braking and accelerating can be carried out more gently, noise and vibrations are significantly reduced. Another advantage: the maintenance-friendly design helps to keep operating costs low. All of these measures combine to facilitate a performance increase of 28 percent compared to the previous version.

The mechanical equipment replacement and controls and software upgrades mean that esco will profit from significantly higher availability and easier maintenance. The results of performance tests and energy measurements demonstrate not only the economic benefits but also the positive effects in terms of resource consumption and sustainability.

Energy savings of 37 percent

Modernising the hardware and software will permit a total energy savings of 37 percent. This is an important step for esco in terms of sustainability. "Before, the storage and retrieval machines' braking energy was simply lost. With the Mustang E+ we can recover the energy from the horizontal or vertical travel axis and use it for the other axis," explains Markus Kammerhofer, Director of Sales Retrofit at TGW. "That ensures careful handling of scarce resources and also makes economic sense."

Investing in the future

TGW's specialists draw from more than half a century of experience, and the retrofit area in particular has experienced strong growth. The system integrator now handles five times as many retrofit projects annually as it did ten years ago – and proceeds systematically for each project.

"Generally speaking, retrofits are inherently sustainable investments because they not only extend the lifespan of a company's systems but also increase the company's efficiency," Markus Kammerhofer points out. "Many companies have put programmes in place and handle resources conscientiously, as well as carefully and thoroughly examining every link in their supply chain to find out where they could cut down on emissions."



Seven success factors for a perfect retrofit recipe

TGW's extensive experience in the area of retrofits has given rise to a list of seven factors

or prerequisites for a successful modernisation project:

- 1. Consider the lead time and start early enough
- 2. Choose experienced partners and project managers
- 3. Develop a structured plan
- 4. Integrate specially developed retrofit solutions
- Create a comprehensive functional specification
 Clearly define migration phases
 Intensive employee training

www.tgw-group.com



About TGW Logistics:

TGW Logistics is one of the leading international suppliers of material handling solutions. For more than 50 years, the Austrian specialist has implemented automated systems for its international customers, including brands from A as in Adidas to Z as in Zalando. As systems integrator, TGW plans, produces and implements complex logistics centres, from mechatronic products and robots to control systems and software.

TGW Logistics has subsidiaries in Europe, China and the US and employs more than 4,400 people worldwide. In the 2022/2023 business year, the company generated a total turnover of 955 million euros.

Pictures:

Reprint with reference to TGW Logistics Group GmbH free of charge. Reprint is not permitted for promotional purposes.

Contact:

TGW Logistics Group GmbH A-4614 Marchtrenk, Ludwig Szinicz Straße 3 T: +43.50.486-0 F: +43.50.486-31 e-mail: tgw@tgw-group.com

Press contact: Alexander Tahedl Communications Specialist T: +43.50.486-2267 M: +43.664.88459713 alexander.tahedl@tgw-group.com