



ZKW Krušovce

A future-oriented warehouse. One of the first fully automated warehouses in Slovakia.

In Slovakia, fully automated warehouses are still something of a rarity compared with many Western European countries. Many experts put this down to the associated high investment costs, despite the fact that automation within intralogistics often represents a good, worthwhile investment in the future that pays off, not least due to a reduction in energy or labour costs. At ZKW Krušovce in Slovakia, one of the largest automation projects in Central Europe is now under way. The partners of choice were the automation experts at STILL Slovakia - cooperating with the group sister Dematic.



Sector: Automotive supplier

Company: Specialist in innovative premium lighting systems and electronics. System supplier in the automotive industry, with almost 10,000 employees worldwide.

Challenge: Optimising processes, safety and costs for a warehouse with a capacity of 7000 pallets and around 45,000 small load carriers.

Products: Automated high lift pallet truck STILL EXV iGo systems, automated very narrow aisle truck STILL MX-X iGo systems, fully automatic Miniload small parts warehouse, conveyor systems, DiQ warehouse management system (WMS) and a shelving and platform system.

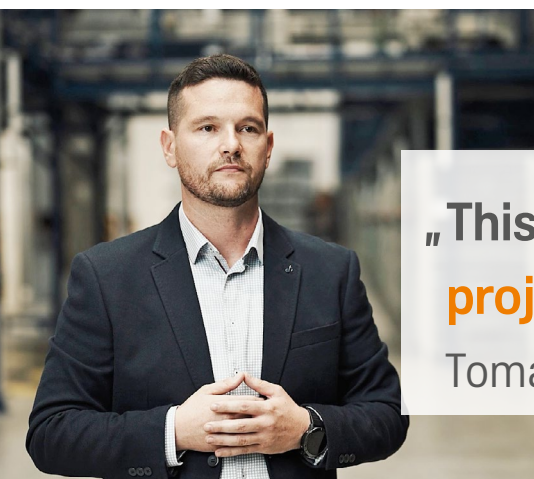
Investing in the future

ZKW, which is based in Krušovce, is part of the international ZKW Group and is a specialist in innovative premium lighting systems and electronic components, as well as a strategic partner of the automotive industry. The positive experience at other Group sites was one of the main factors behind the decision to invest in a fully automated solution. This also represented an opportunity to optimise intralogistics processes and reduce operating costs. ZKW in Krušovce selected STILL Slovakia to be their partner for this project. "We opted for STILL because we had already been won over by their expertise in recent years. We were also impressed by their references from all over the world," says Peter Belák, shift supervisor at ZKW. Following a joint analysis of the flow of both goods and information, the automation experts at STILL developed a fully automated warehouse solution. The new warehouse holds more than 45,000 small load carriers and 7000 pallets. At the same time, a concept for supplying parts to the connected production processes was also developed.



A unique project in Central Europe

STILL Slovakia developed and delivered - in cooperation with the group sister Dematic - a particularly future-proof solution. It puts ZKW in the best possible position to deal with the challenges of the coming years. As well as achieving significant savings, the new system also runs smoothly. "This is one of the largest and most complex projects by STILL in Central Europe. It involved a huge number of pallets and small load carriers. But the outcome was incredibly successful - the entire flow of goods can now be controlled by just one person," says Tomáš Ličko, Regional Sales Manager (STILL Slovakia), as he describes the project.



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Tomáš Ličko, Regional Sales Manager (STILL Slovakia)

He goes on to add that the whole solution was designed to be ready for turnkey implementation. "This meant that the entire project process was easy to plan and we were able to provide the right products for a coherent overall solution. Our collaboration was always underpinned by clarity, as well as by speed and professionalism," explains Ličko.



A turnkey solution

A project of this scale is one of a kind in the whole region. It required detailed preparation and planning, as well as a thorough commissioning plan. "We began by analysing the flow of goods and information. In line with the requirements specification, we developed a tailor-made solution for a new warehouse, complete with a material flow control system. It also included the provision and integration of a comprehensive shelving and platform system, as well as fully automatic material handling technology," explains Andrej Korčaník, Head of the Advanced Applications Department (STILL Slovakia).

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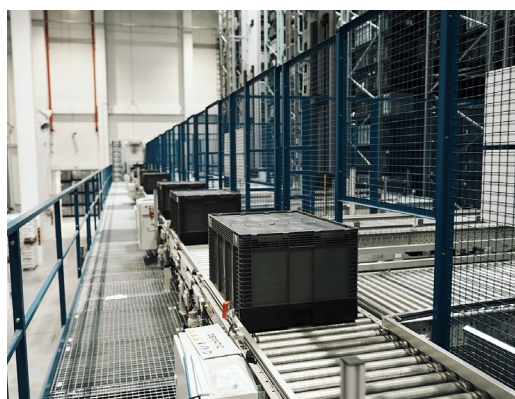


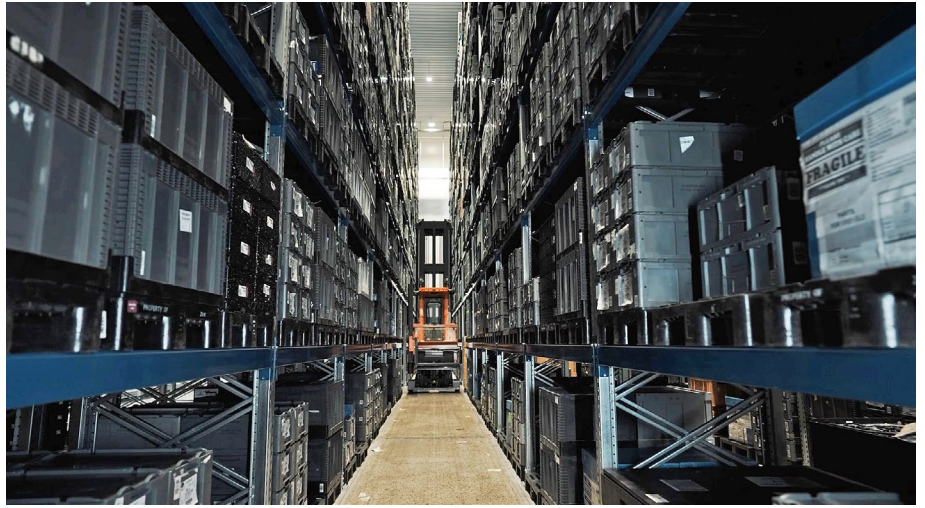


Pallets are transported to the transfer points by automated STILL EXV iGo systems high lift pallet trucks and are then stored by an automated STILL MX-X iGo systems very narrow aisle truck.

The entirely automated process begins with the arrival of materials in the warehouse. At this point, boxes are either unloaded from the pallets onto a conveyor belt, or full pallets are processed on a conveyor belt. All material passes through a checkpoint to ascertain whether the packaging complies with the requirements. The goods are then transported into the warehouse on conveyor belts. Small load carriers are transported directly to an automatic small parts warehouse to be stored. Pallets are transported to the transfer points in front of the narrow aisle shelving by automated STILL EXV iGo systems high lift pallet trucks. They are then picked up and stored by a STILL MX-X iGo systems very narrow aisle truck, which is also automated. The entire process is controlled by a Dematic iQ (DiQ) warehouse management system (WMS), which is connected to SAP, communicates online and manages the whole warehouse according to defined criteria.

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“STILL was the perfect partner for us. They have lots of experience and they planned, prepared and handled the entire project as a turnkey solution. The combination of their high levels of professionalism, fast response times and comprehensive technical support made them the perfect supplier for us,” says a delighted Peter Belák from ZKW. Various conveyor systems, a shelving and platform system as well as a fully automatic Miniload small parts warehouse were also installed.

Thanks to the fully automated solution, the whole ZKW Krušovce warehouse can now be managed and controlled by a single person. A further positive point to highlight is the fact that efficient processes lead to a considerable reduction in error rates, increased safety at work and a significant boost in overall productivity.



And action! ZKW Krušovce is one of the largest automation projects in Central Europe.

STILL GmbH
 Berzeliusstraße 10
 22113 Hamburg, Germany
 Phone: +49(0) 40/ 7339-2000
 Fax: +49(0) 40/ 7339-2001
 info@still.de
www.still.eu