*BEUMER Group supplies conveying and sortation technology for Inter Cars' new European Logistics Centre to ensure smooth material flows:*

**Fully serviced in Europe**

**BEUMER Group installed the entire conveying, picking and sortation technology for car parts dealer Inter Cars S. A. at its new European Logistics Centre near Warsaw. This includes a warehouse control system (WCS) that manages the entire material flow. Optimising its throughput and minimising costs, Inter Cars gets the spare parts now even faster to workshops and customers all across Europe. For this project, the system supplier BEUMER Group has permanently stationed employees on site as part of its residential service. They take over responsibility for availability and maintenance of machines and systems.**

"Inter Cars was one of the most important projects for us to successfully complete in Poland," Sandra Lückmann sums up. She is business development manager at BEUMER Group in Beckum, Germany, and was responsible for the successful handling of this order. What was remarkable: "As system integrator, we designed and installed the entire conveying, picking and sortation technology for the spare parts dealer at its European Logistics Centre, including our WCS, which controls the goods receipt, quality assurance, picking, packing and goods issue."

**Spare parts distributor with potential**

Inter Cars is one of the leading spare parts distributors for passenger cars, transport vehicles and trucks. The company, headquartered in Poland, has several hundred subsidiaries and branches spread all across the Baltic states and the Balkans. In addition, there is a nationwide network of approximately a thousand workshops. The previous logistics centre in Czosnów, Poland, supplied smaller distribution centres all over Europe who then supplied the workshops and customers. The increasing number of stored and delivered parts, however, started to exceed its capacities. The managers decided to build a new automated European Logistics Centre in Zakroczym, approx. 30 km from Warsaw. The in-house logistics provider ILS was commissioned as general contractor - "and this is how we got involved as system supplier of intralogistics solutions", says Sandra Lückmann. "At the end of 2013, ILS called our Polish subsidiary. At the time, the project was still in its design phase. We only knew how many parts needed to be sorted in a given period of time."

**Up to 7 million parts**

In January of 2015, BEUMER Group got awarded the contract, installation started in September of 2015, and the start-up process began the following September, with completion in December. Inter Cars closed the previous logistics centre at the end of 2016, the new European Logistics Centre went into full operation in May 2017. "Currently, around 7 million parts like spark plugs, brake disks, V-belts, batteries, but also more bulky goods, like exhausts and hoods, are stored here, basically everything needed for cars," explains Lückmann. The complex is comprised of four warehouses, the largest one with 40,000 square metres, ten metres in height. It is equipped with a four-story shelving rack. The other warehouses have a surface of 5,000 square metres each. Here they store tyres and hazardous material, such as oils and varnishes, that must be kept separate for reasons of fire protection.

The products are divided into different clusters, similar to clothing sizes into S, M and XL, depending on dimension and weight. "Items are picked in two stages," describes Lückmann. With a set number of containers placed on a trolley, the employee drives along the aisles of the shelves, collecting all the components displayed on the hand-held reader. The small and medium parts are taken out of the shelves in batches, consolidating multiple orders into one picking wave. The containers are then placed on the container conveying system and transported automatically to the packing sorter. "Depending on the content, the WCS distributes the incoming containers to one of three induction areas," explains Lückmann. The conveying system transports them to the workplaces where the items are taken out of the containers. Each item is identified with a matrix camera and placed on the sorter. Empty containers are returned to the feeding area by the conveying system. "We provided our BEUMER BS 7 Belt Tray Sorter for this sorting process," explains Lückmann. This system manages a throughput of around 14,000 without presorting, and up to 27,500 items per hour when using the described presorting process.

**Destinations ensure gentle sortation**

Power and data transmission on the BEUMER BS 7 is contactless. This prevents mechanical friction losses and wear and tear. Compared to conventional cross-belt sorters, this sorter has 50 percent less components, which reduces maintenance costs by 80 percent. Energy requirements are also reduced during production and operation. The distance between the individual conveying elements on the BEUMER Group systems is reduced to a minimum. The use of belt trays makes it possible to have narrower, more closely arranged destinations. Therefore, the sorter requires less square footage. "The special feature of our BS7 are the 361 specially developed destinations that ensure careful handling of the very different spare parts," so Lückmann. Everything must be sorted and discharged while keeping the packaging intact. To this end the destinations are divided in two parts. If the spare part weighs up to 1.4 kilogram, the WCS classifies it as "light", up to six kilograms as "heavy". This way the heavier parts are placed in the container or cardboard box before the lighter parts when the order is packed.

"The XL items from the main storage are handled differently," explains Lückmann. "Their size means that only one spare part fits in one container or box." Therefore, they are conveyed directly to the consolidation area by the container conveying system. The same happens with items from other warehouses like tyres and hazardous material. Together with the items from the packing sorter, the shipping units consolidated in containers and boxes for the respective orders are weighed, compared with the target weight, closed, labelled and then strapped. The container conveying system transports them to the connected shipping sorter that distributes the consolidated orders to up to 50 different dispatch destinations, at a capacity of 2,500 containers per hour.

And what if the spare parts are not working or are no longer needed by the customer? "They go back to the logistics centre in Zakroczym," explains Lückmann. Employees examine the returns: is the part damaged, was it just not needed or was it the wrong choice? If it is still in its original condition, it goes back to the warehouse. The material flow for all these processes throughout the entire distribution centre is controlled by the WCS, from goods receipt to goods issue. The orders are sent from the operator's warehouse management system.

**Residential service: BEUMER Group assumes responsibility**

BEUMER Group continues supporting the project even after this point. ILS opted for the residential service, a special component of the BEUMER's comprehensive customer support, to focus more on their own core business. "With this 24/7 service, the BEUMER employees ensure availability of the machines and systems," reports Jaroslaw Gorczynski, General Technical Director, Poland. "It must be perfectly coordinated during the entire operating time, so that all processes run smoothly." The team has its own control room, and the workplaces were designed in a way so that potentially critical areas can be reached as quickly as possible.

The BEUMER Group employees also perform preventive maintenance work. Gorczynski explains: "This way, we can avoid unplanned machine breakdowns that can get very expensive for the customer." The team carries out maintenance and inspection work on the systems at defined intervals. They also check the safety devices, electrical components and automation technology. And they can perform repairs that might be necessary in case of an unscheduled failure of components. The team checks the technical installations and maintains them regularly, at agreed intervals. The contract with BEUMER Group runs over five years until 2022.

**Guaranteed system flexibility**

"Our systems and machines fully met the customer's targets. The system offers high levels of availability, high and precise throughput and can be easily adjusted to changing customer requirements. The same holds true for our modular WCS," describes Lückmann. The owner is very happy with the cooperation: "We were able to accommodate all requirements. Delivery, installation and commissioning went all according to plan." The companies are currently in talks about an extension of the system.

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***Meta-Description****: For this project, the system supplier BEUMER Group has permanently stationed employees on site as part of its residential service. They take over responsibility for availability and maintenance of machines and systems.*

***Keywords****: BEUMER Group Customer Support Residential Service material flow intralogistics maintenance repair Inter Cars ILS Poland European Logistics Centre automotive parts sortation technology material handling*

**Captions:**



**Picture 1:** BEUMER Group installed the entire conveying, picking and sortation technology for car parts dealer Inter Cars S. A. at its new European Logistics Centre.



**Picture 2:** The managers decided to build the new automated European Logistics Centre in Zakroczym, approx. 30 km from Warsaw.



**Picture 3:** Currently, around 7 million parts like spark plugs, brake disks, V-belts, batteries, but also exhausts and hoods are stored in Zakroczym.



**Picture 4:** The container conveying system transports the containers with the goods to the packing sorter.



**Picture 5:** The container conveying system transports the goods to the workplaces.



**Picture 6:** The BEUMER BS 7 manages a throughput of around 14,000 without presorting, and up to 27,500 items per hour when using the described presorting process.

**Photo credits: BEUMER Group GmbH & Co. KG**

**The high-resolution picutres can be downloaded** [here](https://newcloud.a1kommunikation.de/index.php/s/LGsg7bOshqNIT4k)**.**

The BEUMER Group is an international leader in the manufacture of intralogistics systems for conveying, loading, palletising, packaging, sortation, and distribution. With 4,500 employees worldwide, the BEUMER Group has annual sales of about EUR 900 million. BEUMER Group and its subsidiaries and sales agencies provide their customers with high-quality system solutions and an extensive customer support network around the globe and across a wide range of industries, including bulk materials and piece goods, food/non-food, construction, mail order, mail and airport baggage handling. For further information visit [www.beumer.com](http://www.beumer.com).