

Flexible, growing logistics for the food and beverage industry

The **Colian Group** is reducing the complex supply chain typical for this industry.



Körber is delivering a fully automated high-bay warehouse for the Polish confectionery and beverage manufacturer Colian. The warehouse will help to mitigate seasonal peaks and is designed for further growth.

Colian is a Polish family business delivering high-quality products to the market under brandnames known in Poland and abroad. It is the first and only Polish company awarded with the European Candy Kettle Award for outstanding achievements and contribution to the development of the confectionery market. The products manufactured by the Colian Group are simply indispensable for anyone in Poland with a sweet tooth. Founded 30 years ago as a small company for the domestic spice trade, the group of companies – still family-owned – now exports its products to nearly 70 countries, including ranges specially tailored to the preferences of different national markets.

At the bottling plant for Hellena soft drinks, Körber is significantly optimizing warehousing, traffic routes and processes on site.

At a glance

Goals

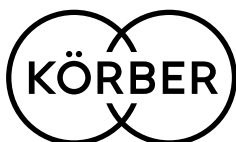
- unblock bottlenecks in warehouse capacities
- mitigate seasonal peaks
- enable further growth

Solution

- fully automated high-bay warehouse
- advanced conveyor and storage technology
- reserve areas for further automation technology and robotics

Results

- an integrated automation solution that can be more than doubled in size and
- supplemented with state-of-the-art robotics, as the market demands.



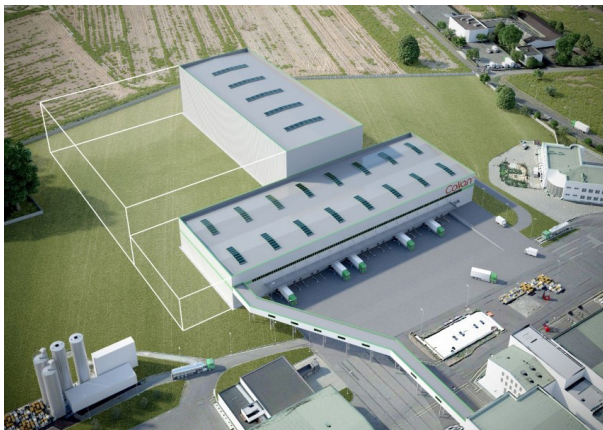
Challenge

The continuous growth of the company had brought the existing warehouse facilities to their limits. In Opatówek, home to the bottling plant for Hellena soft drinks, which have experienced strong continuous growth since their relaunch by Colian around 20 years ago, the production volume threatened to exceed the storage capacity. In the past, containers were stored temporarily on pallets in various manual warehouses. During high-speed production periods when demand peaked, logistics were increasingly pushed to their limits.

This is quite a common trap of success. The food and beverage industry in general must be extremely agile in order to proactively respond to changes in demand due to seasons and promotions, for example. In hot summers, turnover figures can easily spike. The challenges of this project thus included not only the sheer size, the potential for later expansion, and the highly dynamic nature of the process, but also the volatility of the beverage market. However, with effective supply chain management, these factors can be mitigated.

Solution

As one of the most distinguished system integrators and suppliers of material flow systems for the food and beverage supply chain, Körber delivered a fully automated high-bay warehouse (HBW) as the core of an automation solution that significantly optimizes warehousing, traffic routes and processes on site, while still offering room for further growth.



A new bridge with rail-guided vehicle (RGV) conveyor technology connects production with the logistics area. On the RGVs, pallets reach the second floor of the warehouse's preliminary zone, where they

are transferred to an RGV loop. Pallets are placed in storage by two-mast stacker cranes, each with two load-handling devices. These offer high performance and excellent stability – ideal for transporting heavy loads over long distances and at great heights. For retrieval, the pallets are transferred back to the loop and conveyed by two lifts to the first floor, where the goods issue area is located.

The bridge and the front zone are relatively large for the currently installed technology, and despite the size of the plant, Körber worked to maximize space-efficiency. This is why reserve areas and space for further automation technology and robot systems were created, which can be used to increase the degree of automation step by step, as necessary. At present, for example, the mixed pallets frequently used in beverage logistics are still partially manually picked; in the future, sophisticated robots will take care of this.

Results

The era of decentralized warehouses is over. Colian now has a state-of-the-art, sustainable and future-proof central warehouse that can easily mitigate seasonal peaks. Anyone approaching the site today will see something entirely different. The large area is dominated by the new warehouse building, which towers over the site. At 43 meters tall (the rack construction alone is approx. 42 meters tall) and over 100 meters long, the building has a capacity of 26,740 pallets. However, these numbers are put into perspective by future plans, which envisage a potential expansion from the current four aisles to up to ten aisles of the same dimensions. “The food and beverage industry offers a particular challenge with its high requirements for flexibility and responsiveness. The facility’s ability to grow with us is an important asset for our further development in this dynamic environment,” says Arkadiusz Niedźwiedzki, Maintenance Manager at Colian.

<https://www.koerber-supplychain.com>

