

CASE HISTORY

NORDIC SUGAR AB

Sweden

Food



The Company

Nordic Sugar is part of Nordzucker, one of Europe's leading sugar producers. Nordic Sugar produces and distributes a wide range of sugar-based products, including granulated sugar, liquid sugar, syrups, and organic products. With a focus on sustainability and production efficiency, Nordic Sugar has launched an ambitious automation project to modernize and optimize its logistics processes at the Örtofta facility in Sweden.



Collaboration with System Logistics

The partnership with System Logistics was established to address Nordic Sugar's growing need to optimize internal logistics flows, improving both storage management and distribution. During the pandemic, despite restrictions, the project was developed through virtual meetings and close collaboration between teams. System Logistics was chosen not only for the reliability of its technological solutions but also for its flexibility in adapting the project to Nordic Sugar's existing facilities, ensuring operational continuity and space optimization.



The New Automated Storage System

Nordic Sugar's facility, commissioned in 2020 and operational since 2021, is designed to accommodate up to 11,696 pallet spaces, ensuring optimal management of various types of pallets through a high-density storage system. The innovative layout includes an SVL ring in the shape of an "M," designed to fit the configuration of the existing warehouse. This ring, composed of 10 monorail vehicles, ensures a continuous flow of pallets from production lines to the warehouse and from the warehouse to the shipping area, allowing efficient and uninterrupted connections between various buildings.



Environmental Impacts and Operational Advantages

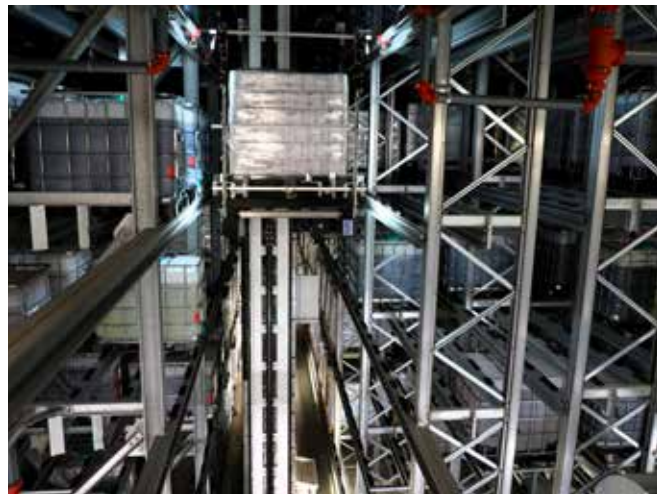
The automation implemented by System Logistics has helped reduce the environmental impact of Nordic Sugar's operations. The facility, heated to prevent the crystallization of liquid sugar, represents a unique case for energy efficiency in extremely cold environments. Additionally, the automation of the flow reduces reliance on labor for handling and contributes to better management of seasonal production peaks, such as during the "beet campaign," which is the beet harvesting period.

Technical Specifications of the System

- › **Storage Capacity:** 11,696 pallet positions.
- › **Stacker Cranes and SVL Loop:** Monorail "M" with 10 vehicles, ensuring logistical continuity between various production points.
- › **Shipping Area:** Configured for direct truck loading, reducing waiting times and improving supply chain efficiency.

Results and Future Prospects

The automation project carried out by System Logistics has allowed Nordic Sugar to radically transform its storage and shipping system, contributing to increased operational capacity and reduced logistical costs. This success has also strengthened the collaboration between System Logistics and the Nordzucker group, opening up possibilities for new future projects in other European locations.



Technological Solutions and Customer Benefits

- › **Stacker Cranes and Transport Backbone:** Managing the storage and transfer of pallets on roller conveyors, ensuring an optimized flow of materials to shipping areas. Integrated with the SVL ring, the system guarantees real-time traceability until the goods exit.
- › **Space Optimization:** Thanks to the "M" configuration of the SVL ring, the system maximizes available space, avoiding structural expansions and minimizing the logistical footprint.
- › **Automation Without Ground Pre-staging:** Pallets are directly loaded onto trucks without the need for temporary storage space, increasing the efficiency of shipping processes.