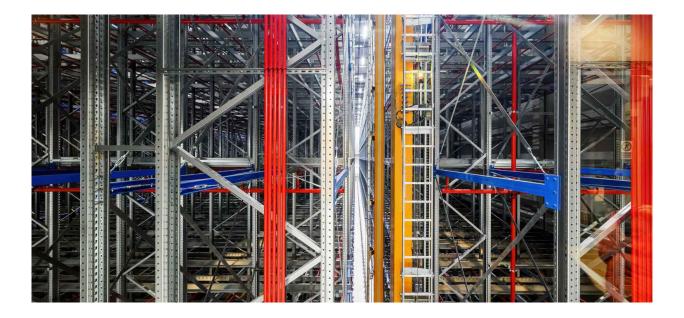
# When growth leads to automation

Drylock: Multiplying storage capacity and dispatch efficiency.



The new pallet handling system, precisely tailored to accommodate the automated tasks of pallet handling, storage, sorting, retrieval, and distribution, empowered DRYLOCK to swiftly expand their storage capabilities and enhance dispatch efficiency.

# The customer

Drylock Technologies, a renowned manufacturer of hygiene products, is dedicated to safeguarding both individuals and the environment. With a steadfast commitment to innovation – deeply ingrained in their DNA – the company ceaselessly pushes the boundaries of the industry, relentlessly seeking ways to get better. Their unwavering dedication to sustainability shines through as they prioritize Recycling, Reducing, Reusing.

Headquartered in Belgium, Drylock Technologies, never stops to extend and expand. The expansion in Hradek nad Nisou, Czech Republic, includes a new production site as well as a new automated warehouse facility. The company's impressive growth

# At a glance

# **Project goals**

- Expediting more and more products in the finitespace warehouse
- Eliminating operational inefficiencies caused by manual handling

# Solution

- · Multiple deep free-standing racking system
- · Double-mast SRMs
- · Conveyor system + Rail guided vehicles
- WCS and Visualization systems

# **Features and benefits**

- Maximum capacity with minimal warehouse usage
- · Exceptional performance in handling large volumes
- Optimized energy consumption through intelligent and eco-friendly power sources





## Körber Supply Chain

and ability to adapt to changing market demands made them search for an intralogistics solution that would ensure a rapid increase in the storage capacity and dispatch throughput.

Being ready to address any challenges, they partnered with Körber and opted for the implementation of an automated storage and retrieval system designed for palletized finished goods.

# Challenge

The system was thoughtfully created to achieve the primary goal of the project, which was to maximize the efficiency of the expedition through:

- · 80 trucks per day after 3 years of implementation
- 176 pallets per hour at the time of implementation

## **Spoiler**

4 months after the start of operation, the design performance was exceeded with 200 pallets per hour and 70 trucks shipped per day.

Additionally, more and more product lines needed to be handled and dispatched, yet the available warehouse space remained limited

#### Solution

Körber successfully executed the project as a turnkey solution, handling the seamless integration of all automation components and racks. The Warehouse Control System, connected to the customer's ERP, and Visualization were essential to complete the task at hand.

The ASRS operates in a multi-deep storage configuration, is extremely efficient with relatively low-energy- consumption.

The satellite vehicles handle the loads – which are euro pallets of 3 height classes up to 2.65 m – transferring them between different storage positions within the system. The movements of the usual shuttle car and the lifts are performed by the crane. The system includes the dispatch bay and two mezzanine levels for manual case picking.

# Results

Remarkably, despite the vast storage area of approximately 10,000 square meters, only a mere of 15% is allocated for access corridors, ensuring optimal utilization of space. The remaining area is intelligently utilized for pallet storage, boasting an impressive capacity of up to 39,000 locations.

Easy scalability of the solution is guaranteed due to flexible design and modularity of the system allowing layout changes by extending rack capacity and increasing performance with additional vehicles whenever necessary.

The customer's growth exceeds any foreseen strategies. Thanks to the great experience with the automated warehouse solution, plans for expansion will heavily rely on further automation.

"As the first automated high bay in the group, the project went a lot smoother than I (and many other critics in the company) ever believed.

I expected a lot more rigidity on the transportation side, but I was wrong, the high bay actually increased our flexibility. Making us a great place to load from."

#### **Ruben Benoot**

Supply Chain Director, Drylock Technologies Group

# **Facts and Figures**

#### **Record implementation**

14 months from the insertion of the first bolt to full operation

# **ASRS throughput**

Outbound: 176 pal/h & Inbound: 84 pal/h

**Dimensions** of the automated warehouse Length (m): 108 | Width (m): 96 | Height (m): 22

#### **Material handling equipment**

double-mast SRMs each with 2 autonomous satellite vehicles (ASV) on-board 395 m of motorized conveyors 2 lifts 12 RGVs

## **Operation time**

24 hours per day / 7 days a week

