

# Orfer Group - Modernization of 20-Year-Old Robotic System

## THE CHALLENGE

In 2004, the client ordered an automation system from Orfer for robotic palletizing of spirits. In 2024, it became clear that spare parts support for the palletizing system would end. Orfer's experts therefore reached out to their service contract client. The client's representative reacted quickly to ensure reliable production in the future. Additionally, the client wanted to improve the system's utilization rate, as current products were no longer suitable for the system.

First, Orfer conducted a lifecycle analysis of the system, which identified the necessary measures to ensure production reliability well into the future. Based on the analysis, Orfer presented a modernization plan that would extend the palletizing system's service life by up to 20 years.

## THE SOLUTION

The analysis showed that the client's conscientious maintenance and modernization history enabled a cost-effective upgrade. Instead of a completely new line, the current infrastructure could be modernized to meet today's requirements.

Orfer upgraded the system's critical components while retaining functional technology, such as some of Interroll's conveyor products.

### Key areas of the upgrade:

- **Grouping conveyor:** The grouping conveyors that had served for years were replaced with modern 3500 series roller conveyors and energy-efficient EC5000 series DC motors.
- **Robot and gripper:** The Kawasaki ZD series robot commissioned in 2004 was replaced with a state-of-the-art Kawasaki CP series palletizing robot equipped with a brand-new F-generation controller. At the same time, the robot's gripper tool was updated to meet new product requirements.
- **Control logic and HMI interface:** The system was fitted with a modern control system and a clear, touchscreen user interface equipped with contemporary software.

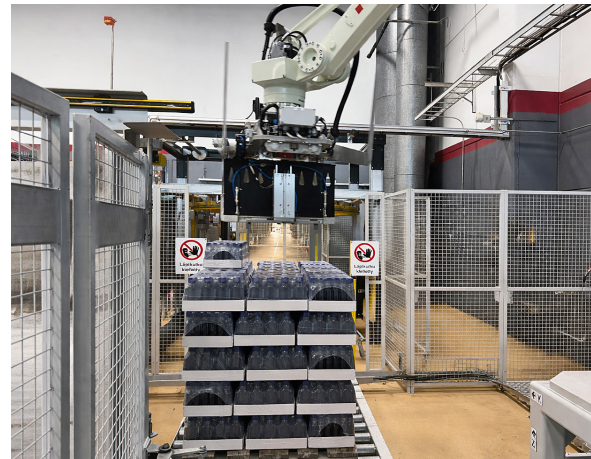


➤ **IN A NUTSHELL**

Through the project, the client gained a modern and reliable palletizing system with a fast payback period.

**Key benefits achieved:**

- **Top-tier performance:** Motor controllers were upgraded to Interroll's state-of-the-art MultiControl cards, enabling product-specific programs and speeds. Digitalization increased capacity and improved overall system usability.
- **Higher utilization rate:** The gripper tool designed for the client's current products enables reliable handling of a wide product range.
- **Waste minimization:** the modern conveyor system allows controlled dispensing of products for palletizing grouping. This reduces waste caused by package collisions. Additionally, the palletizing system consumes less energy than before, as it eliminates idle running on the conveyor.
- **Minimized downtime during modernization:** The palletizing system underwent FAT testing at Orfer's facilities, which accelerated system installation, commissioning, and SAT readiness.
- **Extended lifecycle:** The reliability and spare parts availability of critical equipment have been secured for the coming years.
- **Optimized ROI:** By leveraging existing infrastructure and increasing capacity, the return on investment (ROI) was maximized.



**COMPANY DETAILS**

The Orfer Group is driving sustainability in packaging and logistics. Established in 1970, Orfer is a family-owned business dedicated to enhancing client operations through high-quality secondary packaging machines, robotic packing, and palletizing systems. Orfer Group provides full lifecycle services & production support for robots and automation systems, including:

- 24/7 remote support
- Servomotor maintenance
- Modernizations
- Preventive maintenance and repairs

**Orfer Group**

is an official partner of the Rolling On Interroll program of the worldwide Interroll Group.



➤ **Interroll technology plays a key role in supporting Orfer's long-standing customer partnerships. By leveraging Interroll solutions, Orfer reinforces reliable, future-ready automation for a leading manufacturer of wines and spirits operating internationally in the Nordic countries.**

**Over more than twenty years of partnerships, Orfer has continuously supported the customer by modernizing the automation system, supplying spare parts, providing remote technical support, and maintaining the palletizing cell's industrial robots. Through the close collaboration between Orfer and Interroll, these modernization efforts deliver sustainable performance and an optimized return on investment.**