

## AUTOMATION OF WASHING AND DRYING SYSTEM FOR THERMAL INSULATED CONTAINERS



**customer / general contractor:** Europa Systems Sp z o.o. – a leader in the industry of automated intralogistics solutions, with which SAICON has been cooperating for many years in the integration and commissioning of automation systems.

**end user:** Distribution center of the biggest discount supermarket chain in Europe, which uses TKT insulated containers for transportation of fresh and frozen products to their stores worldwide.

**challenges:** The efficiency of the distribution center was limited by the necessity of preparing already used containers for re-use. The previously used washing and drying methods were stretched in time during which the containers couldn't be used. It resulted in increased number of containers and the floor space taken over by them.

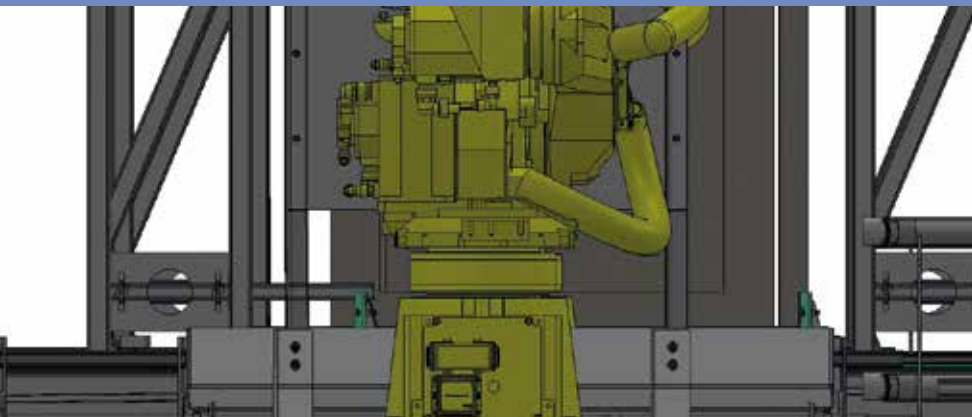
**solution:** Robo Wash&Dry by Europa Systems – robotized washing and drying line which will pick up dirty containers, wash, disinfect, dry and transport them to the warehouse.





**implementation:** SAICON as a preferred and permanent technology partner for Europa Systems has taken up the challenge of creating an integrated control system. The key issue for SAICON engineers was to create a reliable installation that will operate between 2-5 °C, with very high humidity. The system was designed based on all applicable safety standards for robots and transport systems. The security zones and access doors that enable servicing and inspection work are responsible for the protection of hazardous areas. Thanks to the application of the pollution detection system, the system identifies the contaminant and selects optimal cleaning parameters. Employing the Fanuc R-30Ib robot for drying containers has reduced the time and increased the accuracy of the drying process. The robot has been integrated with the Siemens SIMATIC s7-1500-based control system through the efficient and interference-resistant PROFINet industrial network.

- system status visualized on the panel
- iPendant touch controller for user-friendly operation
- washing parameters selected based on the height of the boxes



The application uses modern security solutions including the DCS (Dual Check Safety) system allowing for safe monitoring of the position and speed of the robot arm to provide the user with maximum safety and performance.

### Contact us:

+48 (58) 728 08 81  
info@saicon.pl  
[www.saicon.pl](http://www.saicon.pl)

**SAICON Sp. z o.o.** ul. Starogardzka 17, 83-010 Straszyn, Poland, VAT ID: 604 015 73 08