

hitmark = robotics

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REPACKAGING PROCESS

1. mixing products on a pallet,
2. automatic wrapping,
3. application of logistic labels

Robotic station for mixing products on pallets with an automatic wrapping and labeling system.

Our client's goals:

- Increase in process efficiency,
- minimizing order fulfillment time,
- maximum independence of the process from employee availability,
- reduction of operator errors

How we achieved this:

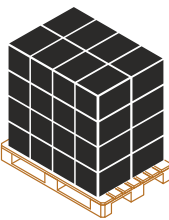
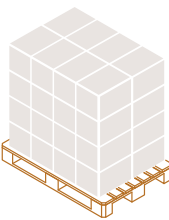
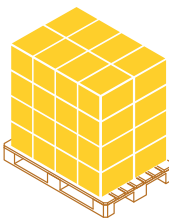
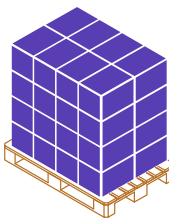
We implemented automatically controlled lifting tables and operator platforms at the client's site, facilitating work at a comfortable height for the employees. We installed industrial monitors displaying information on which products to supply to the line, eliminating the risk of errors.

We implemented a FANUC industrial robot M-410 series – a dedicated arm known for its high speed, range, and incredible repeatability of movements (stacking tolerance does not exceed 0.5mm). An additional element was a spacer magazine in the form of a sliding drawer, handling spacer formats for EUR and DHP pallets."

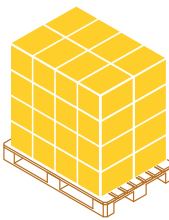
We also implemented an automatic wrapping and logistic pallet labeling system, and the labeling process was integrated with the client's central production management system. The entire setup was complemented by a dedicated application created by Hitmark programmers, accessible through a web browser. This application allows monitoring the station's performance, configuring new orders and sending them directly to the robot, adding new products, and managing the graphics displayed on the monitors in the depalletization area.

The solution proposed by Hitmark provided the ability to handle the maximum amount of products with minimal employee input and efficiently utilized space.

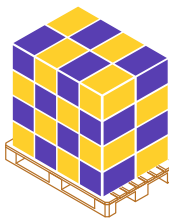
Output products (EUR pallets)



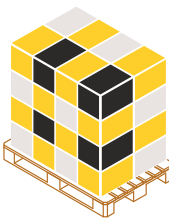
EUR pallets



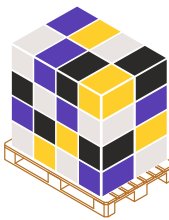
Repacking 1 to 1



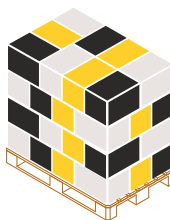
Mix of 2 products



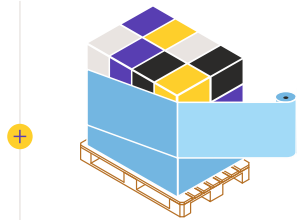
Mix of 3 products



Mix of 4 products



Mix of products in interleaving pattern

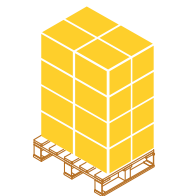


Automatic wrapping

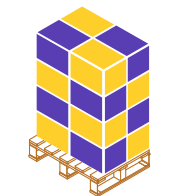


Automatic application of logistic labels

Half pallets



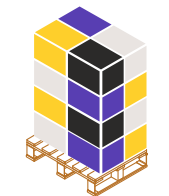
Repacking 1 to 1



Mix of 2 products



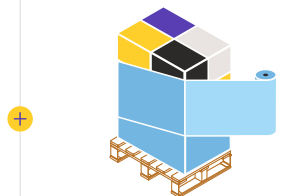
Mix of 3 products



Mix of 4 products



Mix of products in interleaving pattern

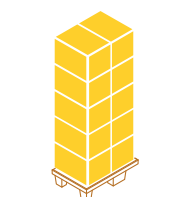


Automatic wrapping

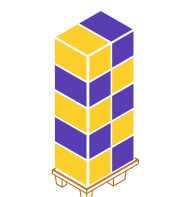


Automatic application of logistic labels

Quarter pallets



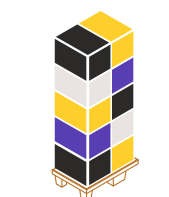
Repacking 1 to 1



Mix of 2 products



Mix of 3 products



Mix of 4 products



Automatic wrapping of quarter pallets



Automatic application of logistic labels



Palletization of 4 quarter pallets on a EUR pallet with automatic wrapping



Automatic application of logistic labels

Technical Informations

Line efficiency

up to 400 half pallets/ 8 hours

Wrapping of fixed pallets

automatic

Number of handled products

from 1 to 4 products

Labeling of fixed pallets

automatic

Handled pallet types

EUR pallets
1200 x 800 mm
Half pallets
600 x 800 mm
Quarter pallets
600 x 400 mm

Application of spacers

automatic
(anywhere on the pallet)

Client:

Carlsberg Supply Company Polska S.A;

Location:

Browar Okocim w Brzesku;

Name:

Robotic station for mixing products on pallets

CASE STUDY

CUSTOMERS BENEFITS:

- 2.5-fold increase in efficiency
- 60% reduction in the number of operators required for the process
- 54% reduction in order fulfillment time
- 87% reduction in complaints through improved quality of finished products
- Enhanced competitive advantage in the Polish market