

ADVANCING TRADITIONAL BUSINESSES WITH AUTOMATION



Pastry Production Robotic Tray Transfer System

Challenges

With an automated food-forming machinery, client has improved production speed by several folds. However, using manual labor to pick up the food products on a tray, is not fast enough to match the speed of the automated machinery. This resulted in compromising the operation of the automated machinery at 40% capacity instead. SilverSteel proposed using robotic solution, with a customized tray loading-indexing and conveying system to optimize existing speed of automated machinery to 85%, and to maximize production floor space.

Solution

Automated picking of trays from panning unit with cycle time of 8s per load using robot arm.

After implementation of Robotic Tray Transfer System, the automated food forming machine records an increased production capacity from 40% to 85%.

The system come with transfer conveyors, vacuum end effectors for collaborative robot, tray trolley docking stations. Also, the integrated tray placing, to panning unit, and food preparation line were built and designed by SilverSteel in-house capabilities based in Singapore.

Results

Replaced tedious and repetitive manpower required to retrieve food products from panning unit.

Achieved two times increase in automated machinery operating capacity from 40% to 85%, resulting in overall production capacity increase.

If you have a similar process in your production, feel free to contact us for a free consultation.