

Case Study









Results



Fully turnkey line with robotic solution



Improved efficiency



Overcame previous limitations to shelf ready applications



Packing up to 80 cartons of oatcakes per minute

Background

Edinburgh based Nairn's are the number one producer, and leading brand of oatcakes in the UK - supplying major supermarket chains and health food shops across the country.

Scenario

For ease of construction Nairn's had traditionally ultilsed tuck in bottom cases but new criteria set out by supermarkets and food suppliers for the design and performance of shelf ready cases demanded a new case design. This design would ensure more efficient handling and faster brand recognition with easier access to products. The old tuck in bottom cases had a design bottleneck, a lip which the customer had to reach over to lift the carton out. the new case design would simplify this operation and Nairn's recognised the efficiency gains they would make by automating this process.

Solution

Accepting the project as a systems integrator, Endoline installed a case erecting and robotic loading solution to fully automate the packing line. The case erector seamlessly forms 13 cases per minute with a hot melt glue. Endoline recommended the glue application as it secures the base of the box without producing an overlap, often the case with tape applications, allowing Nairn's to meet supermarket shelf ready expectations. The case erector is built and programmed into an Endoline conveyor system which is feeding formed cases directly into an Endoline robot cell. Packing up to 80 cartons of oatcakes per minute, the robot cell deploys with a six axis ABB robot arm, equipped with a specially designed gripper that is easily fitted with between 6 and 12 quick release suction cups so that the operator can select packing quantities from 6 to 12 cartons per case using a pre-programmed list of recipes via Endoline's simple to use HMI.

"We were very impressed by the expertise shown by Murray Packaging and Endoline in translating our initial thoughts into a workable solution. We were especially impressed by the design, installation and commissioning of the equipment which enabled an efficient startup and transition." Gavin Love,

Technical Director at Nairn's