

North West Food Processor Case Study

Plastic reduction scheme for major food producer strengthened with green print and apply labelling automation solution



Cobalt Systems recently installed a Print & Apply labelling automation solution into the North West food processing plant for a multi-national food producer as part of a green scheme to remove plastic packaging and improve environmental factors.

The end-of-line project formed part of the packaging area and was part of an upgrade on previously installed Cobalt hardware.

"We have a long-standing relationship of providing barcoding automation solutions into this food producer, so were excited by the challenge of maintaining production speed and efficiency, while incorporating various features to reduce environmental impact into this print and apply labelling project."

Chris Hunt, Sales Director at Cobalt Systems

As part of the green scheme, the food producer developed cardboard cartons that can support the weight of heavier goods such as tins and cans. This packaging development reduces shrink wrap, but retains the stability of the cans.

Application of the labels is to the front of the traded units (TUCs) wide edge leading. The label is printed and dispensed onto the front of the packs and wiped flat with a roller.

This application works particularly well for heavier items such as tins or cans. The solution also has multiple height positions for different pack sizes which the operator can select from the HMI.

Cobalt's solution incorporated its Nexus20 All Electric SWP into a high-speed, front-labelling application applying 60 – 80 labels per minute. This continuous operation system uses a bridge frame to suspend two machines over the high-speed line; the applicators working in tandem and automatically switching to ensure no pack is missed or a bad label applied.





"We'd previously installed SAP integrated software solutions for this customer on earlier projects. All the data is sent from SAP to the print and apply system which then prints and applies the label in real time."

Chris Hunt, Sales Director at Cobalt Systems

This solution provides dynamic automation with no operator input required to continuously run. If one applicator needs replenishing or experiences an error, the other applicator is ready and automatically takes over application while the error is resolved.

The Nexus20 All Electric SWP provides real-time, one-to-one labels without printing into an accumulator. With this configuration, changeovers or modifications don't lead to errors or waste. There is also no requirement for compressed air, which creates a huge saving. With pneumatics removed, the cost of maintenance is also greatly reduced.

"The printer applicators on this project have both vertical and horizontal adjustment, controlled by PLC using motors, so there's no requirement for manual hand wheels. This gives the operator the ability to access the system to replenish media without the line stopping and avoiding any health and safety issues."

Chris Hunt, Sales Director at Cobalt Systems





An essential part of the project is validation on the line, which checks that labels are applied to each pack correctly.

A missing label, or one mis-applied can make the difference between a shipment being accepted or rejected.

The data (match code) comes from the SAP database and is automatically set up when the product data is selected.

Both validation scanners check the barcode data, giving even more security and peace of mind.



Cobalt Green is our commitment to making continuous, ongoing improvements to our industry in an effort to improve sustainabilty. Find out more about our ambition: www.cobaltis.co.uk/cobalt-green