Akzo Nobel

Manufacturing Case study



Akzo Nobel automates production line labelling with Zebra[®] printers

Akzo Nobel is the world's largest producer of paints and coatings. It employs 61,500 people across 13 different business units, operating in more than 80 countries.

In the UK and Ireland, Akzo Nobel Industrial Coatings has six factories making decorative coatings, many of which are familiar to DIY enthusiasts all over Europe. Brands include Crown[®], Sadolin[®] and Sikkens[®]. From these six sites the tins are batched and shipped to major retailers and into distribution across Europe.

From paint to varnishes and even car finishes, the factories produce millions of litres of products each year to feed both trade and the ever-growing addiction to do-it-yourself decorating.

The challenge

Demand for decorative coatings continues to soar, and the Akzo Nobel factories produce tens of thousands of tins of paint and other coatings each day. Each tin needs to be accurately labelled, warehoused and, when ready for dispatch, picked off the shelf. These tins are rolling off four production lines continuously, 14 hours every day, seven days a week.

Responsible for the specification and procurement of data collection solutions for production and logistics at all six of the UK and Ireland sites, Akzo Nobel warehouse manager Tony Callaghan had high demands for the new print and apply systems. "Keeping every element of the production line working through each and every working day is essential. 15,000 tins come off each production line every day, each needing to be accurately labelled, palleted and stored," said Callaghan.

Due to the aggressive industrial environment, the printers are required to print the labels and apply them to the tins needed to be rugged and reliable, yet easy to use.

In addition, Akzo Nobel needed to label cases of tins as they enter the warehouse and the completed pallets as they are dispatched to distributors and customers. Finally, each of these systems needed to link into Akzo Nobel's SAP resource planning system.

"There are three important things to look for when choosing a printer. Whether it is fit for purpose, the average life for the parts and the software it is compatible with," said Callaghan. "We have previously had software that would only run on certain printers. In an ever-changing supply chain that is definitely not practical."

"Finally, we wanted to automate the process, applying labels directly to tins as they come off the production lines. Previously the warehouse team were hand applying ready printed labels to each tin before palleting and storing," continued Callaghan.



Solution Technology
Zebra[®] 110*PAX*4[™]
Zebra[®] Supplies



The Zebra® Solution

Already being a user of Zebra printers, Callaghan decided to contact his Zebra solution provider. Impressed by the length of time the Zebra label printers in the warehouse had been running, he asked his Zebra solution provider to identify a label printer to put on Akzo Nobel's production lines. They needed to be 'plug and play', so that staff would require minimum training and that the labels themselves were quick and easy to replace.

The Zebra *PAX*110 printer was selected by the Zebra solution provider and installed for a three-month trial alongside a mix of competitor products.

"Reliability is key," said Callaghan. "The Zebra 110*PAX* print engines worked continually for the three months with not one being taken off-line. It also offered the best combination of cost, quality, robustness and ability to interface with different software packages. In addition, it is an industrial machine that could quite easily sit in the retail business and not be out of place."

In order to guarantee the maximum level of reliability, Akzo Nobel has standardized on Zebra ribbons and labels. Not only does this provide a better-printed result, with printer heads lasting longer, but there is no need to buy spares to hold on site.

Akzo Nobel now run 63 Zebra printers across the six sites. These are a mix of print and apply PAX110S on the production line for labelling individual tins, $160S^{\text{TM}}$ and $105S^{\text{TM}}$ for printing of shipping labels and Z6S for printing larger six-inch-square pallet labels. All the Zebra printers are linked into the SAP application to ensure all tins coming off the production line are recorded and tracked out of manufacturing and into warehousing and distribution.

The Benefits

When it came to looking for a supplier of print and apply machines to churn out 60,000 labels each day, Akzo Nobel had to look no further than the existing systems printing pallet labels in the warehouse. After many years of reliable use printing pallet and case labels, Zebra was a natural choice for production line-based print and apply engines.

The Zebra solution provider has been able to install the *PAX*110S without any disturbance to the production line. Akzo Nobel now runs Zebra printers from the manufacturing lines through to the warehouse, on items, cases and pallets.

"The business continues to roll out Zebra products when needed. The quality of the build, labels and consumables means the printers are rarely out of use. It is this robustness and the efficiencies created on the production lines that has meant the printers have paid for themselves in less than three months," added Callaghan.

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