

From paper to voice-directed pallet picking

Crown Paints: A leading UK manufacturer boosts productivity with Infios's voice-directed pallet build solution



Leading UK manufacturer achieves significant productivity gains with Infios's innovative voice-directed pallet build solution.

About Crown Paints

Crown Paints, now part of world-leading coating specialist Hempel, is one of the UK's leading manufacturers of paints for over 200 years and holds the Royal Warrant by Appointment of HRH the Queen. Based in Darwen, Lancashire, Crown Paints serves every sector of the decorative coatings market, promoting its market-leading paint and woodcare brands to consumer and professional audiences alike.

With a manufacturing and distribution site in Darwen and a second facility in Hull, the company has a network of more than 130 Crown Decorating Centres throughout the UK and Ireland and was using a paper-based picking process.

Darryl Senior, supply chain director at Decorative Europe Hempel, said: "We were seeing an increased proportion of case picks and mixed pallets in the warehouse, with more frequent, smaller deliveries to our distribution network. We saw an opportunity to provide our customers

with the 'perfect pallet' that would ultimately improve our productivity, efficiency and accuracy with Infios's VoiceMan Warehouse Execution System (WES), delivered through an optimized pallet-build process."

Features and benefits

- 22% increased productivity
- Significant accuracy improvement
- High user acceptance
- Ease of training (both permanent and temporary staff)
- Improved operational visibility and control via K.Sight Data Analysis
- Full collaboration of Crown Paints and Infios teams

The challenge

Crown Paints used traditional handheld terminals (HTTs) to record and capture data within the warehouse, with the solution requiring high levels of operator interaction via the display and keypad. A solution was needed to be able to automatically calculate customer-specific cubing methodologies via integration with Crown Paints SAP Warehouse Management (WM) solution.

Operators needed a more systematized solution that was easy to use and guided them through the process, with full buy-in from staff and cost-savings made to the business and customers. Crown needed something that would automatically calculate the cubing method directly from Crown's WMS SAP, at the same time as improving productivity, as they needed to pick more items faster and accurately.

The main objective was to find an innovative method to meet changes in customer requirements around order fulfillment and delivery expectations, along with providing operational improvements which would be sustainable for future growth.

Crown needed to ensure its staff could better perform with a new solution and that could interact with various data feeds. The company looked at a two-part solution; firstly, how to improve business and operational efficiency, accuracy and visibility. Secondly, how to deliver an increased volume of case picks, stacked on pallets.

Nigel Balshaw, Warehouse Manager explains: "It was imperative that the voice technology could integrate easily with our existing processes. We needed to retain the accuracy levels whilst improving the productivity to enable us to get smaller picks sent out quicker."

The solution

Crown identified the need for consistency and productivity improvement, based on a process rather than an individual's knowledge and experience. The scope of the development was to create a voice solution with, at the very least, the same high standards of picking and stock record accuracy, whilst also delivering increased productivity and auto cubing to achieve standardization — significantly reducing damages through weight sensitive stacking patterns.

The pilot combined voice-directed working which would calculate the cubing requirements automatically, and direct operators through each task using spoken commands. The initial approach was to communicate to all operators through use of briefings, visual aids and provide equipment to familiarize themselves with the solution.

The Crown team was very responsive with the Infios team, holding regular communications and appointed Crown's top operator as the project sponsor, ensuring that they were always available throughout the pilot. Crown completed the capture of the volumetric data very early on in the project, enabling them to promptly complete development to output the import file requirement, as well as providing Infios with weekly picker statistics to aid the monitoring and reporting.

To deliver the optimum result the company had to first improve the accuracy of its Master Data, and this was achieved using the Cubiscan solution which analyzed each case to provide the data (dimensions and weight) to feed into the WMS and Voice systems.

A proof-of-concept productivity target of 12% was set for the pilot, yet the solution implemented actually exceeded this, with Crown Paints recording more than 22% operational improvements.

The results

Five operators with varying performance levels and experience were chosen to take part in the pilot, enabling a true representation of the workforce and ensuring the solution can deliver benefits at all levels. Crown also ensured a wide range of customer/ load/ order complexities were completed.

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The flexibility to configure the pick route within Voice produced additional gains as it enabled Crown to optimize the walk route for each picking operator. Additionally, operational spikes are now more manageable, as there is increased visibility and the system allows more flexibility on responding quickly.



"We needed to know what was happening in our DC at any point in time to ensure high levels of service, and that product dispatch targets were being achieved."

Nigel Balshaw
Warehouse Manager
Crown Paints