

# CONFECTIONERY

## PRODUCTION

chocolate, sweets, snacks & bakery

### Inside

Risk management

Alternative raising agents

Gum processing equipment

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The Natural Food Show





# Snowball effect

Investing in a real time warehouse management solution has resulted in improved stock management and end to end product traceability for one confectionery company

Lees of Scotland has been producing its range of confectionery, including snowballs, teacakes and meringues, since the 1930s. The company operates from an 82,000 ft<sup>2</sup> manufacturing facility in Coatbridge, near Glasgow.

Now a £20 million (\$24.8m) a year business, innovation is an important factor in the company's success and the launch of a new range of nut and gluten-free Macarings, an allergy friendly alternative to baked macarons, demonstrates this.

As a business with traditional values, Lees previously managed some elements of its warehouse operation

using a paper based system. This involved documenting in detail every item coming into the facility, its use within the manufacturing process and concluding with warehouse pallet references for the storage of finished goods and final destination locations, as products left the site for retail.

## Up to date information

One area where Lees faced the most administrative challenges was handling and storage of finished goods. This involved warehouse operatives writing down best before date and batch number details of thousands of products coming from production by hand. Apart from being time

consuming, the system was highly prone to errors and handwriting could be illegible. This then created problems further down the supply chain, when a team of administrators would input the data onto Lees' enterprise resource planning (ERP) system and the delay resulted in system data that was never completely up to date.

Once product data had been captured, the items could be stored in Lees' warehouse, ready for picking and onwards delivery. However, stock put away was also a manual process. Operatives would have to visually identify a location available for the items, check its suitability and then document it during the put away



process. Time consuming and error prone, mistakes would be made when recording location information or because handwriting was illegible. This impacted picking rates because operators would go to a location expecting to pick a number of items, only to find the goods were not where they expected. "It's difficult to quantify exactly how much time was being wasted but overall, we had lots of issues relating to efficiency and data accuracy and needed to invest in warehouse management technology to improve the situation," says Steven Purves, supply chain director at Lees.

### Standardised processes for goods handling

After a review of warehouse management software (WMS) solutions, Lees selected Indigo as its WMS provider. Initially, Indigo's production booking and intelligent put away modules were implemented. This gave Lees a standardised process for handling finished goods and ensuring mistakes were not occurring. Plus, data was available in real time and stock was being managed efficiently.

"One of the main benefits of Indigo was the immediate improvement we saw to stock management and traceability," explains Purves. "Although we always picked in rotation by best before dates, our products lacked a unique label ID."

This prevented Lees from easily locating individual manufacturing batches at the pallet level and they would primarily identify products by best before dates.

"It was very difficult to isolate products to a set time of manufacture, whereas now, we can pull off a set of labels and track goods to a few pallets in the warehouse," notes Purves. "It's had a huge impact on our traceability and control management."

By using the software, put away is now a seamless process. "Gone are the days of driving around looking for empty locations," he adds.

Now, when products come into the warehouse from production, operators scan the barcodes on the works order sheet and specify quantity. The system generates a unique pallet label and at the same time, suggests a series of suitable putaway locations. "If the operator then arrives at the location

and considers it unsuitable, they can search for an alternative, capture an appropriate override reason code and have the put away rules amended if necessary," Purves explains.

### Reduction to stock picking errors

These improvements have led to the elimination of previously prevalent stock picking errors, which has enabled Lees to grow its business over past few years, without the need to increase headcount correspondingly. "Using Indigo allows us to pick more orders more accurately within a shorter space of time, which helps us to better control peaks and troughs in demand and long-term labour costs."

Currently, Lees is making further improvements to its warehouse operations, with the addition of Indigo's purchase goods receiving module to optimise the management of raw materials as they enter the manufacturing facility. This was also previously a manual operation, with warehouse staff recording information by hand and then searching the warehouse for a storage place.

Using a similar process to the put away of finished goods, operators scan the purchase orders of raw materials, creating a unique pallet reference for each pallet of goods delivered. This identifier takes into account any special considerations, for example storage rules for allergens, and suggests a suitable location for the pallet, which is marked with a unique pallet ID. "The biggest benefit of this system is the traceability it affords," says Purves. "The retailers require us to trace everything from raw materials right through the production process and previously Lees used a paper based system to do this, which was time consuming and often difficult to reconcile."

### Improved management of packaging materials

Another benefit seen from standardising purchase goods receiving is the improvement made to the stock rotation and management of packaging materials. Previously Lees had no way of identifying how long

packaging had been stored before use. This meant some items were not utilised as quickly as others, which could have implications for end product quality. For instance, long storage periods can affect the integrity of cardboard boxes and plastic wrapping can warp, making it more difficult to mould by machinery. "Although packaging doesn't necessarily have a best before date, it's good for traceability and overall product quality to be rotating these materials as quickly as possible," adds Purves.

### End to end product traceability

Traceability is a prerequisite for the food industry and an essential capability for Lees, who supplies major retailers and independent stores across the UK. Audit requests by retailers could have Lees working right up to the deadline time to compile the reports needed. Now they can respond much more quickly, with automated reports set up to gather the data required. "We now have an improved end to end process to ensure full product traceability right across the supply chain, with optimised stock management at all times, from the point ingredients arrive on site, to their arrival at the retail depot," explains Purves. ♦

"We have made huge improvements to stock accuracy, traceability and efficiency, future proofing our business for years to come"

