

BIRDS EYE

The big freeze

In Hull, north-east England, Norbert Dentressangle operates the world's largest pea processing plant for Birds Eye, the UK's leading frozen-food brand. With a huge capacity of 61 tonnes an hour and exacting timeframes, this complex operation harnesses the group's long-standing frozen-produce expertise.



Established in 1938, Birds Eye is an iconic British brand - over eight out of 10 households buy its products. Its market-leading frozen-food offer includes vegetables, led by peas with a 45% market share. In 2007 Birds Eye took the decision to outsource all its pea-processing operations and chose Norbert Dentressangle as its partner. "Our decision was based on Norbert Dentressangle's strong track record

with Birds Eye - we had a relationship dating back over 40 years for pea processing and storage," explains James Young, Head of Category, Agriculture, at Birds Eye. The partners worked together to develop the project, and jointly managed the build of a state-of-the-art processing facility. Construction of the £30m plant - dubbed "Project Giant" - took place between pea-growing seasons, from autumn 2007 to spring 2008. "The challenge for





Norbert Dentressangle was to take ownership of the plant and meet our spec on day one of operation, and they did so to our satisfaction,” says James Young.

From soil to storage in 150 minutes

At the 3,850 m² plant, the Norbert Dentressangle team - which peaks at 200 people during the nine-week summer picking season - cleans, blanches and freezes (to -18°C and lower) a tonne of peas per minute, courtesy of leading-edge kit including three integrated blancher-coolers (IBCs) and five freezing tunnels in what is Europe's largest refrigeration plant. The frozen peas are then stored at Norbert Dentressangle own adjoining facility.

To retain maximum goodness and especially vitamin C, the pick-to-freeze window is just 150 minutes - a closely-tracked metric. *“With this scale and timeframe, it's a highly complex operation,”* emphasises James Young.



removal belts, filter screens, and pneumatic or hydraulic separation. Plant waste is directly conveyed via belts to trailers and taken away for use in animal feed. Team leaders continuously monitor intake-load variations to adjust the equipment and ensure the final product remains in spec.

“At Birds Eye state-of-the-art plant in Hull, Norbert Dentressangle processes one tonne of peas every minute.”

The joint on-site quality team ensure compliance with Norbert Dentressangle's ISO 14001 system and Birds Eye stringent operations spec - for example, on zero contaminants in the end product. After the inaugural 2008 season, the focus is on continuous improvement. *“We have a sound plan in place, and Norbert Dentressangle is very responsive when issues arise,”* says James Young.

“Green” peas

The Norbert Dentressangle-run plant naturally has eco-friendly - and also water-saving - design features. All processing water is used three times, gradually moving upstream: to cool the peas post-blanching, then in second- and first-stage cleaning, before being filtered pre-discharge. During cleaning, waste (pods, stems, stones, etc.) is extracted mechanically - by stone-

Norbert Dentressangle, which also operates a second pea-processing plant for Birds Eye in Lowestoft, Norfolk, is currently exploring with its customer the extension of its processing capability to rice.



Norbert Dentressangle's service for Birds Eye

- operates two pea processing plants (Hull and Lowestoft).
- cleans, blanches and freezes 61,000 tonnes of peas a season.
- 150-minute processing window.
- operates 2 additional frozen warehouses.

