Metal detection solution for **Greencore**

Food Processing reports on the successful installation of multi-spectrum metal detection equipment at a Greencore site.

The twin head CEIA system is fully compliant to all supermarket and BRC codes of practice.

Greencore Group is a leading manufacturer of convenience food, supplying many of the UK's leading retailers and food service companies. Its culture is one of innovation, expertise and food safety with Greencore chefs creating over 1,000 new recipes every year.

Metal Detection Services (MDS) has worked with Greencore for many years with one of the most recent installations taking place at its factory in Warrington.

The project required tests to be undertaken using samples from Greencore's own label brand ranges and MDS put forward its CEIA MS21 multi-spectrum industrial metal detection technology. Two other manufacturer's detectors were also tested alongside the CEIA units.

After very positive results were achieved from the tests, MDS was asked to submit its most competitive bid. When all the bids had been received, Greencore requested further testing of the MDS solution which was again successful.

The project required seven, twin headed systems comprising 14 conveyor-mounted detector heads. The heads are both Ferrous in Foil and MS21 Multi Spectrum Technology. All of the systems are designed and built to the latest retailer codes of practice.

Built at CEIA's production facility in Italy, four project staff from Greencore, headed up by Greencore project managers, Neil Greenfield and Jon Bremner, undertook a factory acceptance test at CEIA HQ facility before the units were shipped to the Greencore site in the UK.

Working with MDS project managers, David Hale and Pete Higgins, the units then underwent in-depth testing and were passed off by the Greencore team.

The systems were installed in the first quarter of 2016 and commissioning is currently well advanced with several units already in production and the remainder due to be completed by the end of April 2016.

Since installation of the equipment, Greencore has identified that the level of detection of ferrous materials and other contaminants has dramatically increased using the new CEIA technology when compared to the previous metal detection equipment. Greencore has been able to reduce its test stick size by more than half with the new technology that is now available to it.

The success of these metal detection units has led to MDS being asked to quote for two further units as part of an ongoing expansion project at the Greencore factory. Jon Bremner, continuous improvements coordinator at Greencore said: "We are delighted with the functionality and performance of the CEIA Metal Detectors that we have recently purchased from Metal Detection Services. The introduction of these cutting-edge detectors ensures that Greencore Warrington is using the latest technology available to exceed our customers' requirements for the detection of metal contamination. Both our technical team and our operators are impressed by how simple and user-friendly the detectors are to setup and operate, despite their incredible performance." ■

Metal detection technologies in brief…

There are three technologies that are typically employed in metal detection. The most basic is the single frequency metal detector. This has limited abilities to work with different products and difficult to optimise for varying conditions of temperature, water content and packaging types.

Multi frequency metal detectors operate with multiple frequencies so the same unit work will work with a variety products that have a range of characteristics. However they still only operate with one frequency at a time meaning that the product effect can still impact their performance.

Multi-spectrum metal detectors are able to operate over an entire spectrum of frequencies that are simultaneously applied offering improved inspection of the product.