



turning knowledge into solutions

Sapcote Engineering qualify for the cut

Food Processing Faraday has helped Sapcote Engineering Limited develop an innovative laser cutting system to aid process control at Melton Foods, part of the Samworth Group, one of the country's leading food groups.

Melton Foods were experiencing high wastage on their wrap producing lines due to inaccurate cutting. To put an end to their problems David Walklate, Innovation Consultant at the Faraday, introduced them to Sapcote Engineering who he believed would be able to find them the best solution.

The requirement was simple; reduce waste products due to unacceptable quality by implementing a low cost, easy to use method of assisting operators to accurately align handmade products that could be fitted to any production line and required no setting up or adjustment across the full range of products.

A number of traditional ideas were considered but it was the investigation of methods used in other industries which led to the simple but effective concept of a laser alignment device. The laser system, inspired by the automotive industry, projects a light beam target guide that is used by the operator to physically align the wrap. As long as the wrap is placed correctly on the light beam target it will be cut with perfect accuracy.

An initial prototype instantly highlighted the benefits of the laser device by significantly reducing waste, improving quality and increasing product yield. Almost immediately a second unit was requested to replicate the advantages on a sandwich line. There has been further enhancement of a green laser for superior visibility on a blue conveyor belt and a third unit is currently being specified for an additional production line.

Kevin Kirk of Sapcote comments 'We are pleased to have been involved with the Faraday for over four years now and during this time we have been given many high quality leads, several resulting in orders being placed and ongoing relationships formed. David Walklate has personally provided valued introductions to key contacts and companies with well matched enquiries to our business, with the laser cutting project being a prime example.'

Although Melton Foods have not released any actual figures they say the device was extremely successful and they are rolling out this technology to all other lines. As well as a successfully implemented machine and further orders, the laser cutting system placed Sapcote on the shortlist for the Food and Drink iNet Innovation Awards, creating great exposure for both the company and the laser device.

N.B This development was carried out as part of the Food Processing Faraday's Championing Innovation between the Engineering and Food Sector (ChIEFS) programme. This is funded by emda and is designed to catalyse innovation between the food and engineering sectors.



To know more about how your company can benefit through innovation support from Food Processing Faraday contact enquiries@fpfaraday.com or telephone 01664 420066

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