

Feature: Automation, robotics and vision

Machinery Update talks to Quin about handling cases

At the heart of the end of line equipment offered by Quin Systems is the Rtheta robot arm and pick and place head that allows products to be handled at high speed in one compact unit. This patented robot arm offers a large power to weight ratio and as well as being very fast, it is also robust enough to handle any production environment.

When it was developed a decade ago, it was used in a case packer. Quin developed this machine that today, offers high speed case filling of up to 100 case layers a minute while being easy to integrate into a line as it can operate with any case erector. It is designed to be easy to set up and operate for different products and case sizes and importantly, is so compact that it can fit into existing hand packing factory space.

The prototype of this machine was trialled at Fox's Biscuits and it was so successful that it was never sent back. And more orders followed.

Subsequently, Quin developed a combined case erecting and packing machine – called Versapack – which is based on the Endoline 200 Series compact case erector and the Rtheta high speed



Size matters for line ends

Quin's on-edge infeed system allows for fast handling of new style bag formats in one compact machine

picking head to save even more space. As well as a small footprint, it offers the ability to pack products in almost any orientation, including 'on-edge'. And still at high speed, typically 70 cycles a minute with a 2kg load. Payback is also attractive at between 12-18 months.

In both of these machines, the robot arm acts as an enabler and achieves the space saving required in modern manufacturing plants while offering fast operation. As managing director of Quin Mike Webb says, the end of the line in most plants is often forgotten and space is at a premium. "That is why our Versapack machine in particular scores in this area."

Case packing bags or stand up pouches on-edge presents more challenges than rigid cartons which has led to the company's

latest development. Indeed, Webb believes that how you present a product to the robot is always the trickiest bit. "Infeed is key to a successful end of line operation and we have modified our existing system to handle stand up pouches, doypacks, stabilo and pillow packs," he says.

Customers have been asking for a way to handle bags in the last 18 months which has resulted in the new vertical on-edge infeed system for the Versapack top loading case erector/packer. The main benefit of the new system is the small footprint and also the minimal change parts it requires.

This new infeed is now in operation on a system installed at a food manufacturer that uses stabilo packs and pouches for its products.

T 0118 977 1077

W www.quin.co.uk



Mike Webb is md of Quin Systems