How Machine Vision Enhances Quality Control

In the fast-paced world of modern retailing, quality control has a crucial role to play. With more people buying more items online, this puts extra pressure on the manufacturing and logistics sector to ensure that items on sale meet the necessary quality standards.

Maintaining high quality standards is essential to ensure customer satisfaction – because, in this era of social media, it's very easy (and potentially very damaging) for consumers to make their opinions heard. Effective quality control processes can also help to lower the costs associated with product returns and replacements.

With online retail having changed the way customers buy products, it's incumbent upon businesses to ensure that their quality control processes adapt accordingly. In this post, we'll look at how Zebra's machine vision solutions can help with quality control inspections.

Zebra's machine vision systems can help by automating visual checks on items. By effectively automating these quality control checks, you can free up your employees to take on other tasks – which can boost overall productivity.

For example, take a food manufacturer that produces own-label produce for a number of supermarket chains. In a situation like this, it's essential that the right product is put into the right packaging, and that the sell-by dates printed on the packaging are accurate.

But carrying out these checks manually is time consuming and monotonous, and therefore human error can easily creep in. This is where machine vision comes in, as it can handle both tasks at the same time, while cutting out the potential for mistakes.

Zebra's machine vision technology can identify specific marks on packaging, such as a logo, regardless of the orientation of that item on the production line. Using the logo as an anchor point, it can then locate the sell-by date and use optical character recognition, or OCR, to read it and check whether it's within the accepted parameters.

If the OCR determines that there is a problem, this can trigger several follow-up actions. These include warning beacons, sirens and product rejects.

These systems are powered by Zebra's own software suite, which is named Aurora. This features a user-friendly drag-and-drop interface – so, unlike with standard machine vision tools which can take days to set up, Zebra's machine vision solutions can be up and running within just a few minutes without the need for any user training.

This is just one of the ways in which Zebra machine vision technology can enhance the quality control process and boost your business. [Get in touch with the Cobalt team today](#) and we'll help you find a machine vision solution that's perfect for your needs and budget.