

# Watch your tech

Manufacturers are always searching for new ways to cut costs, increase productivity and improve the quality of their products. The drive towards smarter ways of working has led to an influx of emerging technologies, helping manufacturers edge closer to realising Industry 4.0.

## Augmented Reality (AR)



The technology first came to prominence in 2013 with the introduction of Google Glass, which demonstrated an integrated digital and physical world. The applications for AR now offer real possibilities to manufacturers.

For example, by using Realwear's HMT-1Z1 headset on the factory floor, the wearer can immerse themselves in all the data required to complete a task, such as fixing a motor while following instructions from a training video.

## Machine vision and artificial intelligence (AI)



Giving machines sight has been instrumental for the progression of automation and robotics. Manufacturers can now replace human visual controls with an automated system to reduce costs and improve accuracy.

Deep learning and AI have enabled the development of more advanced technology, which enables manufacturers to benefit from visual QA at a fraction of the traditional cost. Autonomous machine vision is a new category of visual QA launched in November 2018.

## Smarter legacy equipment



Cisco estimates 92 per cent of 64 million manufacturing machines worldwide are not connected to any network. This means manufacturers are missing out on valuable information about production and maintenance — and they don't have to be. The number of Internet of Things (IoT) connected devices has skyrocketed in recent years and so have the number of technologies for connecting legacy equipment.

ABB's smart sensor is one way of bringing legacy equipment into the Industry 4.0 era. The multi-function sensor can be fitted to almost any low-voltage motor to successfully connect it to the IoT. This means if a legacy motor is malfunctioning, the manufacturer can order a replacement component from a reliable supplier, without risking extensive unplanned downtime.

