

# AUTOMATIC PRINT INSPECTION USING 4SIGHT TECHNOLOGY

COMPLETE SOLUTIONS FROM SICK & AUTOCODING SYSTEMS

**SICK**  
Sensor Intelligence.

**AutoCoding**<sup>®</sup>  
Systems



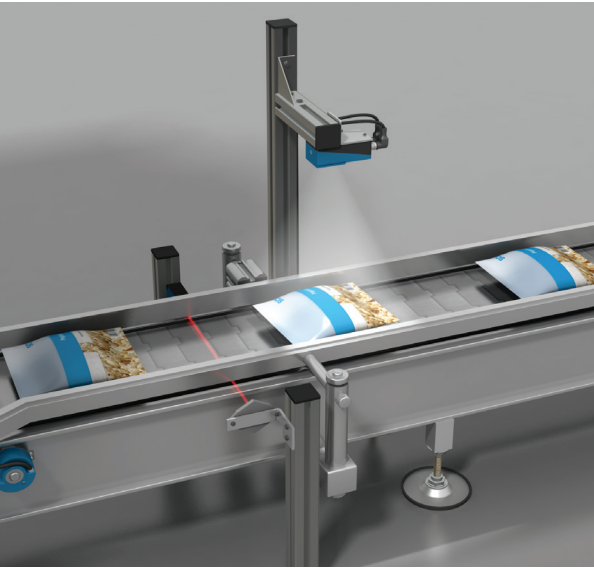


# A COMPLETE SOLUTION FOR TODAY'S WORLD

Marking and coding of accurate and legible information on consumer products is extremely critical, but often challenging. Common problems include **partially printed, poor quality or missing codes**, together with the risk of counterfeit products entering the market. This can have serious consequences particularly within the areas of food safety, as well as pharmaceutical and life science products.

The coding and marking industry is capable of printing variable information at production speeds using a variety of technologies. Laser, thermal inkjet, thermal transfer and continuous inkjet are amongst the most common methods. Reading and inspecting printed codes at speed has always been challenging due to the many application specific variables.

Continuous inkjet, (CIJ), remains popular as a fast, non-contact method for coding consumer products and packaging, but, to date, has been one of the most difficult for inspection. This is due to the nature of the print quality i.e. characters from dots of ink and the impact that variations can make.



## A BREAKTHROUGH IN AUTOMATIC PRINT INSPECTION FOR SIMPLICITY OF USE - 4SIGHT TECHNOLOGY

SICK has been at the forefront of vision innovation for many years and now, in partnership with AutoCoding Systems, has released the latest technology to make sure tailored solutions for Industry are available.

Utilizing the latest Vision Technology from SICK, with the InspectorP series cameras and the AppSpace programming environment, the 4Sight solution is a genuine first for automatic print inspection.

AutoCoding's 4Sight software, powered by SICK AppSpace, is a true industry breakthrough, using new and innovative methods for print inspection.

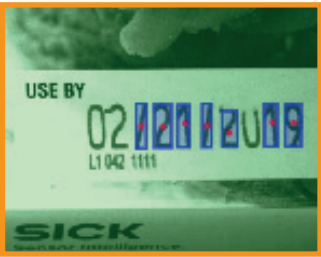
As well as working seamlessly with AutoCoding, the 4Sight system works either stand-alone or connected to a printer code deployment system or other application. The solution can also work with any brand of printer and associated technology.



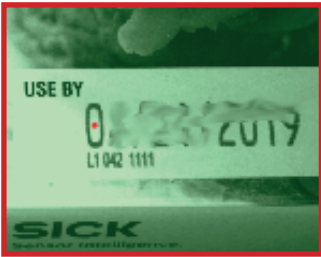
**4Sight** inspects the code for accuracy, legibility and location



● Good Read : all characters have been located, are correct and legible



● No Read : some characters have been identified but part of the code is illegible



● Bad Read : most of the code is illegible

## THE BENEFITS

Tunability: The 4Sight system has been created from the ground up with print inspection in mind. The design takes steps to maximize performance whilst at the same time allowing varying degrees of control and functionality through scalable thresholds.

In the past, machine vision options in this field have been an 'all or nothing' investment in PC-based OCR with expensive lighting, or an 'inadequate' vision sensor.

The 4Sight principle allow users to apply a pragmatic level of security in the most cost effective way.

- There is no need for font teaching or using reference points to locate the code
- The in-built intelligence removes the need to train a large amount of images
- There is no line-side PC; all processing is on-board the SICK camera
- There is no need for operators to configure regions/features of interest or other product specific settings
- 4Sight detects and informs optimal camera setup and guides the user

The results can be tiered from **print presence** through to **full OCR**; the required software is resident on the camera.

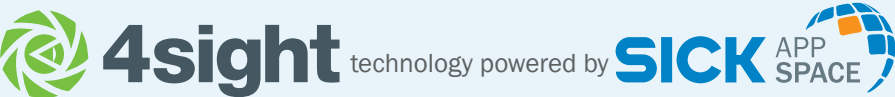


## WHAT WE PROVIDE

**Deploying an automatic print inspection solution using 4Sight technology could not be easier**

- Consultation services are offered to review the applications within your production process
- A full feasibility study is then carried out to ensure the best solution is proposed, confirmed and tested
- Installation, integration and training services are all delivered during the phases of deployment
- A fully configured and functional system will be delivered within an agreed time frame

**SICK and AutoCoding Systems provide ongoing support throughout the life-cycle of the application.**



## AT A GLANCE

### SICK & AUTOCODING SYSTEMS: THE PERFECT COLLABORATION

SICK is a leading manufacturer of intelligent sensors and sensor solutions for industrial applications. We have extensive experience in various industries and understand their processes and requirements. With intelligent sensors, we can deliver exactly what our customers need. In application centers in Europe, Asia and North America, system solutions are tested and optimized in accordance with customer specifications.

AutoCoding Systems is renowned for the globally proven AutoCoding product which automates set-up and control of packaging line equipment, including code printing, barcode verification and vision inspection. The AutoCoding product dynamically integrates to enterprise systems such as ERP, MES, Planning and WMS, as well as line-based IO control systems for critical line stops.

The partnership between SICK and AutoCoding Systems has been in place for many years. The companies complement each other, working together to offer complete solutions within a variety of industries.

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