

Application of Machine Vision Technology

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In printing industry, as shown in figure 1 to detect this kind of bar code, including fuzzy print bar code, label, Numbers, letters and bar code printing errors, and check is not in conformity with the requirements of size detection and so on.



Figure 1

Figure 1: **Bar Code**

Machine vision has been successfully applied in industrial inspection field, such as product packaging, print quality inspection, quality testing beverage containers and so on. As shown in figure 2, in industry, it also has a great influence on printing money and casting. Ensuring the reliability of each production process and the required product must be 100% tested, which requires higher requirements for the image detection system, one for high speed and another for the location of the camera. The reflective optical fiber sensor is adopted, which is widely promoted.

In medicine, because the vast majority of pharmaceutical factories use artificial visual methods to separate the time and time to package the production line, the detection efficiency is low and the cost is high. So using machine vision technology flat packaging defect detection system, its working principle is: the medicinal slices for transmission on the transmission equipment, could

be divided into two areas: machine detection area and isolated areas, as shown in figure 3. Its advantage is that it can significantly reduce test cost, improve product quality and labor productivity.



Figure 2: Coins

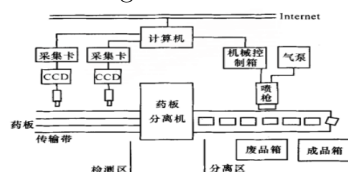


Figure 3: The overall structure of the tablet packaging defect detection system based on machine vision technology

The application of machine vision has greatly liberated the human labor and improve the automation level of production, improving the living conditions of the human, has the good application prospects.¹

References

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¹from "A Typical Applications for Machine Vision"

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