

MACHINE VISION: CLEAR OBSERVATION OF YOUR PRODUCTION

DEFINITION

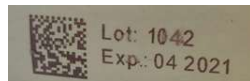
Machine vision is used to film and inspect the characteristics or positioning of an object.

THERE ARE MANY POSSIBLE APPLICATIONS

- Quality control of the product: Machine vision monitors the production flow and indicates whether the product is compliant or non-compliant.
- Re-alignment: The products are positioned randomly. With vision, the production process adapts to the positions of the products to carry out manufacturing operations.

COMMON APPLICATIONS OF MACHINE VISION

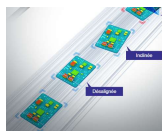
READING OF INFORMATION



DIMENSIONAL / DEFECT CHECK



POSITIONING OF PARTS



TRACKING / ROBOT PICKING



THE ADDED VALUES OF MACHINE VISION

- Quality Control / Compliance: machine vision eliminates human interpretation.
- Productivity: A camera can process information at a very high rate. (more than 600 parts/min).
- Production: More flexible product positioning. Machine vision recognises the orientation of the product and then adapts the production tool to the part (especially used for on-the-fly marking).
- Seeing the invisible: With appropriate lighting, product details can be dynamically analysed by the camera. (surface condition check on 50 µm thickness).



Preconceptions and the reality of machine vision

Machine vision is expensive:

- Over the past 20 years, product lines have diversified. Low-cost solutions meet most of your needs.

Information processing is complicated:

- The cameras can be embedded with Artificial Intelligence to facilitate image processing. Coupled with our supervisor, only the necessary data is transmitted to you in the form adapted to your needs.

Questions to ask for your machine vision project

- Define the discriminating parameters used to define the process.
- What is the purpose of inspection? Control, positioning, reading, re-alignment, traceability, etc.
- How to integrate it into my production line.

