

# STRIP POSITION DETECTION

## CUSTOMER BENEFITS AND GAIN DECISIVE ADVANTAGES

### Ø SAFETY

§ Increased safety for people, materials and equipments by avoiding all strip deviation hazards

### Ø HIGHER QUALITY

§ Guaranteed Quality Assurance

§ Reduced Customer non conformity and material loss

### Ø EFFICIENCY / ACCURACY

§ Accurate detection of running strip

§ Ambient light immunity

### Ø RELIABILITY

§ Specific design and ruggedness for severe environments

§ Easy installation

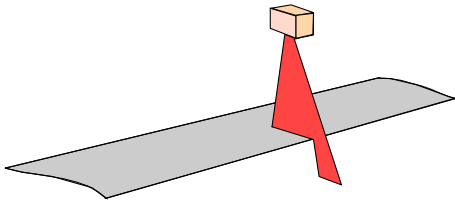
### Ø AVAILABILITY

§ Less down time at the processing line

## APPLICATION

SPICA detects the edge of an object if an optical contrast with the back ground is possible.

It can be used in an automated system to check the position of the edge of a running strip. In such case, the strip is sometimes moving left and right and should be centered using the rolls.



## MEASURING PRINCIPLE

**1D DETECTOR:** One optical head integrates an infrared light which lights in a fan way around its vertical axis.

The emission standard angle is  $\pm 8^\circ$ . In the other direction, the beam is very narrow. A receiver analyzes the received light and checks the shape of reflection.

The internal processor analyzes the light and gives the angular position of the object's edge regarding the sensor optical axis : detection of square object.

**Multiple detectors:** A central computer can receive up to 6 heads and combine these measurements to do a multiple degrees measuring system.

## ENVIRONMENT

SPICA detectors are designed to work in a very harsh environment : shocks, vibration, humidity, temperature ; they are very strong industrial sensors.

## REQUIRED MATERIAL

One or two SPICA sensor(s) Ref. SOS38-ST

One calculator Ref. SPC60-ST



*SPICA sensor*



*Calculator*

