# From pattern detection to rapid position identification

SICK's PS30 pattern sensor for increase flexibility and reduced material consumption

Waldkirch, July 2016 – SICK's new PS30 sensor is a scanning opto-electronic sensor for rapid and precise position identification and presence detection for labels, packaging materials, or tubes. The PS30 is able to detect complex patterns even when objects are moving at high speeds of up to 10 m/s. Based on the principle of operation of a line sensor, it delivers a stable switching signal. The PS30 is primarily used in the packaging industry.

Distinctive taught-in patterns in an image are used as a reference for the subsequent reliable detection and positioning of objects; special reference marks are not necessary. Increased design freedom, reduced material consumption, and effective process control are the advantages. Commissioning the sensor is a quick and user-friendly process which can be completed on the control panel, in the SOPAS configuration software, or via the machine's HMI. Engineering tools for automated format changes and visual diagnosis are available. Formats can be changed quicker and more easily, thus saving time and money.

## Increased flexibility

The PS30 is an incredibly flexible solution which responds to trends in the packaging industry toward ever more complex and unusual labels. Offering unrestricted design freedom, the PS30 impresses not only when used on endless tracks – it also delivers outstanding results when detecting patterns on individual objects. Labels can be positioned securely without a print mark. Significant and distinct image areas are analyzed in order to ensure reliable pattern detection – an analysis of the entire image is not necessary. This results in a very fast response time and precise position identification even at high speed. Furthermore, less material is needed for labels when using the PS30, because significant material overlap is no longer necessary to cover the print mark.

Image: PS30\_IM0062411.jpg  
Rapid and precise object detection with the PS30 sensor from SICK

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