Application - News

N°28 SPECTRO-3 series

Sensor Instruments — Let's make sensors more individual

1. Fluorescent glue control on paper bags

During the production of paper bags fluorescent glue will be used to close the bags at the bottom side. Sometimes, due to different reasons (defects on the printing die, cured glue and absence of glue) there isn´t any glue applied and the paper bags will be produced as cull. Thus fluorescent glue is used to realize at least an offline control with an external UV fluorescent lamp, but this is a time-consuming as well as random inspection. So far an inline inspection wasn´t possible due to the manufacturing speed of up to 10 m/s. With the fluorescent color sensor **SPECTRO-3-30-UV** there is now a sensor available which can be used for inline tasks. The sensor is insensitive against ambient light, the scan frequency of the sensor is approximately 40 kHz and the switching frequency is 25 kHz, adequate for a production speed of 10 m/s. The distance from the sensor to the object is 50mm and at this position the detected range of the sensor is around 20mm. The sensor delivers 5 digital outputs, thus in using the "binary mode" of the SPECTRO-3 software, up to 31 different intensity levels of the fluorescent glue can be evaluated. Due to this monitoring the operator will be informed in good time if anything, concerning the glue application, is changing. As shown in the screen shots, the different amount of fluorescent glue can be detected properly, while the color of the fluorescent glue isn´t changing.