

High-speed fluorescent color mark detection with the SPECTRO-3-FIO-UV

With the **super-bright UV light source SI-ELS-UV** and the **SPECTRO-3-FIO-UV** evaluation unit there now is a color sensor system that not only performs high-speed detection of fluorescent color marks, but also is able to perform differentiation by fluorescent color and brightness. Objects are detected with a scanning frequency of typ. 40 kHz at a distance of approx. 12 mm between sensor head and object. Depending on the employed optical fibre and front-end the spot size may have a diameter of 0.7 mm or dimensions of 2 mm x 0.2 mm or 4 mm x 0.7 mm.

The included SPECTRO3-Scope Windows® operator software allows the teaching of up to 31 colors and the selection of various evaluation methods (L^* , u^* , v^* or x , y , INT) and evaluation modes (BEST HIT, FIRST HIT, MINIMAL DISTANCE, SELFTRIGGER). Since the system uses reflected-light optical fibres, the detection of fluorescent marks also can be performed in Ex areas (zone 0) without any problems. Optical fibres of various lengths are available.

