

## Human visual perception, only 1000 times faster

The new **SPECTRO-3-FIO series** now also allows the detection of color marks with a scanning frequency of 40 kHz. With a high-power LED white light is fed into an optical fibre bundle, and via cross-section converter and attachment optics unit is projected onto the color mark to be detected as a light spot measuring 4 mm x 0.7 mm or 2 mm x 0.2 mm, or having a diameter of 0.5 mm. A part of the light impinging on the color mark is scattered back into the attachment optics unit and through the optical fibre bundle is directed onto the true-color detector that recognises the color of the object similar to human visual perception. With different attachment optics units, object distances of >0 mm up to approx. 200 mm can be realised. Due to the use of an optical fibre the color inspection system also can be used in Ex areas without any problems. Compressed-air attachment units can be provided as protection against excessive dirtying. With a Windows® user interface the color sensor can be correspondingly parameterised via RS232, USB and ETHERNET. The software also provides various evaluation methods.

