



1. Differentiation of ball bearings

Ball bearings with the same size but with a different color ring must be differentiated. At this one ball bearing type has a golden colored inner ring, whereas the other type is equipped with a silver colored inner ring. The ball bearing has to be controlled at a minimum distance of 160 mm. Investigations were made with the **SPECTRO-3-FIO-CL** in connection with an optical fiber type **R-S-A2.0-(2.5)-1200-67°** and an optical frontend type **KL-M34/42-A2.0**. The spot size of the white light at a distance of 160 mm from the frontend is approximately 3 mm. As shown in the screen shots, the sensor system delivers proper results.

