



1. Yarn presence control on plastic spindle

The presence of a yarn on a plastic spindle should be controlled. For this purpose a color sensor type **SPECTRO-3-FIO-SL** in connection with an optical fiber type **R-S-A2.0-(2.5)-1200-67°** and an optical frontend type **KL-M34-XL-A2.0** are used. The distance of the frontend to the spindle is approximately 100 mm and the spot size at this distance is around 3 mm in diameter. Furthermore, the optical axis of the frontend is inclined 65° to the vertical. The yarn can be proper detected as shown in the screenshots.

