



### 1. Winding control of yarn on a pirn

During the winding of yarn, the correct winding should be controlled.

For this purpose a color sensor type **SPECTRO-3-FIO-SL** in connection with an optical fiber type **R-S-R2.1-(6x1)-1200-67°** and an optical frontend type **KL-M34-XL-R2.1** will be used. At this, the angle of the optical frontend to the horizontal axis is approximately 25° and the spot size is 13mm x 5mm at a distance of around 110mm to the pirn. The correct winding can be proper detected as shown in the screenshots.

