



1. Color differentiation of capsules inside cigarette filters

Different colored capsules inside cigarette filters should be detected. For this purpose, a color sensor type **SPECTRO-3-FIO-JR** in connection with an optical fiber type **D-S-R2.1-(6x1)-600-67°** and two optical frontends (one for the transmitter and the other for the receiver side) type **KL-8-R2.1** is used. At this, the distance between the frontends and the respective surface of the cigarette filters is approximately 9mm and the spot size as well as the detecting area is around 3mm x 0.5mm, each. The capsules can be proper detected and color differentiated, as shown in the screen shots.

