



1. Differentiation of metal rods

Metal rods with an even finish should be differentiated from metal rods with a slotted end. Furthermore a metal rod with a black slotted end should be differentiated from a steel colored end. 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-8-R2.1** are used. At this, the distance from the front end to the metal rod surface is approximately 15mm and the spot size at this distance is around 4mm x 1mm. The metal rods can be proper distinguished as shown in the screen shots.

