



### 1. Differentiation of grinded and raw metal pins

Grinded and raw metal pins should be differentiated. 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. The distance of the frontend to the object is approximately 11mm and the spot size at this distance is around 4mm x 0.7mm. The metal pins can be proper distinguished as shown in the screen shots.

