



### 1. Detection of fluorescent oil on flat washers

The presence of oil on different flat washers should be controlled. It has to be taken into account, that the oil is fluorescent, if UV light is used. For this purpose a color sensor type **SPECTRO-3-FIO-UV** in connection with an external UV lightning unit type **ELS-UV-1P** and an optical fiber type **R-S-R2.1-(6x1)-1200-Y-22°/67°-UV** with an optical frontend **KL-8-R2.1** will be used. At this, the distance of the frontend to the flat washers is around 15mm and the spot size at this distance is approximately 6mm x 1mm. The oil can be proper detected as shown in the screen shots.

