



1. Presence control of a laser engraving on a glass bottle

The presence as well as the intensity of a laser engraving on glass bottles should be controlled. For this purpose a color sensor type **SPECTRO-3-FIO-SLE** 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 distance from the optical frontend to the surface of the bottle neck is approximately 85mm and the angle of the frontend to the horizontal axis around 40°. The presence as well as the intensity of the laser engraving can be proper detected as shown in the screen shots.

