## 1. Tear-off strip presence control on cigarette-boxes

The presence of tear-off strips should be controlled on cigarette boxes. For this purpose, a contrast sensor type **SPECTRO-1-FIO-UV/VIS-HP** in connection with an optical fiber type **R-S-A3.0-(3.0)-1200-22°-UV** and an optical frontend type **KL-9-A3.0** is used. At this, the distance from the optical frontend to the object is approximately 12mm and the spot size at this distance is around 2mm in diameter. Furthermore, the optical axis is tilted 25° to the normal. The tear-off strip can be proper detected as shown in the screen shots.













