



### 1. Fluorescent glue control on an abrasive belt

During the production of abrasive belt material with a 10 mm wide glue stripe the presence of the fluorescent glue must be observed.

Defects greater than 2 mm in length must be properly detected. The distance of the sensor head to the object should be approximately 20 mm and the detecting range around 2 mm x 10 mm. With the color fluorescent sensor **SPECTRO-3-FIO-UV** in connection with an external UV light source **ELS-UV-1P** and an optical fiber **R-S-R2.1-(6x1)-1200-Y-22°/22°/67°-UV** equipped with an optical frontend **KL-8-R2.1**, the

application can be properly solved. The test results are shown in the attached screenshots. Two small defects, one of the defects has a length of 1 mm whereas the length of the other defect is roughly 2 mm, can be properly detected. In case of presence of a defect the signal intensity **M** decreases and the color **s i** changes as well. The distance of the optical frontend to the glue stripe is about 20 mm, the size of the UV spot around 4 mm x 14 mm at this distance.

