



### 1. Detection of defects of a welding line on stainless steel tubes

Defects on a welding line of stainless steel tubes should be detected inline. For this purpose, a double contrast sensor type **SPECTRO-2-FIO-(VIS/VIS)/(VIS/VIS)** in connection with an optical fiber type **R-S-A3.0-2x(3x1)-1200-Y-67°-2P/2P** and an optical frontend type **KL-9-A3.0** are used. At this, the distance from the optical frontend to the welding line is approximately 12mm and the double rectangular spots (2mm x 0.7mm) are oriented perpendicular to the welding line. It should be noted, that the gap between the two light spots is roughly 0.7mm. The defects can be proper detected as shown in the screenshots.

