



1. Diameter control of a metal wire with and without insulation

The diameter of a wire without insulation ($\varnothing 50 \mu\text{m}$) should be differentiated from a wire with insulation ($\varnothing 110 \mu\text{m}$). For this purpose a line scan camera type **L-LAS-CAM-512-SL** with a macro objective type **MO-J-4x/20** is used at the receiver side and at the transmitter side a laser type **D-LAS-ED1-9.5x1-IC-T** is used which generates collimated light. The distance from the macro objective to the object is approximately 75mm. The measurement range of the line scan detector in connection with the macro objective is around 2 mm. The insulated wire can be properly distinguished from the non insulated wire.

