



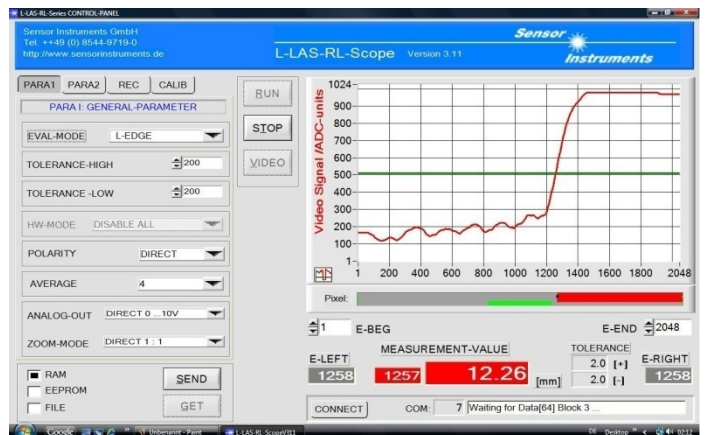
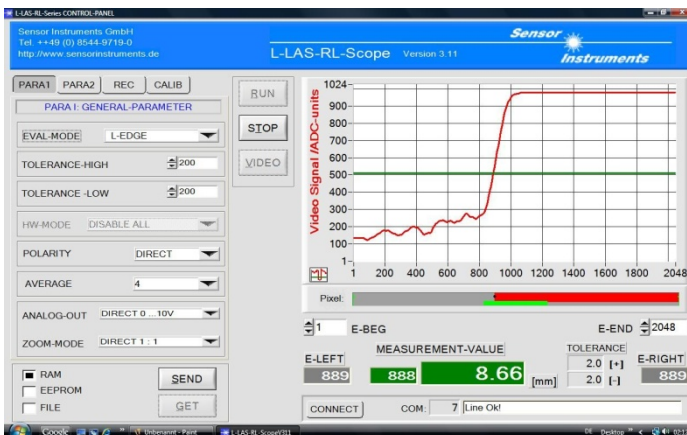
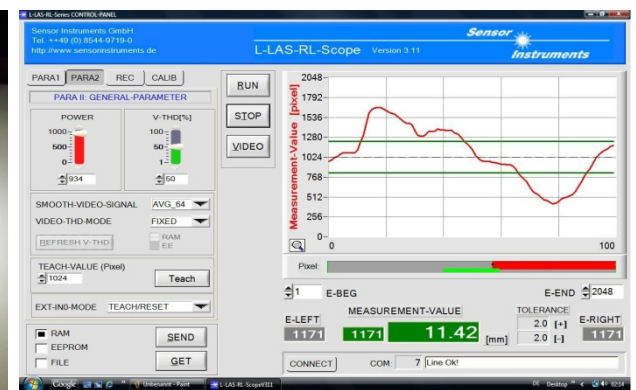
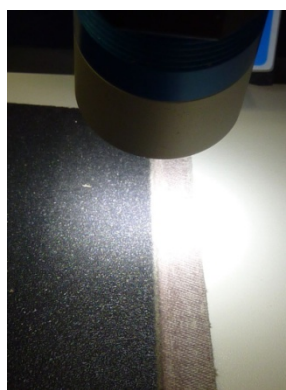
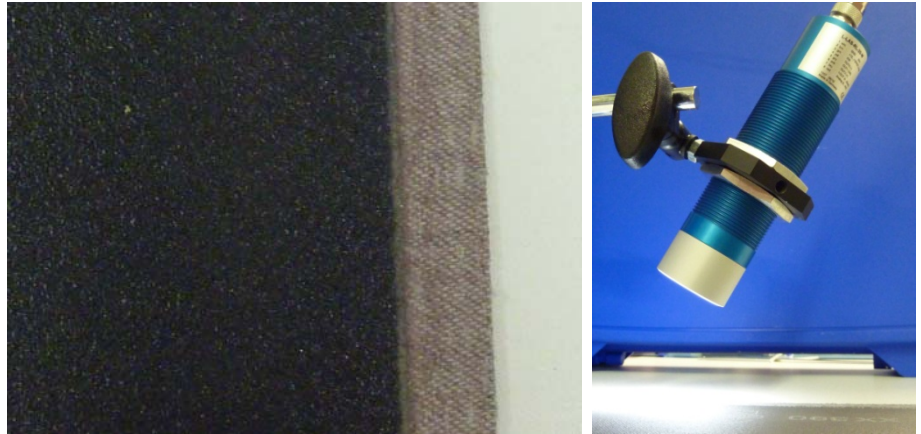
1. Control of margined abrasive belts

Different sanding belts are equipped with a margin and this margin has to be controlled.

The margin can be present on the sanding side of the abrasive belt or on the rear side.

Furthermore the margin can be darker than the rear side but mostly it is brighter than the sanding surface. Nevertheless there is a sufficient difference in contrast between the margin and the rear side or the sanding side.

For the investigations a line scan sensor type **L-LAS-RL-20-W** was used. The sensor was directed under 60° to the sanding surface or to the rear side. The distance from the sensor to the object was around 60 mm. The advantage of the L-LAS-RL series is, that these sensors delivers an analogue signal 0V to 10V as well as 4mA to 20mA and three digital output signals (HI, LO, GO) which can be used for the regulation of the position of the abrasive belt. The measurement range (measurement width) of the sensor is approximately 20 mm, the resolution is around 20



microns and the scan frequency is about 600 Hz. As shown in the screenshots, there is a proper detection of the margin of the respective abrasive belt possible.

