



1. Position measurement of a transparent glass plate

Glass handling machines must be informed not only about the distance of a glass plate but also about the edge position of a glass plate. However the detection of the edge of a transparent glass plate is not so easy, especially if there is nearly no phase on the edges. The direct reflection rate of visible light on a standard glass surface is normally approximately 4% and with the additional reflection of the second surface around 8% of the light will be reflected.

The laser line through beam sensor **L-LAS-TB-75-T** (transmitter) and **L-LAS-TB-75-R** (receiver) comes with a special video threshold profile, which is adapted to the laser beam profile. The threshold can be adjusted very close to the 100% value of the laser beam profile thus even small attenuations of the laser light can be detected. If the glass surface is a bit diffuse, the laser light becomes through interference effects a little bit noisy, but even this effect does not influence the proper edge detection. As shown in the screen shots a correct edge detection is possible.

