



1. Lateral position control of conveyor belts in the wood and paper industry

In the wood industry (during the production e.g. of MDFs = medium density fiberboards) as well as in the paper industry, special conveyor belts are in use. The lateral position of the band material must be held in a range of $\pm 0.2\text{mm}$, whereas the vertical position can change in the range of $\pm 2\text{mm}$. The material of the conveyor belt is either stainless steel or plastic fabric. In most of the installation situations in practice, it is not possible to use a through beam system, like the L-LAS-TB series, thus the reflective line scan camera **L-LAS-RL-20-W** is the practical solution. The sensor will be

mounted perpendicular to the band material at a distance of approximately 60mm, the detecting range is about 20mm. Meanwhile there are also types with a measurement range of 10mm, 30mm and 40mm available. The scan frequency is 600 Hz, the sensor delivers two analogue signals (0V ... +10V and 4mA ... 20mA) as well as two digital outputs and two digital inputs. The sensor is available in a M34 - thread housing or in a rectangular housing type **L-LAS-RL-20-W-CL**. The line scan sensor can be parameterized via the RS232 serial interface with the Windows® software L-LAS-RL-SCOPE, ambient light suppression as well as power control is implemented in the actual software version. As shown in the screen shots the edge of the band materials can be proper detected with a resolution of approximately ± 20 microns. Although the white light spot has the dimensions of about 40mm in diameter at a distance of 60mm to the conveyor belt surface, the detecting area is around 20mm x 0.2mm.

