

## EL.EDGE

Erhardt+Leimer Detection System  
for the Tire and Rubber Industry

### Edge detection by laser triangulation

Today's tire manufacturers are confronted with ever-increasing demands. Production speeds are to increase continuously, quality must be assured and rejects and machine downtime must be reduced to a minimum.

Erhardt+Leimer is the ideal partner for you if you want to ensure excellent production quality and make optimum use of your resources. We give you the right tools to make your manufacturing process more robust and reliable: fast detection of defects and continuous development of innovative solutions.

EL.EDGE enables the reliable and non-contact detection of web edges by the laser triangulation method without any contrast requirements. This allows material stripes on black conveyor belts, laminated stripes as well as grooves or noses to be detected and measured.



# Edge detection with laser sharp precision

## Easy to integrate into the production line

- No additional light source is required
- Easy measurement directly on conveyor belts; no further actions necessary

## Easy operation, setup and quality control

- Any PC that is on the same network can access the system, either for setup or operation.
- Monitor production quality and create transparent traceability via ELQ logs

## Maintenance-free and remotely controllable

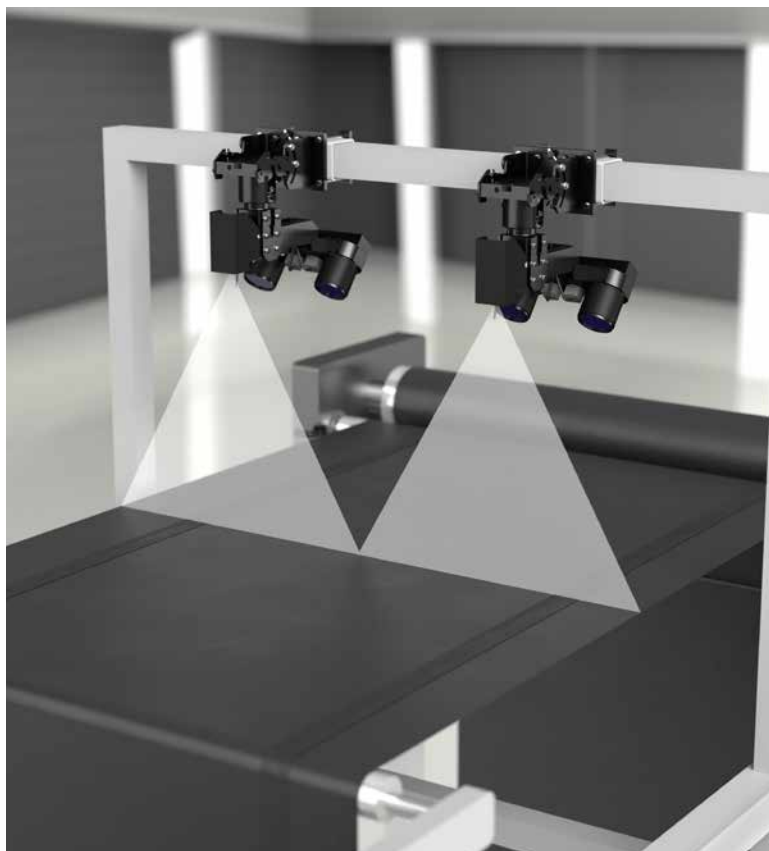
- All components are Ethernet-based and can be remotely accessed for servicing

## Field of Application

The application possibilities of EL.EDGE are various, it can be used whenever complex requirements for width measurements or position detection are given.

The system can be added at the:

- Final checks of laminating processes,
- Width measurements or the guiding according to characteristics on the material
- Thickness measurement of the edge leaps



## Technical data

<b>Measuring range</b>	350 to 1650 mm (X direction/lateral) 40 mm (Z direction/vertical)
<b>Measuring distance</b>	335 mm (to the middle of the measuring range)
<b>Resolution</b>	0.1 mm (X direction/lateral) 0.001 mm (Z direction/vertical)
<b>Accuracy (position)</b>	±0.2 mm (X direction/lateral)
<b>Accuracy (width)</b>	±0.3 mm (X direction/lateral)
<b>Step height</b>	Min. 0.3 mm (Z direction/vertical)
<b>Measuring rate</b>	70 Hz (with max. vertical measuring range)
<b>Laser class</b>	2 (dedicated laser safety officer not required)
<b>Laser wavelength</b>	660 nm (red), 520 nm (green)
<b>Operating voltage</b>	
<b>Nominal value</b>	24 V DC
<b>Nominal range</b>	20 to 30 V DC
<b>Power consumption</b>	18 W
<b>Interfaces</b>	Power supply M12, Gigabit Ethernet RJ45
<b>Protection rating</b>	IP 54 (when connected)
<b>Ambient temperature</b>	+10 °C to +40 °C