

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

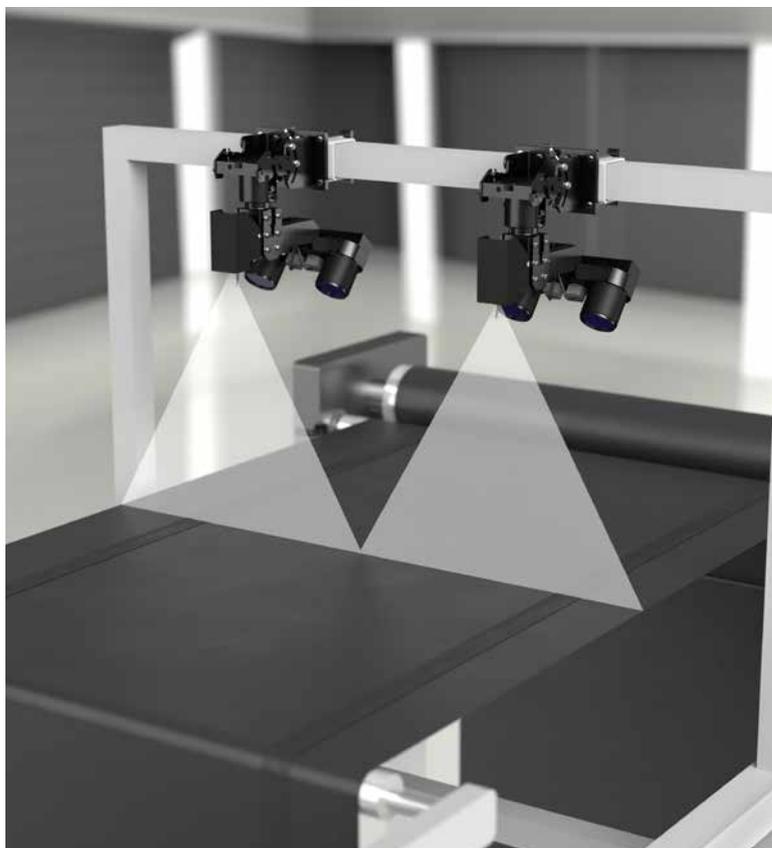
- All components are Ethernet-based and can be remotely accessed for servicing

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



Technical data	
Measuring range	350 mm - 1650 mm (X-direction / lateral) 40 mm (Z-direction / vertical)
Measuring distance	335 mm (to the middle of the measuring range)
Resolution	0.1 mm (X-direction / lateral) 0.001 mm (Z-direction / vertical)
Positional accuracy	± 0.2 mm (X-direction / lateral)
Accuracy width	± 0.2 mm (X-direction / lateral)
Minimum step height	0.3 mm (Z-direction / lateral)
Measuring rate	70 Hz (with max. vertic. measuring range)
Laser class	2
Laser wave length	660 nm (red), 520 nm (green)
Operating voltage	Nominal value 24 V DC
Nominal range	20 to 30 V DC
Power consumption	18 W
Interfaces	Power supply M12, 8-pin 1 Gbit Ethernet RJ45
Protection class	IP 54 (when connected)
Ambient temperature	+10 °C to +40 °C