

## EL-TRISCAN offline

Erhardt+Leimer

Offline profile measurement system  
for the tire and rubber industry

## Highest precision in offline profile measurement

Tire manufacturers today are faced with ever increasing demands. Production speeds need to increase constantly, while at the same time the highest quality standards must be achieved and resources optimally utilized.

With the innovative offline profile measurement system, Erhardt+Leimer offers exactly the right tool for monitoring important quality parameters and comprehensive data analysis. With its extended range of functions, EL-TRISCAN now sets new standards in precision measurement. The use of state-of-the-art technology and numerous new features not only guarantee highly

accurate and reliable measurement results, but also offer a wide range of analysis options. Beyond that, the system is easy to use and integrate into the tire machine.

EL-TRISCAN can be used in the DIE shop, in test laboratories or directly in extrusion lines in a temperature-controlled measuring cabin.



# The new dimension in offline profile measurement EL-TRISCAN

## Coaxial measuring principle

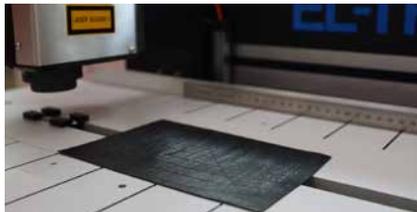
- prevents shadowing effects
- guarantees precise measuring results
- even with complex surface structures

## Topography measurement and profile measurement

- enables the simultaneous use of laser triangulation and chromatic-confocal sensors
- offers a comprehensive analysis of the surface texture

## Measurement with the highest precision

- high resolution in the nanometer range
- for the most demanding applications and the finest structures

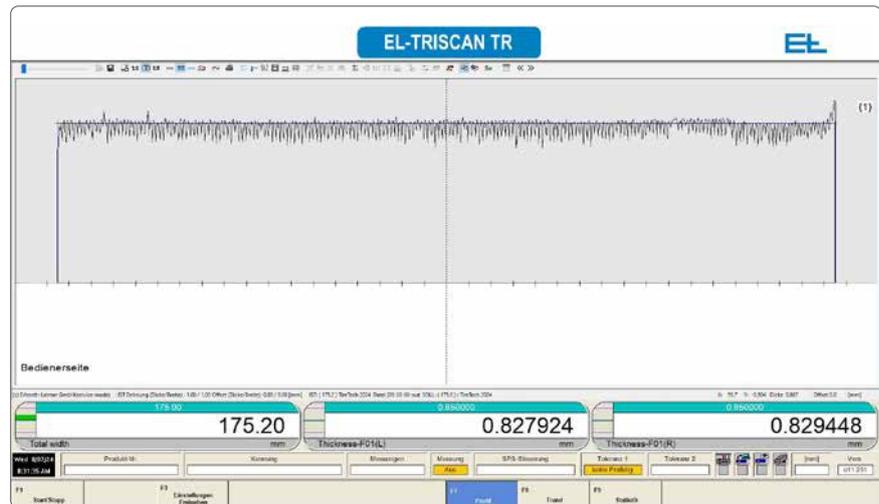


## Counting of threads in cord material

- exact determination of the threads in the cord material
- optimum quality control

## Roughness measurement

- precise measurement of surface roughness
- enables the evaluation of material characteristics and quality



EL-TRISCAN software screenshot

Technical data	
Profile width	750/1000/1250 mm
Profile thickness	Up to 68 mm
Measuring gap	Up to 258 mm
Measuring accuracy, thickness, laser triangulation sensors	Up to $\pm 3 \mu\text{m}$
Measuring accuracy, thickness Chromatic-confocal sensors	Up to $\pm 0.3 \mu\text{m}$
Measuring accuracy, width	$\pm 0.15 \text{ mm}$ ( $\pm 0.1 \text{ mm}$ reduced speed)
Measuring equipment capability (Cg&Cgk) [TW* = 10 x accuracy]	$\geq 1.67$
Displayed resolution in profile width	0.001 mm
Displayed resolution in profile thickness	0.001 $\mu\text{m}$
Number of sensors	2/4
Traversing speed laser	Up to 150 mm/s (higher on request)
Laser sensor	Point sensor
Scan frequency	Sensor technology-dependent, typical 4kHz
Laser class	max. 2 (designated laser safety officer not required)
Relative humidity	15 to 95 % (non-condensing)
Ambient temperature	+10 °C to +50 °C
Operating voltage	115 to 230 V, 50/60 Hz
Protection rating	IP 54
Dimensions (L x W x H)	Profile width 750 mm (710 x 1300 x 1266 mm) Profile width 1000 mm (710 x 1543 x 1266 mm)