Erhardt+Leimer

EL-TRISCAN TR

Industrial online profile measurement

The newest addition for thickness measurement systems in the tire production

Profile measurement

Producers of tires today are confronted with ever-increasing demands. Production speeds are to continuously increase, quality must be ensured, while waste and machine downtimes must be reduced to a minimum.

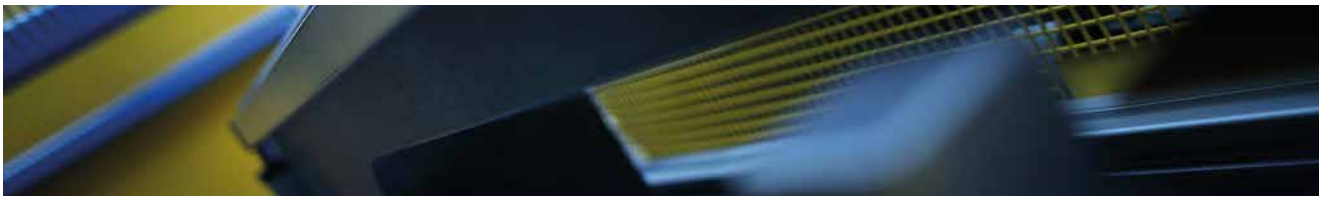
Typically, tires are produced from many different profiles and plies. Each web or strip of material must be produced to the required tolerances to achieve the desired quality for the finished tire.

E+L measuring systems reliably and precisely measure the profile of the innerliner to determine the thickness of the material and ensure the ultimate quality and safety of the manufactured product. With the latest system of the TRISCAN family, we offer the measurement of tire semi-finished material with a new range of features.

Latest addition to TRISCAN family

Thickness measurement

- Profile measurement of complex appearances of the innerliner
- Traversing profile measurement system with contactless doublesided point laser triangulation
- Reliable detection through automatic intensity control for matte and glossy surfaces
- Minimized thermal expansion and susceptibility to vibration due to the use of granite frames
- Reduction of scrap material and highest quality assurance



Range of application in the production process

The newest member of the TRISCAN TR system can be used for the thickness measurement of the following material layers:

- Innerliner

- Thread

- Sidewall

- Apex

- Steel cord & fabric

Technical data				
Profile width	200 - 2500 mm			
Web speed	Max. 100 m/min			
	Standard		ECO	
Max. measurement range thickness	up to 28 mm	up to 68 mm	up to 38 mm	up to 98 mm
Sensor distance	115 mm	225 mm	100 mm	200 mm
Accuracy thickness	10 µm	20 µm	40 µm	60 µm
Accurancy width	150 µm	150 µm	150 µm	200 µm
Capability* (Cg&Cgk): [TW** = 10*Accuracy width]	>1,33			
Max. traversal width (measuring range)	Profile width + 50 mm			
Max. traversal speed of sensors	150 mm/s			
Laser sensor	Point sensor			
Scan frequency	< 4 kHz			
Laser class	2 (no designated laser safety officer required)			
Resolution in profile width	ca. 0,1 mm			
Repeat accuracy thickness	+/-0,02 mm	+/-0,035 mm	+/-0,055 mm	
Resolution in profile thickness	< 1ym			
Opening height max.	240 mm			
Interface	Ethernet IP / Profibus / Profinet / CC Link / DeviceNet			
	SQL Database			
Relative atmospheric humidity	15 – 95 % non-condensing			
Ambient temperature	+10 to +50 °C			
Operating voltage	120V~230V; 50Hz/60Hz			
Current consumption	16 A			
Protection class	IP 54			
Dimensions (LxBxH) in mm	600 x 1300 x 1400 mm (with 600 mm profil width and 900 mm roller conveyor height)			
Weight	500 kg (with 600 mm profile width)			

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