ELCorruMatic® Warp Meter



Corrugated GmbH



System Function

The brand name ELCorruMatic[®] contains E+L's variety solutions for total corrugator process automation. The portfolio includes systems for speed and splice management (product group CSM) up to systems to control continuously all production and quality parameters (product group TCCM). All E+L systems are linked via interface to the system relevant components on the corrugator. Additionally to the intuitively operated elements on the Touch PCs E+L developed a flatness measuring beam (Warp Meter) in the area of the dry end.

The Warp Meter is a laser based measuring system which monitors board flatness and allows in-depth analysis based on diverse evaluation methods. This system checks the flatness of the current order and adjusts all machine settings automatically, with the result of board flatness according to presetted requirements.

The results can be used online during an order run in close loop control, or ,teaches' another production run to optimise parameters.





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Highlights

- + Laser Class 1
- + Robust, insensitive to steam
- Process- und parameter data directly from sensors to control system
- + Close loop control to ELCorruMatic process control
- + Stand alone warp monitoring system
- + Continous Ethernet communication
- + Flexible und individual networking



Fig. 1: Array

Technical Data

- + Measuring range: 250 mm up- or downwarp
- + Scanning grid:
 60 mm (distance measuring point)
- Measuring resolution:
 0,2 mm in Warp direction
- Working width:
 1.800 mm 3.300 mm (others upon request)
- + Measuring system: Laser running time (Class1)
- + Sturdy mounting support pre-wired and connected

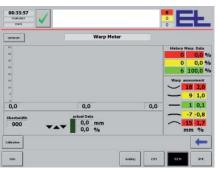


Fig. 2: Warp Setting Screen

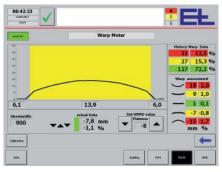


Fig. 4: Production Run "Warp Warning"

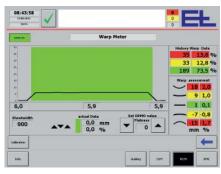


Fig. 3: Production Run "No Warp"

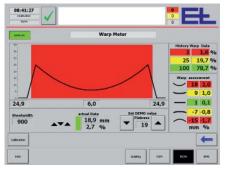


Fig. 5: Production Run "Warp Excessive"