Erhardt+Leimer

CREATIVE
AUTOMATION

OUR SOLUTIONS FOR
YOUR EXCELLENCE

**WE KNOW
THE GRAPHICS
INDUSTRY**

- ◉ **WEB INSPECTION**
- ◉ **WEB GUIDING**
- ◉ **WEB MONITORING**
- ◉ **WEB TENSION CONTROL**

WE KNOW
THE GRAPHICS INDUSTRY

Quality assurance of the production process is one of the major challenges in the graphics industry. This requires the monitoring, measurement and evaluation of all factors that influence the quality of processes in the graphics industry. Continuous web guiding and web tension control as well as web monitoring and inspection play a particularly important role here.

With efficient monitoring functions, we enable our customers not only to achieve a significant increase in quality, but also to save a great deal of time and money and to reduce waste. New functions with high customer benefits are the means of choice to clearly differentiate ourselves from the global competition in the graphics industry.

As market leader, Erhardt+Leimer utilizes its combined expertise in material selection, engineering and the production of high-quality components, modules and systems to set new standards.

INTEGRATED INTELLIGENCE
WE MAKE COMPLEX THINGS SIMPLE

Our machine exhibit shows the complex challenges of combining drive technology, controlled web tension, guided webs, precise inspection and visualisation in a very small space.

The system, equipped with our standard components, demonstrates how easy it can be to fulfil complex requirements and thus master processes.

Specifically, three web tension systems interact with each other. The two rotary drives from the EL.MOTION series are connected to the PD 30 and PD 40 measuring roller systems and regulate the respective web tension fully automatically. A third motor with drive-integrated "Safe Torque Off" safety function serves as a tension system and impulse generator.

The pivoting frame systems DRB23 and – brand new in an elegant, extremely flat design – DRB11 combine web tension measurement, visualisation, control and interfaces for a wide range of applications. The systems' unique performance in terms of accuracy and control dynamics is only possible thanks to highly integrated drive technology. Both systems only require a power supply and an Ethernet interface for operation.
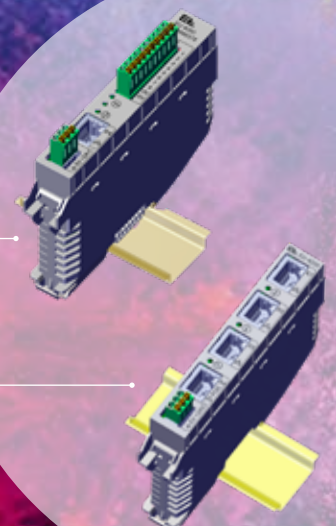
During operation, the highly intelligent systems provide information that enables correlations to be recognized and data to be aggregated. They therefore serve as the basis for analyses that can be evaluated by the machine. For the parameters transmitted by the sensors and actuators, we provide the EU 40 and EU 42 gateways, which can send data to any end point.

We talk about complexity because we understand it.

Extension modules enable a seamless connection to the industrial Ethernet world. The connection of machines to the network is made considerably easier.

Multiple Purpose Device EU 40

Managed Ethernet Switch EU 42

PRINTIMAGE**INSPECTION**

Print image inspection | SMARTSCAN MIS2

200% INSPECTION · 100% AFFORDABLE · 0% DEFECTS

- Camera system with unique 200% inspection function
- For printing and finishing machines in label and narrow-web applications
- Continuous double inspection of the entire width and length of the web
- Web monitoring with zoom function
- Detection of print defects, missing labels, unremoved matrices, splice points, flags, color defects, damage, etc.
- Counting function for labels and defects
- Log function for the inspection runs
- Signal output for customer-side defect location or to activate signal lamps

The SMARTSCAN 200% concept is unique on the market

WEB**GUIDING**

Elegant pivoting frame system | ELGUIDER DRB11

100% space-optimized solution

- Maximum optimized design
- Highly precise and highly dynamic
- Component replacement via auto-restore function
- Intuitive, guided commissioning
- Virtual operation concept

EL NET. **inside**

Compact pivoting frame system | ELGUIDER DRB23

Highest control accuracy up to ±50 µm and highest control dynamics

- Digital, Ethernet-based system
- Brushless drive technology
- Commissioning, operation, and maintenance
  via web-based management
- Industrial Ethernet interface
- Intuitive operation due to graphical
  touch operating panel

WEB**MONITORING**

Web monitoring system | ELSCAN OMS5

Due to a completely new lighting concept, ELSCAN OMS5 is perfect for the printing market. Irrespective of whether reflecting foils/films, paper with varying properties, whether transparent or opaque, OMS5 is the all-round solution for your production.

DualView – the hallmark of ELSCAN

- Technology with 2 x 18 megapixels for magnificent image quality
- Motorized crossbeam with precise, high-speed control
- Unique LED-based flash concept for all types of printing in the printing industry
- Very straightforward system integration due to the new quick alignment function
- Comprehensive synchronization concept for stable web synchronization
- Powerful processor for smooth working
- Maximum field of view 100 x 75 mm
- Maximum web width 2500 mm

Software

- Autoscan functions (X/Y/100%/meander)
- Digital repeat overview for fast navigation
- Position gallery with 21 storable positions
- Master image comparison in different variants
- DeltaE color monitoring
- Image stabilisation
- Automatic job change detection
- Archiving of repeat orders

Black Line – the new product line of the E+L vision world
Latest features encased in a black design

WEB**TENSION**

Detection and control of the web tension | ELTENS

Eliminate web tension errors, increase productivity

- Aluminum roller with fixed axle and two integrated load cells
- Various mounting options
- Highly reliable in operation thanks to overload protection up to 10 times the nominal measuring force
- Maximum flexibility due to different roller diameters from 60 to 200 mm
- For measurements in a horizontal direction, the weight of the roller does not affect the measured result

PA 62

PD 30

PD 40

Stand-alone sensors
for direct PLC connection
- Easy position detection
- Width measurement
- Also for transparent material

FR 61

FR 65

EL.MOTION
drive technology for Industry 4.0
- Automatic System Identification ASI (auto tuning)
- Integrated drive technology
- Absolute positioning
- Industrial networking
- Drive-integrated safety function STO

AG 72

AD12 STO

AD 14

INTEGRATED CONTROL

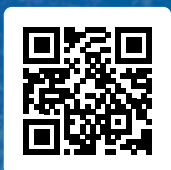## Customized solutions for various machines

Label printing machines
Inspection rewinders
Digital printing machines
Web-fed offset printing machines
Flexo printing machines
Gravure printing machines

Discover all products

SMARTSCAN | ELGUIDER | ELSCAN | ELTENS

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