

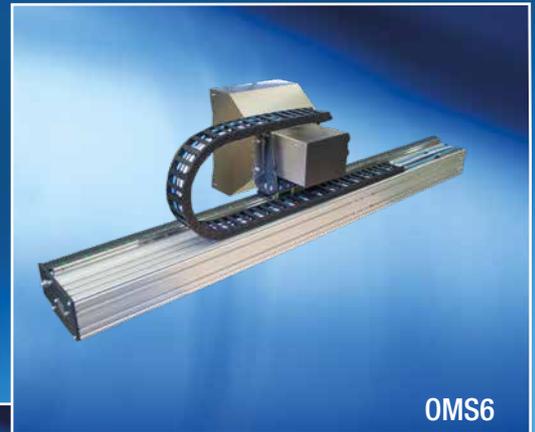
ELSCAN dualView

Web monitoring

Fully digital monitoring
of the print quality on moving webs

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FOCUS ON CUSTOMER SATISFACTION

INTELLIGENT TECHNOLOGY · SMART PRODUCTS

INTERNATIONAL LOCATIONS · WORLDWIDE AVAILABILITY

CUTTING-EDGE TECHNOLOGY AT HOME ALL OVER THE WORLD

Erhardt+Leimer Global solutions for production of the future

Intelligent technologies and products in the highest quality designed to optimize the production processes of our customers all around the world. This is our claim as the internationally expanding Erhardt+Leimer group of companies.

With our global presence – from development to production and on to service – we are always close to the customer. We develop customer-specific solutions and provide our customers with excellent products either in digital or intelligent versions depending on their preference. Not only this, but we also set new standards for the production of tomorrow. In the process, it is not just our products that are increasingly becoming smart – our entire company is currently undergoing a digital transformation. One visible indication of this is the E+L online shop, which enables our customers to order products and spare parts quickly and easily from our website.

With more than 1,600 employees at sites across Europe, Asia, and America, we deliver cutting-edge technology on-time to any location in the world.

In everything we do, we aim to use all company resources responsibly to protect the environment and demonstrate our commitment to increased sustainability.



Higher quality and productivity with web monitoring

Production processes in printing houses are becoming ever faster and more precise. The quality of the results of the printing is continuously increasing and paper waste must be reduced to a minimum.

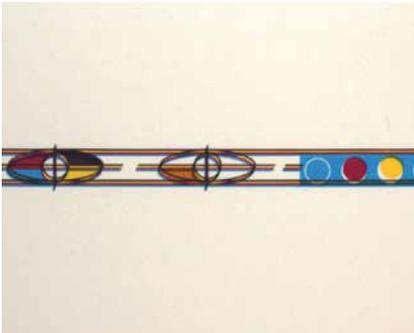
For many years, web monitoring systems from Erhardt+Leimer have made an essential contribution to fulfilling these demands. More than 6,000 ELSCAN systems have been delivered to the market worldwide.

ELSCAN dualView supports the printing process from the setup phase to completion of the job with the continuous display of the printed web in the highest resolution and prime image quality. The points in the print that are decisive for quality, such as register and color marks or distinctive colored areas, are made available to the printer in highest resolution, and thereby guarantee high quality production.

Advantages

- Higher production speed
- Constant quality printing and color
- Less waste
- Faster system setup
- Operator assistance during production

Application areas / examples of errors in the graphics industry



Register inspection



Print quality inspection

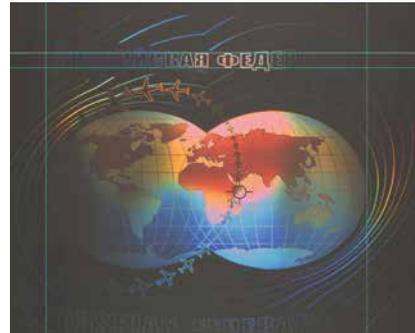


Color accuracy monitoring

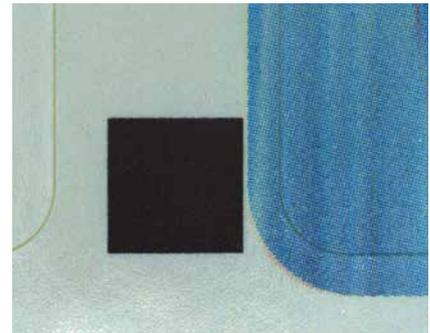
Examples from the graphics industry



Hot films / cold films



Hologram depiction



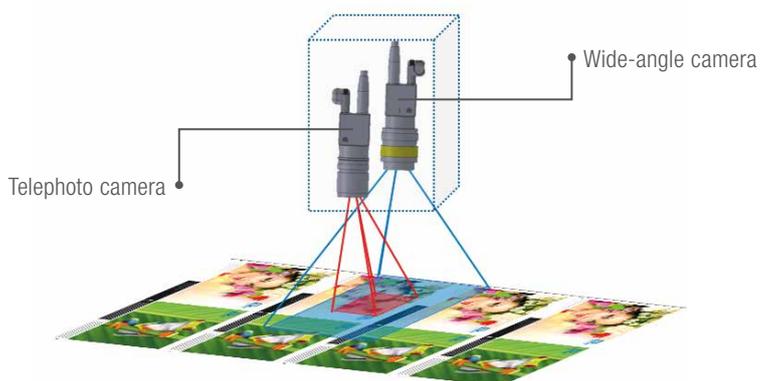
Die cutting position monitoring

ELSCAN product family

Sophisticated image processing, combined with two high-resolution cameras – this is what the ELSCAN web monitoring systems offer. They allow the display of printed images on moving webs with the greatest detail and color fidelity. The cameras can be moved manually or by a motor to adopt positions with the highest precision and display the corresponding images on the monitor.

All ELSCAN variants feature the patented "dualView" technology with its two cameras. The telephoto lens or wide-angle lens is activated depending on the zoom level. During zooming, the system switches imperceptibly between the cameras. It is thus possible to display the printed images at several times of their resolution. This unique, patented "dualView" concept allows nearly lag-free zooming up to the highest resolution.

**PATENTED
DUALVIEW
TECHNOLOGY**



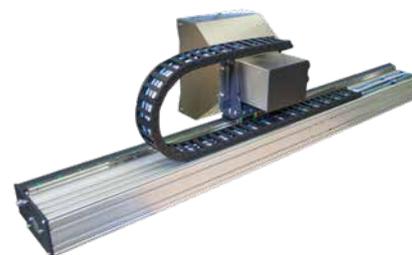
OMS3 – Basic

- Field of view of 100 x 75 mm
- Patented "dualView" technology with 2 x 5 megapixel cameras
- For narrow web applications up to 580 mm operating width



OMS4.6 – Premium

- Field of view of 120 x 90 mm (other versions available)
- Patented "dualView" technology with 2 x 5 megapixel cameras
- For operating widths up to 3,250 mm
- Additional functions, e.g.
 - Color comparison (Delta E)
 - 100% repeat overview
 - Expanded position gallery
 - Double-camera system



OMS6 – High End

- Large field of view of 234 x 124 mm
- Patented "dualView" technology with 2 x 12 megapixel cameras
- Uncompromising image quality in 4k quality and brilliant color rendering
- Highly precise camera positioning via motorized crossbeam guide
- For operating widths up to 3,250 mm

Web monitoring ELSCAN OMS3

ELSCAN OMS3 – Basic

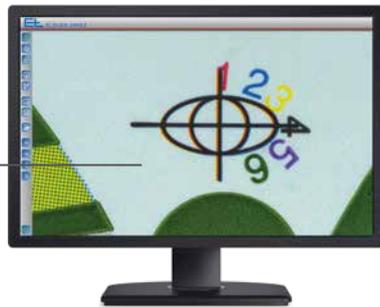
ELSCAN OMS3 was specially designed for narrow web applications up to a web width of 580 mm. Reduced to the essential functions, OMS3 focuses on the main task of a web monitoring system – the display of the web in brilliant image quality!

Like all ELSCAN systems, the proven "dualView" technology is used of course.

- Camera system with two 5-megapixel cameras for wide-angle and telephoto ranges
- Intelligent camera (no separate computer)

- Crossbeam with manual or motorized camera positioning
- Operation with mouse, command station or touch monitor
- Image display on monitors in Full HD resolution
- Remote maintenance access for service

Perfect register and color monitoring



Authentic depiction of hot and cold film embossing



NO SEPARATE COMPUTER

FOCUSING ON THE BASICS

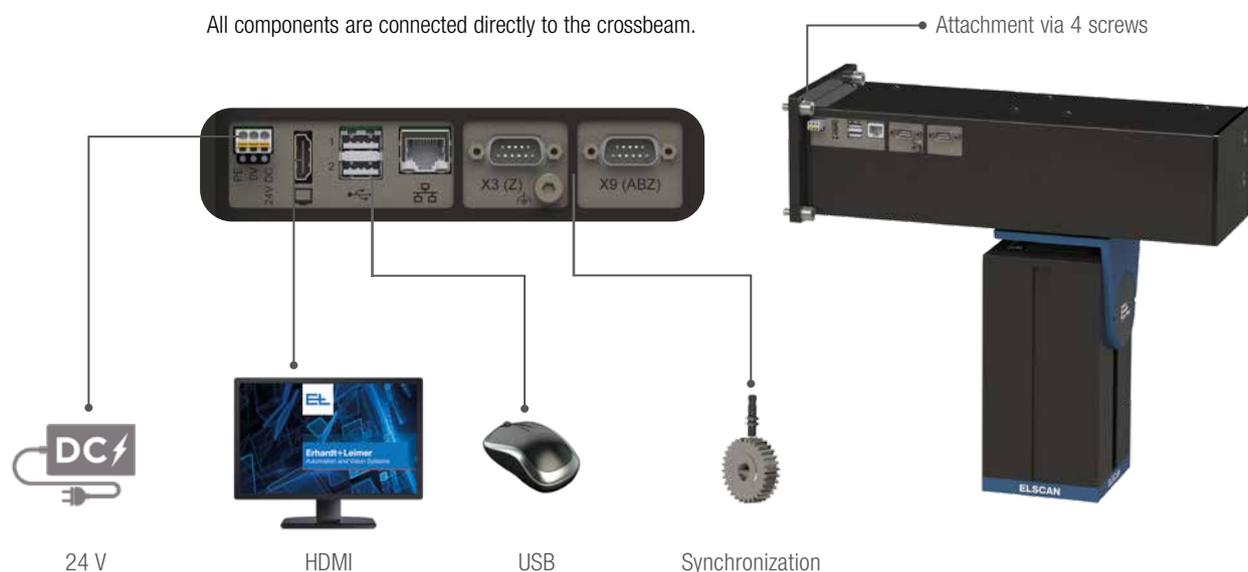
VERY LOW PRICE

PRICE
PERFORMANCE
par excellence!

ELSCAN OMS3 for the narrow web industry

Web monitoring ELSCAN OMS3

Easy integration and commissioning



Technical Data

Camera						
Type	Camera	Field of view	Resolution	Flash	Protection class	Web surfaces
OM 3110	2 x 5 megapixels, color (2,596 x 1,944 pixels)	From 100 x 75 mm Up to 12 x 7 mm	W: 38 µm / 660 dpi T: 11 µm / 2,350 dpi	Bright field	IP 30 (IP 50)	Paper, labels, cold and hot embossing films, clear-on-clear

W = Wide-angle lens, T = Telephoto lens (figures correspond to the native resolution per camera chip)

Crossbeam with integrated controller	
Crossbeam length max.	700 mm
Operating width max.	580 mm
Actuating speed	Up to 350 mm/s
Operating voltage	20 – 30 V DC (max. 1.5 A)
Nominal frequency	50 – 60 Hz
Protection class	IP 30
Connections	HDMI / 2 x USB / Ethernet / 2 x synchronization

System data	
Web speed	Up to 400 m/min
Ambient temperature	+5 °C to +50 °C
Relative humidity	5 % to 95 % (non-condensing)
Operation	Mouse / touch monitor / keyboard

Monitor	
Operating voltage	100 – 240 V AC / 120 W (±10%)
Connection	HDMI
Resolution	22" Full HD (1,920 x 1,080 pixels)

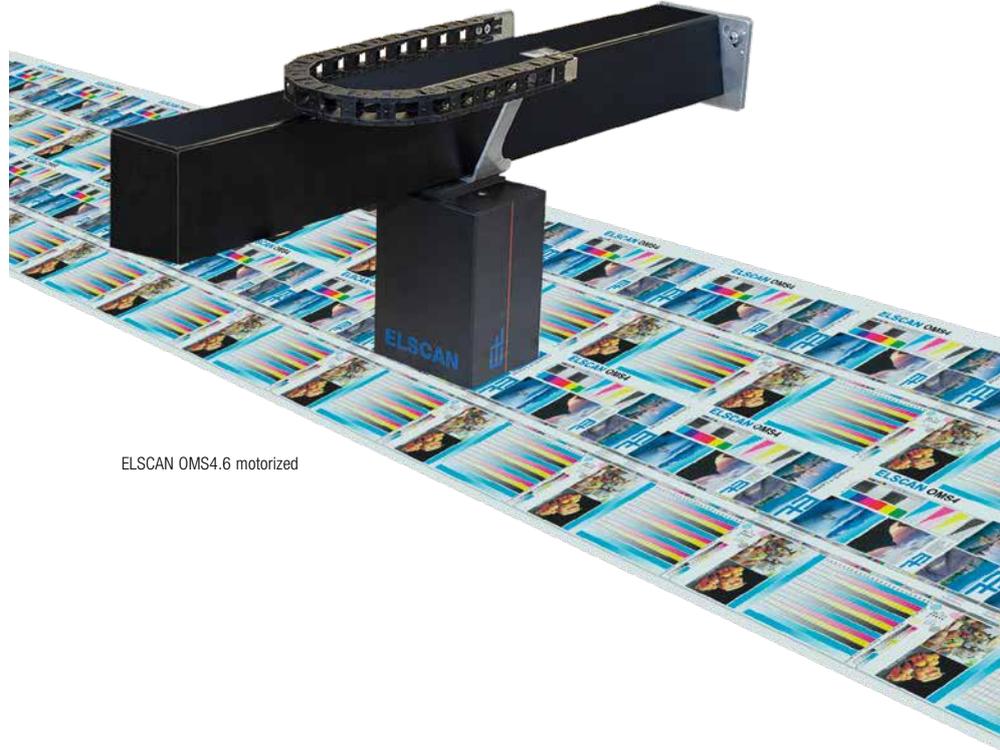
Web monitoring ELSCAN OMS4.6

ELSCAN OMS4.6 –

Premium for operating widths up to 3,250 mm

Along with all the basic functions for web monitoring, OMS4.6 provides an expanded range of functions in the hardware and software area. As per the modular concept, almost all options can be retrofitted at any time.

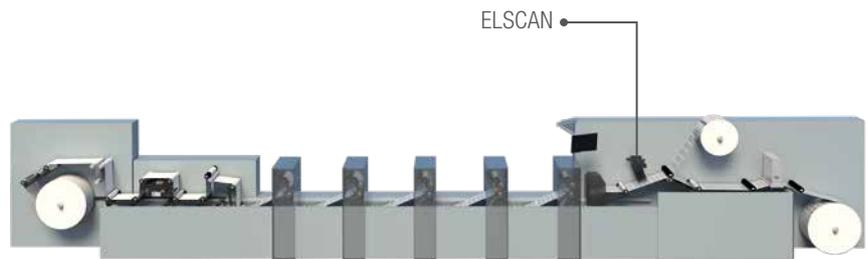
- Proven "dualView" technology with 2 x 5-megapixel cameras
- Lag-free digital zooming using mouse wheel, command station or touch screen
- Manual or motorized camera positioning
- Crossbeam with one-sided or double-sided mounting
- Image display on monitors in full HD resolution
- Many software functions available and upgrades are possible at any time
- Remote maintenance access for service



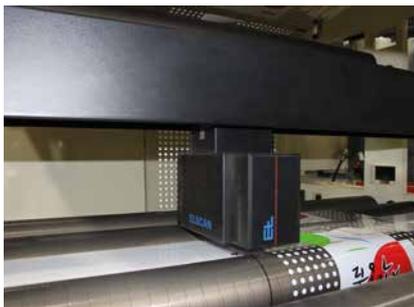
ELSCAN OMS4.6 motorized



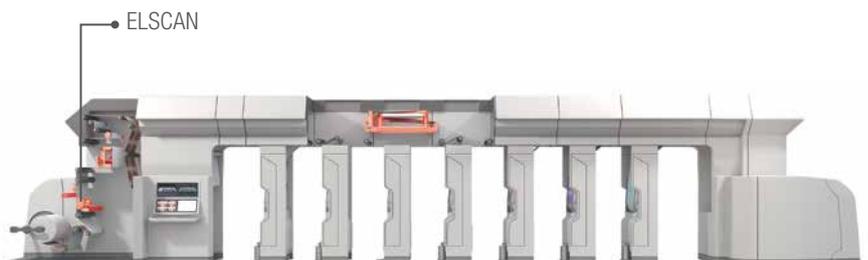
ELSCAN OMS4.6 on label printing machine



ELSCAN on label printing machine



ELSCAN OMS4.6 on gravure printing machine



ELSCAN on gravure printing machine

Web monitoring ELSCAN OMS4.6

Software standard functions

- Automatic scan both in direction of web travel and also traverse to the web
- 100% repeat display with fast navigation to any desired position
- Image stabilization for deviations up to ± 20 mm in the direction of web travel
- Manual measurement of objects in the print using measuring lines
- Master image comparison to detect the smallest changes during production

Software upgrades

- Position gallery for saving positions with individual zoom and brightness levels
- Color comparison for up to 6 homogeneous colors using Delta E evaluation
- Manual register pre-adjustment for e.g. CI flexo printing machines



Brilliant color rendering

Technical Data

Camera						
Type	Camera	Field of view	Resolution	Flash	Protection class	Web surfaces
OM 4110 Standard	2 x 5 megapixels, color (2,596 x 1,944 pixels)	From 120 x 90 mm to 6 x 5 mm	W: 46 μ m/550 dpi T: 13 μ m/1,880 dpi	Bright field	IP 40	Paper, labels, holograms
OM 4111 High resolution		From 90 x 67.5 mm to 5 x 4 mm	W: 35 μ m/730 dpi T: 10 μ m/2,440 dpi	Bright field		Paper, labels, holograms
OM 4112 UHD		From 24 x 18 mm to 1.5 x 1 mm	W: 9 μ m/2,750 dpi T: 3 μ m/8,400 dpi	Bright field		Paper, labels, film, holograms
OM 4120 Twin-flash		From 120 x 90 mm to 6 x 5 mm	W: 46 μ m/550 dpi T: 13 μ m/1,880 dpi	Dark field		Film, high gloss
OM 4130 UV		From 120 x 90 mm to 6 x 5 mm	W: 46 μ m/550 dpi T: 13 μ m/1,880 dpi	UV flash		Paper, labels, film

W = Wide-angle lens, T = Telephoto lens (figures correspond to the native resolution per camera chip)

IPC (industrial computer)

Operating voltage	100 – 240 V AC/400 W ($\pm 10\%$)
Nominal frequency	50 – 60 Hz
Protection class	IP 30
Connections	PS/2 / USB / DVI / 2 x DisplayPort

Monitor

Operating voltage	90 – 240 V AC/120 W ($\pm 10\%$)
Connection	DVI/DisplayPort
Resolution	19": 1,280 x 1,024 (4:3) 22" / 24": 1,920 x 1,080 (Full HD)
Variants	Standard / multitouch

Crossbeam

Crossbeam length max.	3,600 mm (frame inner dimension)
Operating width max.	3,250 mm
Installation	Between walls / single-sided mounting
Actuating speed	Up to 350 mm/s

System data

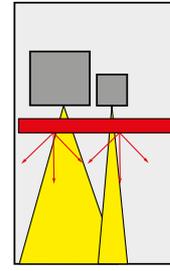
Web speed	Up to 1,000 m/min
Ambient temperature	+5 °C to +55 °C
Relative humidity	5 % to 95 % (non-condensing)

Flash systems for ELSCAN OMS4.6

Standard flash OM 4110/11/12 –

Bright field flash for paper and labels

- Diffuse xenon flash for matt and slightly reflecting materials
- Authentic rendering of gold, silver and other design colors
- Compact camera dimensions for confined installation space

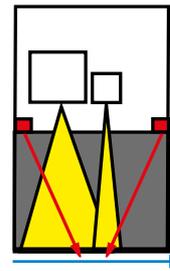


Label

Twin-flash OM 4120 –

Dark field flash for film

- Xenon flashes are arranged at an angle to the material path
- For high-gloss films and other highly reflecting materials
- Avoids reflections from flash sources and camera lenses in the image



Packaging film

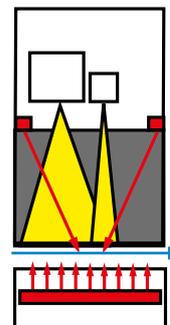
ADDITIONAL OPTION

- ELSCAN OMS4.6 is also available with LED UV illumination.

Rear flash OM 4401 –

For front and rear registers

- Mounting opposite the camera at the rear of the web
- Inspection of the front and rear registers on opaque materials with pixel level accuracy
- Contours become visible on the rear and allow the register to be inspected
- Brightness is sufficient for semi-transparent materials (such as paper, cardboard, film) up to a thickness of 240 g/m²
- Available as manual or motorized version



Security

Double-camera system

Two cameras combined on one computer

A second camera can be retrofitted to ELSCAN OMS4.6 using plug-and-play.

- Both cameras offset on the same side of the web or in the same position at the front and rear
- Independent operation of both cameras
- Coupled operation of both cameras (lead/follow mode)
- Grid lines for inspecting the front and rear registers

Typical applications

- Camera 1 for register inspection or color monitoring / camera 2 for independent working
- Monitoring of sequential processes
- Parallel monitoring of the left and right web edge
- Inspection of front and rear registers
- Combination of white light and UV light

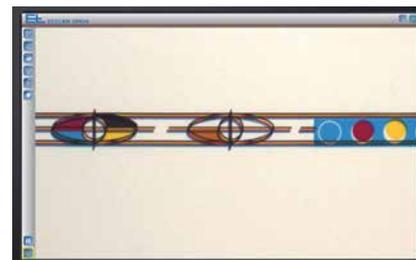


Two monitors

- Display of both camera images on two separate monitors



Camera 1



Camera 2

One monitor with two camera images

- Full-screen display of the selected camera with thumbnail of the second camera image
- Split-screen display of both camera images (horizontal/vertical)



Full-screen display with thumbnail



Vertical split-screen

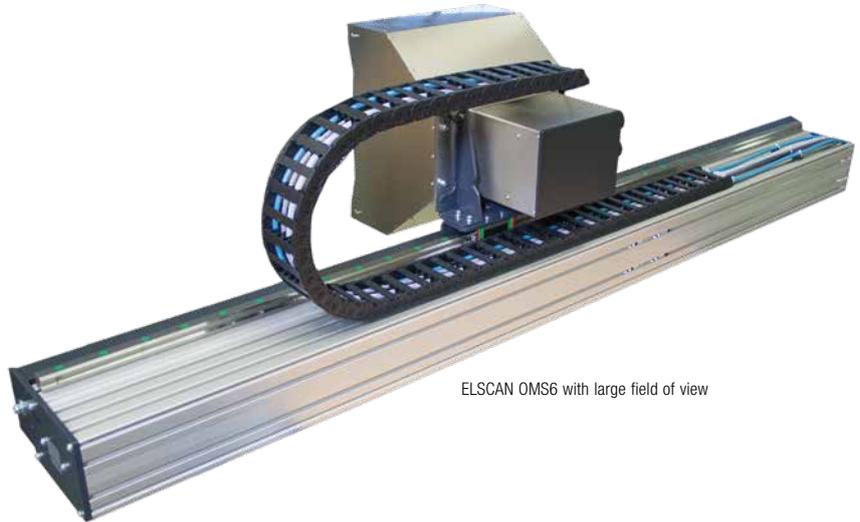
Web monitoring ELSCAN OMS6

ELSCAN OMS 6 –

High End with large field of view

ELSCAN OMS6 is the high-end system in the ELSCAN family. With its expanded field of view of 234 x 124 mm and detailed resolution in 4k quality, it impresses in every aspect. Due to its high-speed crossbeam, the camera is moved precisely to any position in the machine with an acceleration of up to 10 m/s²; it is therefore the perfect solution for operating widths of up to 3,250 mm.

- "dualView" camera system with 2x 12-megapixel cameras (4k resolution)
- Selection of LED flash systems for different web surfaces (white light, varnish flash, UV flash, background/backlight flash)
- Changeover between front and rear inspection for web inversion
- Remote maintenance access for service



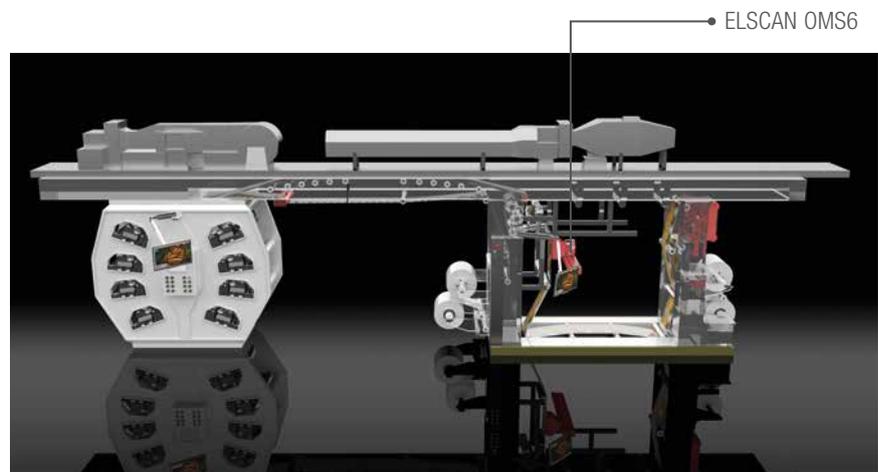
ELSCAN OMS6 with large field of view



ELSCAN OMS6 on flexo printing machine



ELSCAN OMS6 on gravure printing machine



ELSCAN OMS6 on CI flexo printing machine

Web monitoring ELSCAN OMS6

Standard functions

- Modern multitouch operation
- Ultra-short LED flash for speeds up to 1,300 m/min
- Scan functions traverse to the web and in direction of web travel
- 100% repeat display with complete overview for fast navigation to the desired position
- Position gallery for saving positions with individual zoom and brightness levels
- Image stabilization
- Master image comparison to detect the smallest changes during production



Technical data

Camera						
Type	Camera	Field of view	Resolution	Flash	Protection class	Web surfaces

OM 6120	2 x 23 megapixel, color (4,096 x 2,160 pixels)	From 234 x 124 mm to 8 x 4 mm	W: 56 µm / 450 dpi T: 12 µm / 2,080 dpi	LED (dark field, light field, UV)	IP 40	Paper, aluminum, film (opaque, transparent, reflecting)
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W = Wide-angle lens, T = Telephoto lens (figures correspond to the native resolution per camera chip on a 16:9 monitor display)

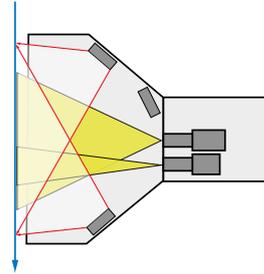
Control cabinet with IPC (industrial computer)		Monitor	
Operating voltage	90 – 240 V AC / 150 W (±10%)	Operating voltage	90 – 240 V AC / 120 W (±10%)
Nominal frequency	50 – 60 Hz	Resolution	22" / 24" - 1,920 x 1,080 (Full HD)
Protection class	IP 54	Connection	DVI / DisplayPort
Connections	DVI / DisplayPort / USB	Operation	Multitouch

Crossbeam		System data	
Length (frame inner dimension)	Max. 3,600 mm	Web speed	Max. 1,300 m/min
Operating width max.	3,250 mm	Data interface	Ethernet
Actuating speed	Up to 1,000 mm/s	Ambient temperature	+5 °C to +55 °C
Acceleration	2 m/s ² (max. 10 m/s ²)	Relative humidity	5 % to 95 % (non-condensing)

Flash systems for ELSCAN OMS6

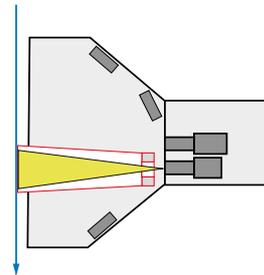
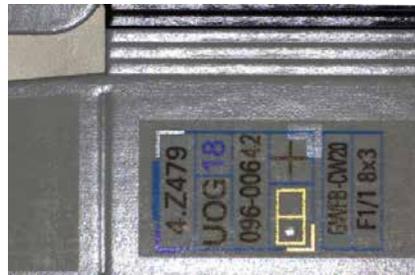
Dark field flash (standard)

- Indirect lighting is standard for ELSCAN OMS6 cameras.
- Prints with reflecting or glossy surfaces are displayed with highest color fidelity
- Spectral color deviation ≤ 8 Delta E



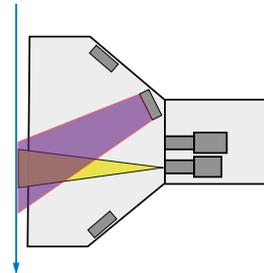
Varnish flash for coating

- Optionally, the ELSCAN OMS6 telephoto camera can be equipped with a varnish flash.
- Coatings, paints and adhesives applied become visible
- The varnish flash can be switched on as required



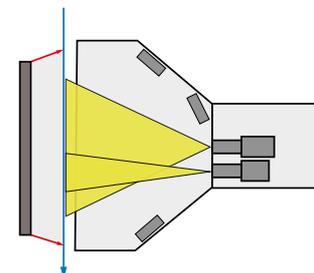
UV flash for fluorescent colors

- Optionally, the ELSCAN OMS6 telephoto camera can be equipped with a UV flash.
- For highlighting and/or making visible security features and UV effects
- The UV flash can be switched on as required



Rear flash

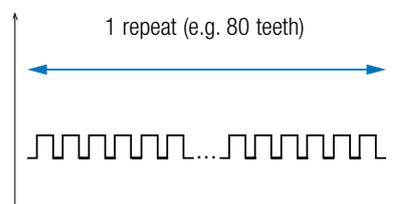
- The ELSCAN OMS6 system is available with motorized and continuous rear flash.
- Inspection of front and rear registers
- Enhanced contrast for opaque and transparent film prints
- Display of, for instance, watermarks



Synchronization OMS3, OMS4.6, OMS6

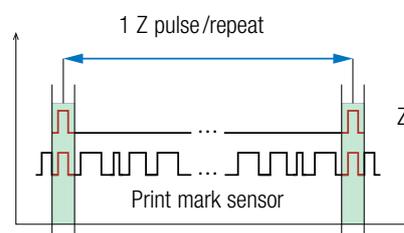
Gearwheel sensor

- Synchronization method on label printing machines
- Typical = e.g. 80 teeth/10 inch
- Gearwheel on the print roller



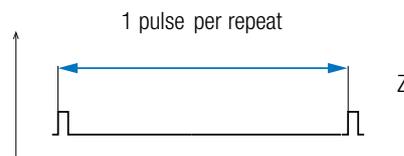
Print mark sensor

- Synchronization via print image
- Intelligent trigger logic automatically detects repeat signal in the print image



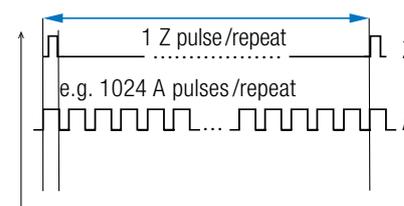
Proximity switch

- Synchronization via repeat signal
- 1 pulse per print cylinder rotation
- Mounted on the shaft of the print roller



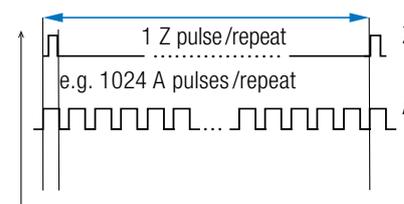
Encoder

- Encoders supply repeat signals and A/B lane
- Attachment to the print roller axle or via measuring wheel



Printing machine signal

- Modern drive controllers provide emulated encoder signals for synchronization



Function modules

Autoscan X *

- In the Autoscan X mode, the entire width of the repeat is scanned at any position along the length of the repeat

OMS3	OMS4.6	OMS6
■	■	■

x (transverse to direction of web travel)



Autoscan Y

- In the Autoscan Y mode, the repeat is scanned in the direction of web travel, at any position transverse to the web

OMS3	OMS4.6	OMS6
■	■	■

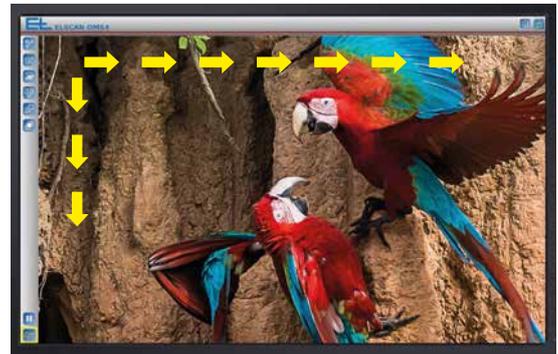
y (in direction of web travel)



Autoscan 100% *

- Scanning the repeat in X and Y direction

OMS3	OMS4.6	OMS6
■	■	■



Meander Scan *

- The camera scans the entire repeat by meandering over the print image

OMS3	OMS4.6	OMS6
	■	■



* Only with motorized crossbeam

Function modules

100% repeat overview

- Display of the entire repeat overview
- The repeat is built up one image after the other
- Each position in the repeat overview can be selected directly and quickly by clicking with the mouse

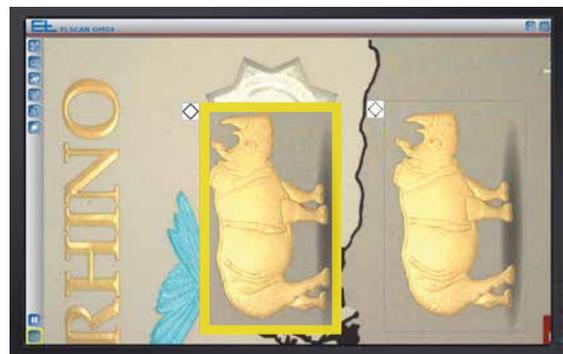
OMS3	OMS4.6	OMS6
	■	■



Master image comparison

- Define and save a reference area on the repeat in the print image
- The smallest changes in color or position can be detected optimally using image-in-image
- Master image and associated position are saved and can be retrieved at any time

OMS3	OMS4.6	OMS6
	■	■



Measuring lines

- 2 vertical measuring lines and 2 horizontal measuring lines can be positioned as required using the mouse
- Measuring accuracy down to 1/10 mm
- For inspecting die cutting positions in the print
- Measurement of panels
- Inspection of the web tension on flexible materials

OMS3	OMS4.6	OMS6
	■	■

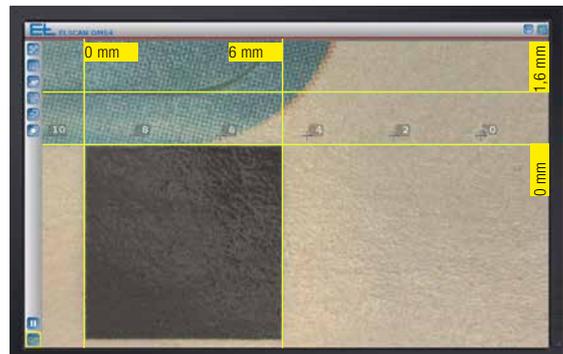
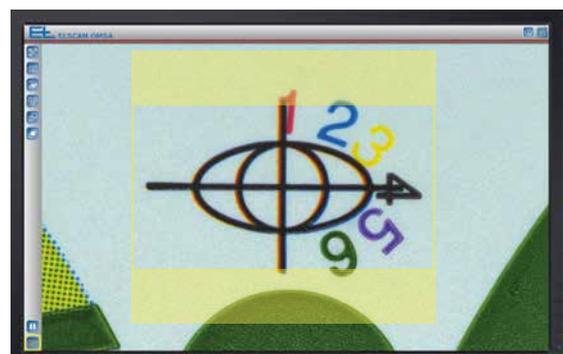


Image stabilization

- Jitter, for instance caused by web elongation during printing, can be compensated in the direction of web travel
- The details of register marks can be monitored precisely on screen without "skipping"

OMS3	OMS4.6	OMS6
■	■	■



Function modules

Position gallery

- Up to 5/21/30 positions can be saved in the position gallery with zoom and brightness levels
- The saved positions are shown in a continuous loop and can be selected specifically
- Additional functions such as master image or color comparison are taken into account
- Double-camera systems can switch freely from position to position between the cameras
- In each position, it is also possible to vary individually between lead/follow and single camera mode.
- A rear flash is also possible instead of the second camera for inspecting the front and rear registers
- A program library provides quick access for repeat orders
- Saved programs can be edited

OMS3	OMS4.6	OMS6
■	■	■



Delta E color comparison

- The high image quality allows precise color inspection over the entire job
- Minimal color deviations are detected
- The color comparison is excellently suited to color bars
- In combination with the position gallery, each position can have a color measurement zone
- Image stabilization guarantees that the correct color area is analyzed if slip or web elongation occurs
- Signal output for alarms (24 V signal)

OMS3	OMS4.6	OMS6
■	■	■



General evaluation of ΔE

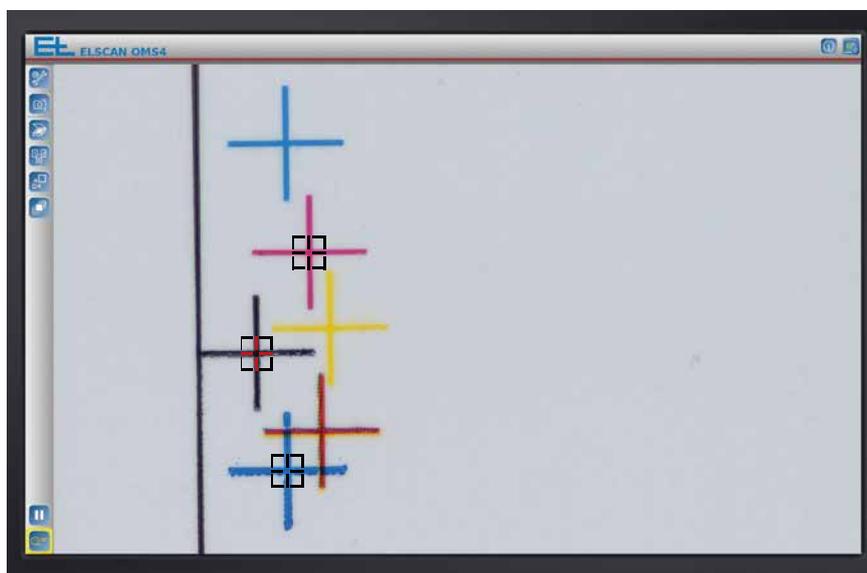
ΔE	Evaluation
0.0 ... 0.5	No difference to almost no difference
0.5 ... 1.0	Difference can be distinguished by trained eyes
1.0 ... 2.0	Imperceptible color difference (2.0 = typical limit)
2.0 ... 4.0	Perceptible color difference
4.0 ... 5.0	Significant color difference that is rarely tolerated
Above 5.0	The difference is evaluated as a different color

Register Pre-Adjustment (RPA)

Ideal printing, more quickly

ELSCAN RPA (Register Pre-Adjustment) was specially developed for the flexo printing area. Due to the easy operation, the register can be set much more quickly on flexo printing machines while setting up a new print job or while a process is running, in this way waste can be avoided and costs reduced.

ELSCAN RPA combines register pre-adjustment with web monitoring – everything in one system. After setting up, the camera system is ready for web monitoring and can be moved to any position on the repeat to display the related images in high resolution on the monitor.



RPA in detail

- For quick matching of the color register on, for instance, CI flexo printing machines
- Measuring accuracy higher than 50 µm due to high screen resolution and lenses with fixed focal length
- The individual register marks are selected with the mouse and the distances between them measured traverse and longitudinally to the web
- The established deviations are transferred to the printing press
- Up to 12 printing units are supported
- Printing unit configurations created are stored in the archive
- The interface to the printing press is implemented via Ethernet



Fine register adjustment on a selected printing unit



Register adjustment for all printing units



You will find more detailed information in the separate brochure "ELSCAN RPA" (PRO--251203).

Questionnaire 1/3

General data			
Customer			
Street			
Zip code		City/town	
Country		Internet	
Contact person			
Phone		e-Mail	
Project			

Technical Data			
Type of machine			
Make			
Position on the machine			
Frame inner dimension	GI _____ mm		
Web type	<input type="checkbox"/> Printed paper	<input type="checkbox"/> Printed film	<input type="checkbox"/> _____
Web width	Min. _____ mm	Max. _____ mm	
Web speed	Min. _____ m/min	Max. _____ m/min	
Ambient temperature	_____ °C		
Ambient conditions	<input type="checkbox"/> Dry	<input type="checkbox"/> Dusty	<input type="checkbox"/> _____
Operating voltage	_____ V	_____ Hz	

Comments			

Date		Issuer	
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Questionnaire 2/3

Specification, ELSCAN OMS3

Camera positioning	Positioning:	<input type="checkbox"/> Manual	<input type="checkbox"/> Motorized
Operation	<input type="checkbox"/> Mouse	<input type="checkbox"/> Cordless mouse	<input type="checkbox"/> Trackball
	Cable length crossbeam – mouse:	<input type="checkbox"/> 1.8 m	<input type="checkbox"/> ___ m
	<input type="checkbox"/> Keypad without holder	<input type="checkbox"/> Keypad with holder	
	Cable length crossbeam – keypad:	<input type="checkbox"/> 0.9 m	<input type="checkbox"/> ___ m
	<input type="checkbox"/> Touch monitor		
Monitor	Screen diagonals:	<input type="checkbox"/> 22" (16:9, 1920 x 1080)	<input type="checkbox"/> Diagonal _____"
	Cable length:	<input type="checkbox"/> 3 m	<input type="checkbox"/> 5 m <input type="checkbox"/> ___ m
Optional	<input type="checkbox"/> 24 V power supply unit panel mounted kit	<input type="checkbox"/> 24 V power supply unit in housing	
	<input type="checkbox"/> Monitor pivoting arm	<input type="checkbox"/> Mouse tray	<input type="checkbox"/> Trackball holder

Specification, ELSCAN OMS4.6

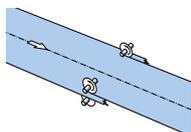
Front camera	<input type="checkbox"/> Standard (120 x 90 mm)	<input type="checkbox"/> High resolution (90 x 67 mm)	<input type="checkbox"/> UHD (24 x 18 mm)
	<input type="checkbox"/> Twin-flash (120 x 90 mm)	<input type="checkbox"/> UV flash (120 x 90 mm)	
	Positioning:	<input type="checkbox"/> Manual	<input type="checkbox"/> Motorized
	Assembly:	<input type="checkbox"/> One-sided (cantilever)	<input type="checkbox"/> Both sides (GI > 700 mm)
	Crossbeam:	<input type="checkbox"/> Compact	<input type="checkbox"/> Standard
	Cable length:	<input type="checkbox"/> 3 m	<input type="checkbox"/> 5 m
Rear camera	<input type="checkbox"/> Standard (120 x 90 mm)	<input type="checkbox"/> High resolution (90 x 67 mm)	<input type="checkbox"/> UHD (24 x 18 mm)
	<input type="checkbox"/> Twin-flash (120 x 90 mm)	<input type="checkbox"/> UV flash (120 x 90 mm)	
	Positioning:	<input type="checkbox"/> Manual	<input type="checkbox"/> Motorized
	Assembly:	<input type="checkbox"/> One-sided (cantilever)	<input type="checkbox"/> Both sides (GI > 700 mm)
	Cable length:	<input type="checkbox"/> 3 m	<input type="checkbox"/> 5 m
Rear flash	<input type="checkbox"/> Without	<input type="checkbox"/> Manual	<input type="checkbox"/> Motorized
Operation	<input type="checkbox"/> Mouse	<input type="checkbox"/> Cordless mouse	<input type="checkbox"/> Trackball
	Cable length PC – mouse:	<input type="checkbox"/> 1.8 m	<input type="checkbox"/> ___ m
	<input type="checkbox"/> Keypad without holder	<input type="checkbox"/> Keypad with holder	
	Cable length PC – keypad:	<input type="checkbox"/> 0.9 m	<input type="checkbox"/> ___ m <input type="checkbox"/> _____m
	<input type="checkbox"/> Multitouch monitor:	<input type="checkbox"/> Diagonal 22"	<input type="checkbox"/> Diagonal _____"
Monitor 1	Screen diagonals:	<input type="checkbox"/> 19" (4:3, 1280 x 1024)	<input type="checkbox"/> 24" Full HD (1920 x 1080)
	Cable length:	<input type="checkbox"/> _____ m (max. 100 m)	
Monitor 2 (must have the same resolution as monitor 1!)	Screen diagonals:	<input type="checkbox"/> 19" (4:3, 1280 x 1024)	<input type="checkbox"/> 24" Full HD (1920 x 1080)
	Cable length:	<input type="checkbox"/> _____ m (max. 100 m)	
Additional modules	<input type="checkbox"/> Position gallery	<input type="checkbox"/> Color comparison	<input type="checkbox"/> Register pre-adjustment
Optional	<input type="checkbox"/> Monitor pivoting arm	<input type="checkbox"/> Mouse tray	<input type="checkbox"/> Trackball holder

Questionnaire 3/3

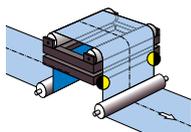
Specification, ELSCAN OMS6			
Camera	Cable length camera – control cabinet:	<input type="checkbox"/> 10 m	<input type="checkbox"/> 20 m
	Addition flash:	<input type="checkbox"/> Varnish flash	<input type="checkbox"/> UV flash
Rear flash	<input type="checkbox"/> Background flash:	<input type="checkbox"/> Motorized adjustment	<input type="checkbox"/> Continuous
	<input type="checkbox"/> Backlight flash		
	<input type="checkbox"/> Passive background plate		
Monitor 1	Screen diagonals:	<input type="checkbox"/> 22" <input type="checkbox"/> 24"	
	Cable length:	<input type="checkbox"/> _____ m	
Monitor 2 (must have the same resolution as monitor 1!)	<input type="checkbox"/> 2nd monitor	<input type="checkbox"/> 22" <input type="checkbox"/> 24" <input type="checkbox"/> _____"	
	Cable length:	<input type="checkbox"/> _____ m	
Auxiliary module	<input type="checkbox"/> Color comparison	<input type="checkbox"/> Haze module	
Optional	<input type="checkbox"/> Monitor pivoting arm	<input type="checkbox"/> Park position monitoring	

Specification, synchronization for OMS3 / OMS4.6 / OMS6			
Synchronization	<input type="checkbox"/> Encoder with shaft coupling (A,B,Z signal)	Cable length: <input type="checkbox"/> 10 m <input type="checkbox"/> 15 m <input type="checkbox"/> ___m	<input type="checkbox"/> With attachments
	<input type="checkbox"/> Encoder with wheel (A, B signal)	Cable length: <input type="checkbox"/> 10 m <input type="checkbox"/> 15 m <input type="checkbox"/> ___m	<input type="checkbox"/> With attachments
	<input type="checkbox"/> Gearwheel sensor	Cable length: <input type="checkbox"/> 10 m <input type="checkbox"/> 15 m <input type="checkbox"/> ___m	<input type="checkbox"/> With attachments
	<input type="checkbox"/> Print mark sensor	Cable length: <input type="checkbox"/> 5 m <input type="checkbox"/> 10 m <input type="checkbox"/> 15 m <input type="checkbox"/> ___m	<input type="checkbox"/> With attachments
	<input type="checkbox"/> Proximity switch	Cable length: <input type="checkbox"/> 5 m <input type="checkbox"/> 10 m <input type="checkbox"/> 15 m <input type="checkbox"/> ___m	<input type="checkbox"/> With attachments
	<input type="checkbox"/> Signal provided by printing press	Cable length: <input type="checkbox"/> 10 m <input type="checkbox"/> 15 m <input type="checkbox"/> ___m	<input type="checkbox"/> NPN <input type="checkbox"/> PNP <input type="checkbox"/> Push/Pull <input type="checkbox"/> Differential

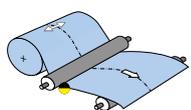
Other products for the paper and film/foil industry



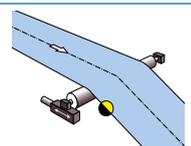
ELCUT – Web cutting systems



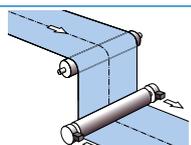
ELGUIDER – Web guiding systems



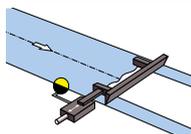
ELWINDER – Web guiding systems for winding stations
(brushless)



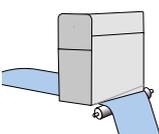
ELBANDER – Belt position control systems



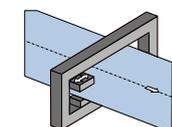
ELTENS – Web tension control systems



ELPOSER – Positioning and follow-up control systems



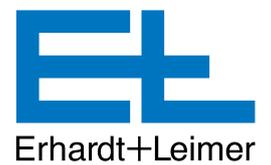
SMARTSCAN – Print inspection systems



ELTIM – Thickness measurement systems

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