



meshcon\_3

**Quick to Register**

→ CI flexo print



**eltromat** – since 1960 we have developed and produced control equipment to optimize printing processes. We are an innovative partner of machine manufacturers and printers. Our products are installed in many printing companies that have high demands regarding efficiency and quality.

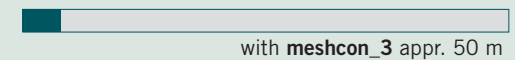
**eltromat** products are applied to rotogravure as well as flexo, offset and screen printing processes. A modular concept allows installations from the easiest web viewing system up to a complete 100% inspection system. Upgrades are easy and a great value.

Please feel free to ask about reference installations.

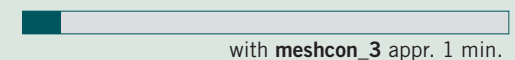
# meshcon\_3

## PRINT-QUALITY-SYSTEM FOR REGISTER CONTROL AND WEB INSPECTION

### WASTE MATERIAL



### TIME



Electronic web inspection and register control combined in one system – **meshcon\_3** is the result of a modular system technology made by **eltromat** and specified for the CI flexo printers. With this *Print-QualitySystem* printers world-wide are increasing their productivity while costs are drastically reduced. Length and side register are automatically adjusted immediately after start-up – this saves time and waste. Furthermore, a high quality standard is obtained due to continuous print inspection.

**meshcon\_3** is designed as an open system which can be upgraded by additional video options, such as Top To Bottom module, inspection modules, and many others.

The system provides comfortable operation via *Touch-Screen* and *TouchFrame (optional)* as well as high speed processor technology.

		→ meshcon_3		
→ drive	register	vision	colour	flow
	DGC 650	<b>web video_3000</b>		
	DGC 750	barcode module		
	DRC 200	inspection module		
	<b>control module</b>	TTB module		

## SEEING WHAT'S IMPORTANT

A camera is mounted onto a high-precision traverse bar moving across the web. All positions stored by the operator will be repeated automatically, micro register marks measured and images picked-up and compared with master images – manually or automatically. This and more is electronic print inspection.

### Cameras

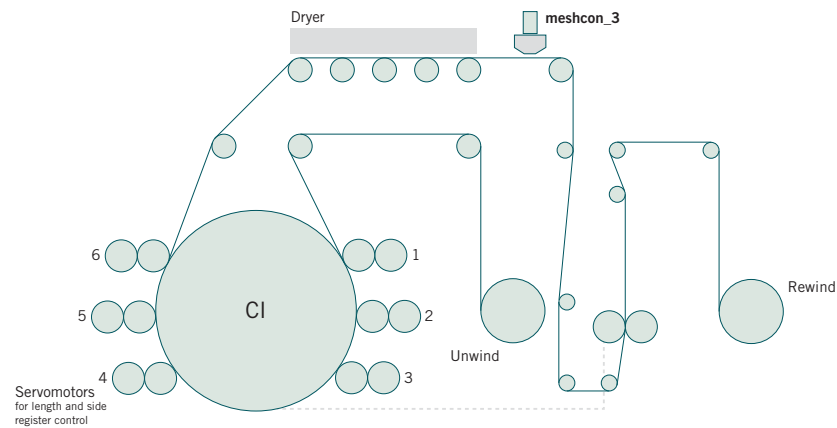
3-chip CCD cameras ensure a high-resolution real-time image reproduction. Up to 2 cameras can be placed in the system.

### Monitors

Full-size image reproduction or, as an option, split screen mode or picture in picture mode. Additional monitors can be connected.



## CI-FLEXP PRINT



For further information please refer to the [eltromat\\_vision](#) brochure

### Operation

Easy operation is obtained via the *TouchScreen*. Also, quick camera positioning is available with an optional joystick or *TouchFrame*. The *TouchFrame* uses modern sensor technology to create a fine-meshed grid over the printed pattern. A finger-touch defines the required position of the camera. The current camera positions are continuously displayed for the operator's benefit.

### Surfaces

Additional and optional special strobes allow an inspection of varnish and cold seal coatings, holograms and fluorescent printed materials.

The inspection of front to backside print with translucent material is possible using the translucent light option.

### Multi image repeat

This option lets the system determine the coordinates of all single impressions and steps through them sequentially so that each impression is inspected individually, with or without a sensor for automatic web edge recognition.



## FAST INTO REGISTER

While the press is not running, the operator enters the job specific data – using the *TouchScreen* or via online link. After machine start-up all register marks are measured at the same time leading to all register motors being controlled simultaneously – after less than 60 seconds the print is in register.

### **Register**

A special trigger sensor (coupled with the camera) allows the fine synchronization of the automatic mark recognition system by immediately finding and holding the register mark position. After machine start-up, the camera automatically moves to the micro marks and the register control adjusts length and side register within the shortest possible time.

During production, the register marks are measured cyclically as preset by the operator. Register deviations are displayed and corrected within seconds.

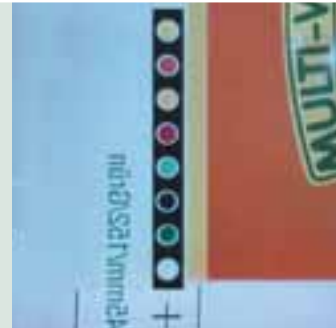
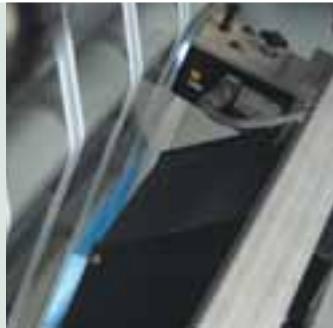
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#### The Advantages:

1. Substantial savings of time and waste by simultaneous adjustment of length and side register of all printing units.
2. Improved print quality and more constant register by absolute register measurement of the micro marks.
3. Improved production control through cyclical register measurement during production, and an alarm indicates when a register mark is missed.

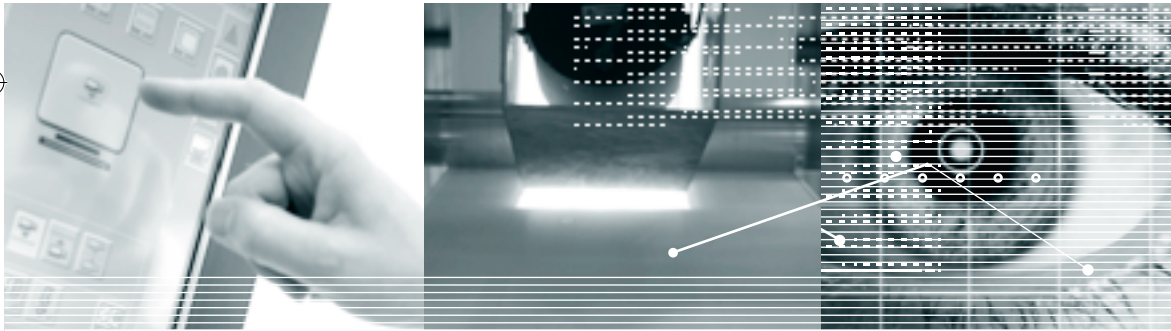
The absolute register measurement is based upon the comparison of the actual image with the master reference image. Any preset parameters can be varied during production. The system can be adapted to register mark arrangements placed across or ahead. As an option, the system can use customers specific register mark patterns.

**meshcon\_3** offers interfaces to many register motors as well as BUS interfaces to PLC systems common in the market.



For further information please refer to the [eltromat\\_register](#) brochure





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