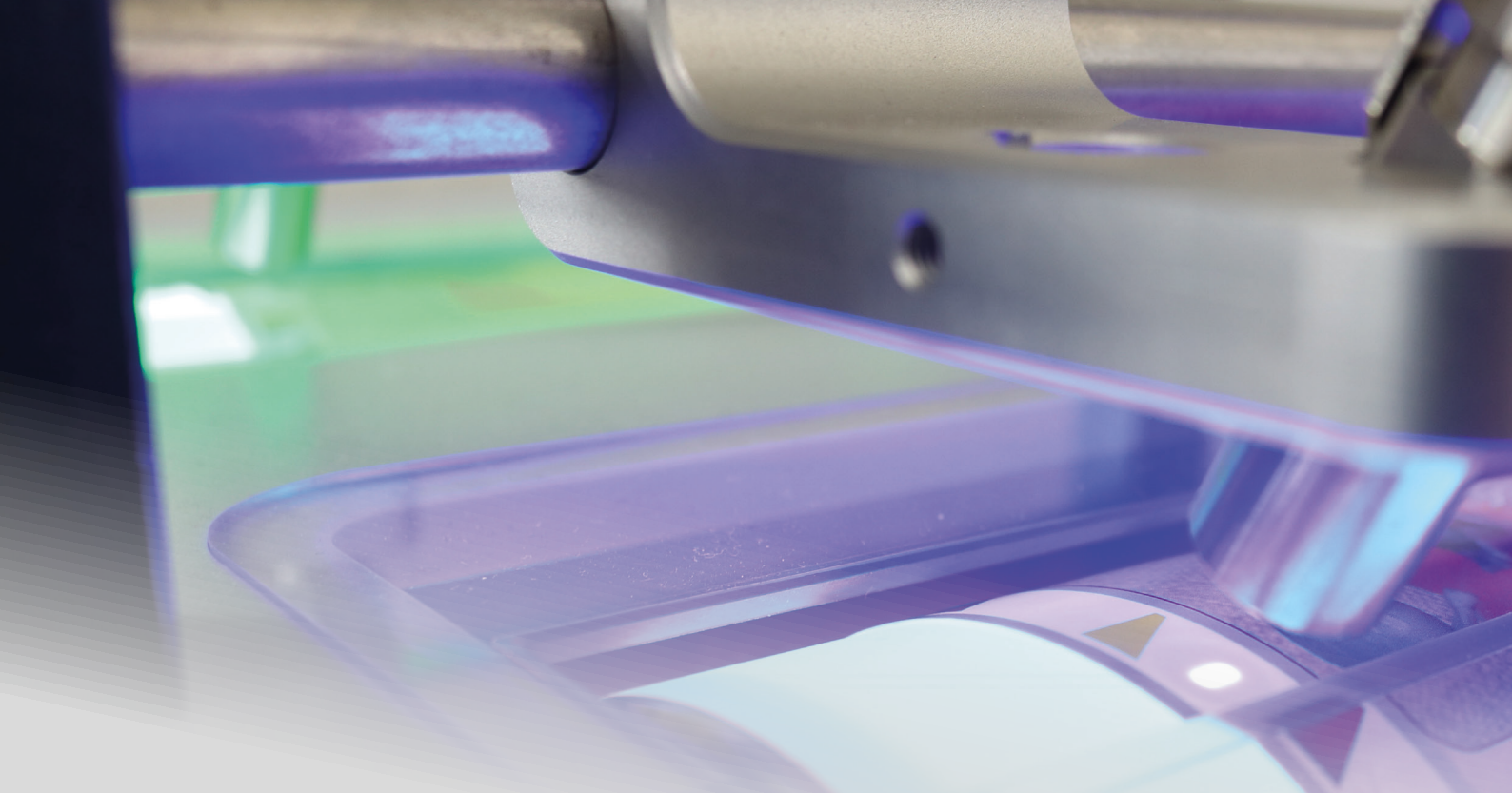
Highest register precision.
First-class quality.

Register Control

TWINStar

eltromat
BST GROUP



TWINStar

Innovative register control

Competition in the printing industry is tough and the requirements are constantly increasing. Precise control of the print image is the key to excellent print products.

Precision from experience
As a leading manufacturer of quality assurance systems for the web processing industries, the BST Group has completed more than 200,000 installations in over 100 countries worldwide and can look back on more than 60 years experience in the field of register control.

The new eltromat TWINStar is a compact register control system for control of up to two control stations.

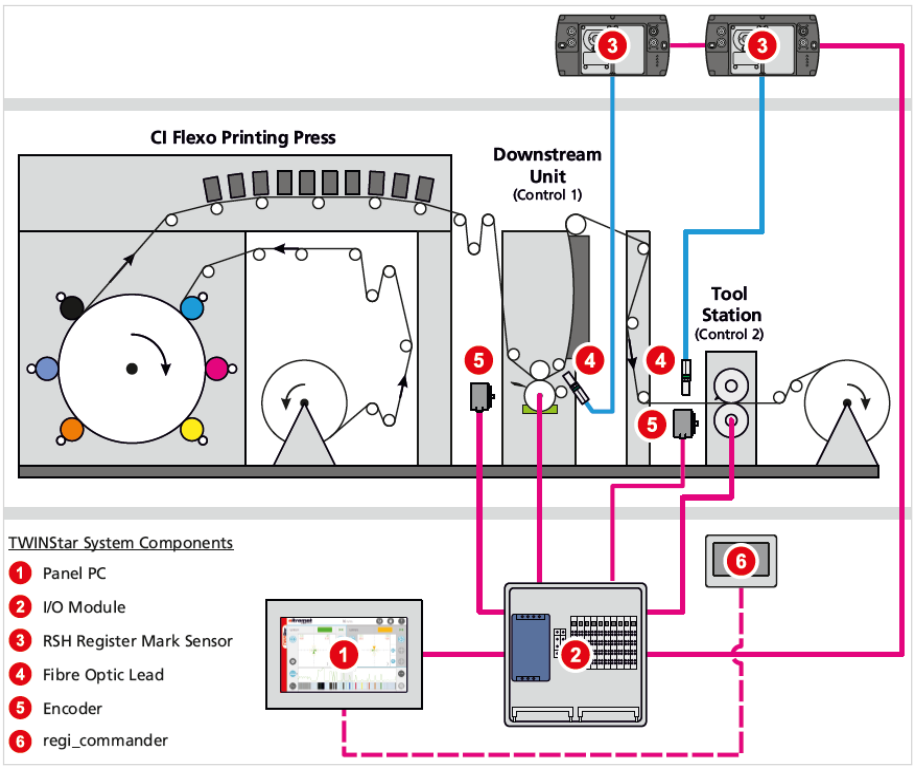
TWINStar is our response to new challenges.
With its extensive scope of functions, it is the perfect solution for a wide range of applications. Typical areas of application are, for example, hybrid printing presses or converting machines in which different printing and converting processes are combined. **TWINStar** shows its class in the control of downstream printing units, of finishing or tooling stations or in the insetting of pre-printed materials.

Thanks to its flexible system architecture, the modular system is suitable for use on new machines as well as for retrofits on existing ones.

TWINStar - Your benefits:

- minimum **waste**
- reduced **production costs**
- fast **set-up times**
- easy **handling**
- maximum **quality**
- high process **reliability**
- increased **productivity**

Do you have special requirements? Just get in touch with us. We will be happy to help you.



System configuration
The schematic illustration shows a typical system configuration of the **TWINStar** register control system for use on a CI-flexo printing press with two control stations for controlling a downstream printing unit and a tool station.

TWINStar

Options

RegiTouch – semi-automatic register presetting
The **RegiTouch** function allows to bring selected register marks quickly and easily into the measuring gate.

Insetter control
For register-true insetting of pre-printed webs and for electronic transmission adjustment of tools, insetter modules are available.

Remote maintenance module
With the help of the remote maintenance module the system can be maintained easily and quickly by remote diagnosis via the Internet.

regi_commander control panel
With the compact **regi_commander** operating panel, register deviations can be corrected directly at the printing unit or at the tool station.

Chart outputs for recording
Special analog chart recording outputs can be used for external recording and analyzation of register deviations.

Determining the printing cylinder positions
The printing cylinder positions of all printing units are required for the make-ready process of the press. The register mark sensors determine and provide this information.

Integration interfaces for process data
For the exchange of relevant process data and status information with the machine control system, PROFINET integration interfaces are available.

Convincing technology.

First class register control

The system features of the TWINStar have been perfectly matched to printing applications with the highest requirements in terms of quality, flexibility and performance.

Standard features in the basic system
Even the basic configuration offers you a wide range of intelligent functions for effective register control.

Reliable mark detection

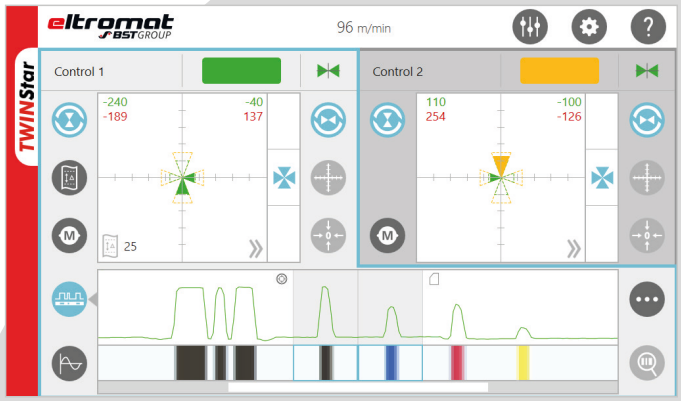
Waste reduction under all production conditions
The adaptive **RSH** fiber optic register mark sensor of the **TWINStar** is able to detect even extremely low-contrast and metallized colors as well as transparent coatings.

With its fully automatic, optimal scanning technology, **TWINStar** supports both the eltromat single-head and the standard dual-head measuring method. By using the different measuring methods web-web and web-cylinder in any combination and the highly dynamic control modules specially optimized for the respective application, a maximum of waste and cost reduction can be achieved.

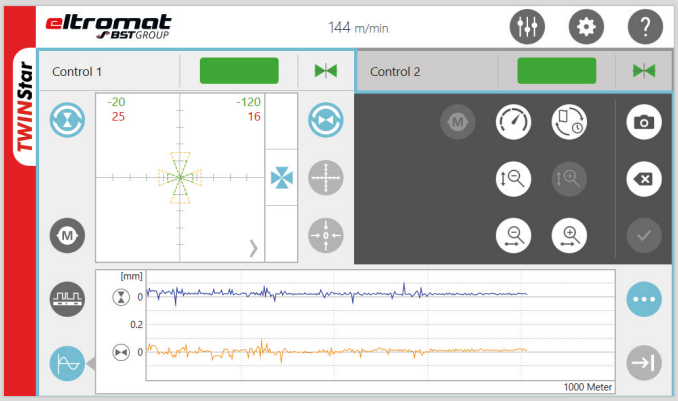
One View, one Click

Simple, intuitive operation
The newly designed operating concept provides all important information at a glance at all times. All necessary functions are reachable with just one click.

The modern touchscreen user interface offers efficient handling of the register control system. The clearly structured concept provides the operator with a maximum of comfort.



Live image of the register marks
The colored display of the live image of the detected register marks and the recorded mark signal (oscilloscope view) on the user interface allows the operator to clearly assign even low contrast register marks.



RegiChart - Register trend display
RegiChart visualizes the register trends of all control stations clearly over time or distance. **RegiChart** supports the operator during the running production to recognize deviation trends. In this way waste is avoided in advance.

TWINStar

Technical data

Register control

Number of printing units	1 or 2
Maximum web speed	1,200 m/min
Format length	50 – 6,000 mm
Applications	Gravure printing, flexo printing, offset printing, screen printing, hybrid machines, processing units
Measurement methods	web-web 1, web-web 2, web-cylinder
Control algorithms	Gravure, Offset, Insetter

Sensors

Variations	RSH fiber optics, 1- and 2-channel
Measuring resolution	max. ± 5 µm
Measuring frequency	max. 30 Hz
Register marks	Wedge marks, block marks, special printing features
Materials	Paper, foil, metallized substrates (opaque, transparent, reflective)
ATEX approval (RSH fiber optics sensor only)	CE 0123 Ex II 2G [Ex op is T4 GB] IIB

System

Operation monitor	Panel PC (installation version) with 10.1“ TFT touchscreen; 1,024 x 600 pixels Dimensions: 275 mm x 190 mm
Interfaces	Ethernet for remote maintenance and data exchange, PROFINET for machine integration
Digital inputs	24 V according to EN 61131-2, Type 3
Digital outputs	24 V, 0.5 A, short-circuit proof
Power supply	100 – 240 V AC / 50–60 Hz, 4 A
Ambient temperature	Panel PC: 0 - 55 °C (32 - 131 °F) PLC: 0 - 40 °C (32 - 104 °F) Sensor: 0 - 50 °C (32 - 122 °F)

BST Group

SMART SERVICE TO HELP YOU ACHIEVE THE NEXT LEVEL.

No matter where in the world you use our technologies: We support you reliably at all times with our comprehensive BST Group service.

Our specialists are internationally on the road for you and quickly on site when you need them. You can rely on a comprehensive, global production, sales and service network - for first-class performance at any location.

For your optimum benefit, we always adapt our systems exactly to the conditions in your production. Combine solutions from our different product areas:

- Web guiding
- 100% inspection
- Register control
- Video web inspection
- Color measurement
- Surface inspection
- Color management
- Workflow
- Automation

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