

## // Overview of Controllers



*Be inspired. Move forward.*

# BST CONTROLLERS: THE MOST MODERN TECHNOLOGY. PRECISE WEB GUIDANCE.

**Modern production machines for working and processing of web-shaped work at the highest speeds – therefore they must always reliably deliver flawless results.**

Through a comparison of real and nominal values, BST controllers ensure that the material is placed exactly in its intended position.

The compact design of all BST controllers allows direct fitting onto or into the guiding device or your machine. With a variety of connectable components, the devices can be optimally adjusted in every case to your particular tasks.

All controllers come with ports for various sensors (ultrasonic, optical, line and contrast sensors as well as scan line cameras) and actuators drives of various performance classes (with and without position feedback).

## ECO EKR CON 100 – EASY HANDLING FOR RELIABLE RESULTS

**The ekr CON 100 scores high points through its user-friendliness as well as through its precise working methods.**

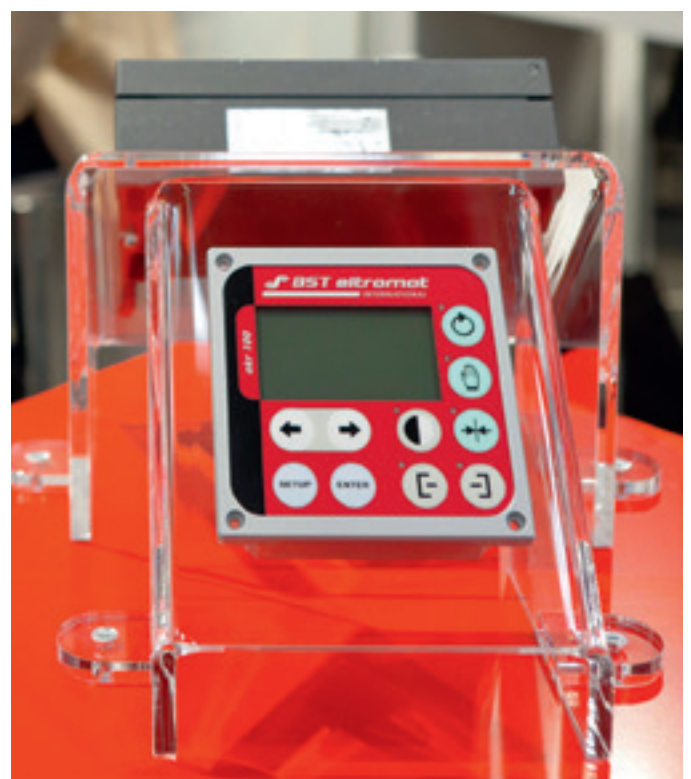
As a controller for all standard web guiding applications, this system is versatile and meets all requested features with the highest reliability.

Commissioning takes place quickly and easily through a plug-and-play feature. Through the use of connectors, the exchange processes can be performed without difficulty every time. Digital edge sensors can be effortlessly integrated into the system.

Due to its first-rate price-performance ratio makes the ekr 100 is an attractive solution for all common web guiding applications.

### **ekr CON 100 – Your benefits at a glance:**

- Fast commissioning (Plug & Play)
- Easy to replace
- Simple handling
- USB Port for service
- Remote control via digital inputs



# BASIC

## EKR 500 DIGITAL – COMPACT, SIMPLE, CLEAR.

**The functional scope of this reliable and affordable controller is specifically aligned to classic web guiding applications.**

ekr 500 digital particularly stands out because of its user-friendliness and convenient commissioning and operation. The compact controller design and the removable control unit allow for comfortable handling even when it is installed in places which are hard to get to.

The clear LC display graphically shows all relevant data including web position, sensor coverage and actuators drive position. The commander may function up to 20 m (65 feet) away from the controller. This allows for universal handling, fewer cables and simple wiring. A galvanically-isolated CAN bus can be used for networking with other BST controllers. Communication with your machine's PLC is possible through an optional C2E-coupler. The service interface functions via a USB connection.

### **ekr 500 digital – Your benefits at a glance:**

- Fast commissioning (Plug & Play)
- Easy to replace
- Simple handling
- USB port for service
- CAN-hub technology
- Electronic remote precision adjustment (efe digital)
- Remote control via digital inputs
- digitale Outputs



## ADVANCED

# EKRPRO COM<sup>60</sup> – MAXIMUM EASE OF USE.

### The ekrPro Com<sup>60</sup> stands out due to its simple installation and clear control elements.

After selection of the connected components (sensors, actuators etc.) in the set-up menu, all relevant control parameters are automatically adjusted. Therefore, the user only has to select the control functions (automatic, manual or servo-center position) and the scanning mode (left or right web edge, center-line guiding).

The ekrPro Com<sup>60</sup> controller can be flexibly configured and has an integrated step motor output stage for motor-driven edge sensor positioning units. These sensor-positioning devices enable functions such as automatic edge seeking, pre-positioning, web width measurement and oscillation. In this case, movement of the edge sensors takes place via the BST controller. It can optionally be equipped with a fieldbus module.



### ekrPro Com<sup>60</sup> – Your benefits at a glance:

- Flexible configuration
- Step motor output-stage for motor-driven sensor adjustment unit
- Configurable digital outputs
- Optional configuration with a fieldbus module for:
  - Safe and fast data transmission
  - Connection to various bus systems using BST interface modules (external networking)
  - Convenient connection to higher systems (PLC or PC) using suitable gateways

# BST COMPARISON OF CONTROLLERS.

	Eco ekr CON 100	Basic ekr 500 digital	Advanced ekrPro Com <sup>60</sup>
Web edge and center-line guiding	✓	✓	✓
Electronic remote control keyboard (efe plus/digital)	✗	✓	✓
Electronic remote control keyboard (ekrPro Key <sup>60</sup> Desk)	✗	✗	✓
Keyboard detachable	✗	✓	✗
Remote Control via I/O	✓	✓	✓
Digital I/O	8 Inputs	max. 16; 12 Inputs, 4 Outputs	12 Inputs, 4 Outputs
Error output/ok-relay	✗	✓	✓
Additional locking only for automatic mode	✗	✓	✗
Networking with fieldbus module	✗	● (mit C2E)	ProfiBusDP ● DeviceNet ●
Motorized sensor positioning	✗	✗	✓
Special logic software	✗	✗	● (with additional mini PLC)
Oscillation	✗	● (with efe plus/digital)	✓
FVG Oscillation integrated	✗	✗	✓
Web width measurement	✗	✗	✓
Tear-off detection	✗	✗	✓
Watchdog	✓	✓	✓
External locking input	✓	✓	✓
External locking output	✗	✗	✓
Manual position control	✗	✓	✓
External input for machine speed	✗	✓	✓
Connection of servo-valve for hydraulics	✗	✗	✓ (0-1000 mA)

yes: ✓ no: ✗ optional: ●

# TAILORED SOLUTIONS – FOR RELIABLE WEB GUIDING.

## Electronic remote fine-adjustment (EFE)

Due to either the conditions of the machine or production requirements, it may be necessary for the web position to be corrected at a location distant from the actuator. An electronic remote control permits correction of web position and operation of basic functions from any place in the machine.



Remote control in the machine

## CAN-2-Ethernet Coupler (C2E-Coupler)

The CAN-2 Ethernet coupler offers an intelligent networking opportunity for BST control amplifiers of the ekr 500 digital series as well as the ekrPro Com<sup>60</sup> series. Up to four amplifiers of the ekr 500 type can communicate with higher-level machine controls with the help of a C2E module. Further networking is possible through the integration of additional C2E couplers. The BST C2E module uses the internal BST CAN Bus and functions as a gateway to high-level machine controls. Your benefits: The performance of the internal communication between the controllers is not disturbed by additional traffic.



C2E-Coupler

Your local contact

*Be inspired. Move forward.*

### BST eltromat International

Heidsieker Heide 53 • 33739 Bielefeld • Germany

Phone: +49 5206 999-0 • Fax: +49 5206 999-999 • [info@bst-international.com](mailto:info@bst-international.com)

A member of the eLEXIS group

© 2017 BST eltromat International • BST-eltromat\_B404\_0317\_EN • Subject to modification

 **BST eltromat**  
INTERNATIONAL