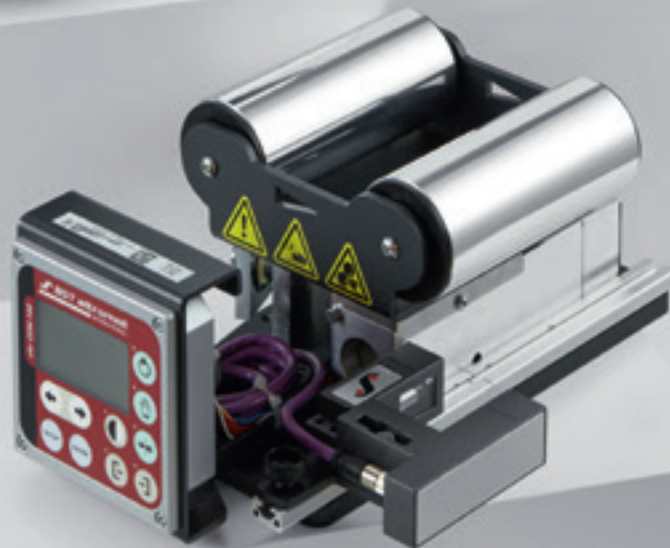


## // Overview Guiding Devices



*Be inspired. Move forward.*

# BST GUIDING DEVICES: PRECISE WEB GUIDING IN ANY MOUNTING POSITION.

BST guiding devices precisely and almost instantaneously position the web. Therefore, they make a central contribution to the smooth functioning of the web guiding system process. Should the current web position measured by the controller deviate from the nominal value measured by the controller, the guiding device – moved by the actuators – corrects the position until the nominal position is reached again.

Our guiding devices are available in various sizes and configurations for almost all web widths and applications.

**Talk to us: We would be happy to provide you with competent advice, even from the project planning and conception phase of your project.**

## ECOGUIDE – AN ECONOMICAL BASIS FOR YOUR WEB GUIDING SYSTEM.

**The BST eltromat EcoGuide, like the CompactGuide, is perfectly suited for web guiding narrow material webs. Its most popular application areas include the packaging and non-woven industries.**

With three different sizes and various characteristics, the EcoGuide can be individually configured, and is extremely economical in its use. Through its compact design and the side mounted controller the system installation can be carried out without difficulty even in tight space conditions. A significant advantage of the EcoGuide also lies in its intuitive operation, which takes place via an ergonomic keyboard and allows direct access to all the important control functions. The maintenance-free brushless actuator allows for efficient operation even under extreme conditions.

The EcoGuide is delivered ready-to-fit in order to minimize the costs of installation and wiring. It can be used for all mounting styles and web paths.



### System Equipment

- All digital standard edge sensors (optical or ultrasonic)
- Operating side choosable
- Web edge guiding
- Manual sensor positioning
- Remote control via digital inputs (digital I/O)

### Options

- Web edge and center-line guiding (two edge sensors)

For more information regarding your individual specification, please talk to your BST eltromat contact person.

			Web width	10 - 520					
EcoGuide 1-3	max. web tension	300 N	roller length correction span roller diameter	150	250	300	350	450	550
	max. machine speed	500 m/min	length of correction	180	200	250	300		
	max. web position error	+/- 17 mm	diameter of rollers	60					

# COMPACTGUIDE – PRECISE WEB GUIDING IN NARROW SPACES.

The BST eltromat compact web guiding control CompactGuide is perfectly suited for use in narrow webs, especially in the label, packaging and non-woven industries.

With six different sizes, the CompactGuide can be application adjusted to your requirements. Its compact, modular design and integrated controller allow for problem-free mounting even in con-strained space conditions. The removable, ergonomic key-board allows simple and intuitive operation as well as quick direct access to all important controlling functions.

The ready-to-fit construction minimizes the effort for installation and wiring. The CompactGuide can be used for all mounting positions and web paths.



CompactGuide 1-3



CompactGuide 4-6

For more information regarding your individual specification, please talk to your BST eltromat contact person.

			Web width	10 - 420							350 - 750			
CompactGuide 1-3	max. web tension	300 N	roller length correction span roller diameter	160	200	250	300	350	400	450				
	max. machine speed	600 m/min	length of correction	180	200	250	300							
	max. web position error	+/- 17 mm	diameter of rollers	40	60	80								
CompactGuide 4-6	max. web tension	600 N	length of rollers						400	450	500	550	600 – 800	
	max. machine speed	600 m/min	length of correction						300	350	400	450	500	
	max. web position error	+/- 25 mm	diameter of rollers						80					

## System Equipment

- All standard sensors usable (optical or ultrasonic)
- Operating side choosable
- Web edge guiding
- Manual sensor positioning
- Remote control via digital inputs (digital I/O)

## Options

- Line and contrast guiding with CLS Pro 600
- Web edge and center-line guiding (10 edge sensors)
- Manual sensor adjustment for one or two edge sensors
- Remote control with efe digital
- Wide Array Sensors US SEN 3xx, IR SEN 4xx

# SMARTGUIDE.DF – PROVEN SOLUTIONS FOR OPTIMAL WEB GUIDING.

## The main applications for the SmartGuide.DF are the printing and extrusion industries.

The BST eltomat rotating frame guide (DF) is specifically suited for short spans with low material stress. For easy handling, the sensors can be moved through an optional sensor positioning unit. This is particularly advantageous for sensors that are hard to get to, heavily changing web widths or special functions such as oscillation.

Benefit from proven standards and a large diversity of equipment: Through the SmartGuide.DF's modular construction, customer-specific solutions can be carried out very economically. Simple retrofits are also possible at any time. The pre-configuration of settings guarantees the application and simplifies technical details.

The SmartGuide.DF can be used for all mounting positions and wrappings.



SmartGuide.DF Size M



SmartGuide.DF Size L

For more information regarding your individual specification, please talk to your BST eltomat contact person.

For more information regarding your individual specification, please talk to your BST eltromat contact person.			Web width	750 – 1750							900 – 3400			
SmartGuide.DF Size M	max. web tension	1000 N	roller length correction span roller diameter	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800
	max. machine speed	800 m/min	length of correction	800	900	1000	1100	1200						
	max. web position error	+/- 25 mm	diameter of rollers	120	160									
SmartGuide.DF Size L	max. web tension	1000 N	length of rollers			1000	1100	1200	1300	1400	1500	1600	1700 – 3500	
	max. machine speed	800 m/min	length of correction			1400	1500	1600	1700	1800	1900	2000		
	max. web position error	+/- 50 mm	diameter of rollers			120	160	200						

## System Equipment

- All standard sensors (optical or ultrasonic)
- Operating side choosable
- Web edge guiding
- Manual sensor positioning
- Remote control via digital inputs (digital I/O)

## Options

- Line and contrast guiding with CLS Pro 600
- Web edge and center-line guiding (two edge sensors)
- Manual sensor adjustment for one or two edge sensors
- Remote control with efe digital/plus
- Motorized sensor positioning unit without automatic edge seeking for web edge and/or center-line guiding
- Advanced: Motorized sensor positioning unit with automatic edge seeking for web edge and/or center-line guiding with fixed or variable center-line (no automatic edge seeking with CLS Pro 600)
- Advanced: Bus systems: CAN, Profibus DP and Profinet or DeviceNet
- Advanced: Remote control via digital inputs and configurable via digital outputs
- Basic: Wide Array Sensors US SEN 3xx, IR SEN 4xx



# SMARTGUIDE.WF – ACCURATE WINDING THANKS TO PRECISE POSITION CONTROL.

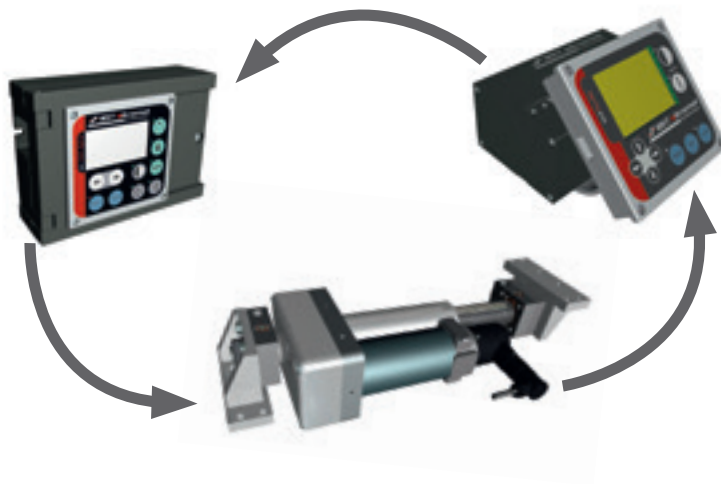
**The SmartGuide.WF is frequently used for converting applications.**

Its controlled unwinding and rewinding causes the precise compensation of web position variations and effectively minimizes the potential for mistakes. Proven BST system components and a comprehensive range of options take care of customer-optimized solutions at the most economical price. Optionally available are also line and contrast sensors.

Through the SmartGuide.WF's modular construction, subsequent enhancements can be economically carried out at any time. The pre-configuration of settings simplifies technical clarification processes and increases success.

## System Equipment

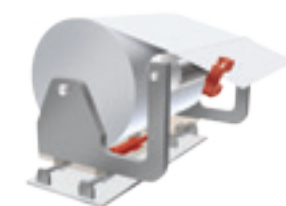
- All standard sensors (optical or ultrasonic)
- Web edge guiding
- Manual sensor positioning
- Remote control via digital inputs (digital I/O)



## Options

- Line and contrast guiding with CLS Pro 600
- Web edge and center-line guiding (two edge sensors)
- Manual sensor adjustment for one or two edge sensors
- Remote control with efe digital/plus
- Motorized sensor positioning unit without automatic edge seeking for web edge and/or center-line guiding
- Advanced: Motorized sensor positioning unit with automatic edge seeking for web edge and/or center-line guiding with fixed or variable center-line (no automatic edge seeking with CLS Pro 600)
- Advanced: Bus systems: CAN, Profibus DP and Profinet or DeviceNet
- Advanced: Remote control configurable via digital inputs, digital outputs
- Basic: Wide Array Sensors US SEN 3xx, IR SEN 4xx

SmartGuide.WF Size 1	max. positioning force	840 N	stroke (mm)	50	100	200
	max. adjustment speed	20 mm/s	adjustment speed (mm/s)	10	20	
	max. web position error	+/- 100 mm				
SmartGuide.WF Size 2	max. positioning force	1680 N	stroke (mm)	100	195	
	max. adjustment speed	20 mm/s	adjustment speed (mm/s)	10	20	
	max. web position error	+/- 100 mm				
SmartGuide.WF Size 3	max. positioning force	2250 N	stroke (mm)	195		
	max. adjustment speed	20 mm/s	adjustment speed (mm/s)	10	20	
	max. web position error	+/- 100 mm				
SmartGuide.WF Size 4	max. positioning force	9000 N	stroke (mm)	195	295	
	max. adjustment speed	20 mm/s	adjustment speed (mm/s)	10	20	
	max. web position error	+/- 150 mm				



Controlled unwinding



Controlled rewinding

For more information regarding your individual specification, please talk to your BST eltromat contact person.



## INDIVIDUAL SOLUTIONS FOR OPTIMAL WEB GUIDING.

**Growing production speeds and increasing demands on quality demand high performance on the production machines of the web processing industry. It is important to take full advantage of machine speeds while ensuring that everything is running in a controlled manner.**

As the leading manufacturer of quality assurance systems for the web processing industries, BST eltromat International has already carried out more than 100,000 installations in over 100 countries across the world. Competent, individual and solution-orientated: This is how we support you with a lot of experience in optimizing your production processes.

### **Tailored for your production**

BST systems control web guiding in multiple varieties of manufacturing processes, they can be used for many different materials and effectively minimize waste and downtimes. Thus, the scope and level of automation is orientated exactly according to your requirements.

Our solutions are created in a close dialogue with you: Even in the projection and conception phase, we are happy to be on hand and provide support in all of your decisions – with a lot of expertise and just as much passion for perfection. Your benefits: made-to-measure systems whose performance you can trust in every use.

**Talk to our highly qualified outside and in-house staff. We are happy to give you advice!**

# CONTROL SYSTEMS FOR EVERY DEGREE OF PROCESSING.

The best way to control your web depends on the web's degree of processing. Untreated webs are configurable exclusively by means of the web edge or center, as no further contrast characteristics exist on the web itself. Finished webs offer more options

to position measuring by sensors, for example through printed lines or freely selectable contrast areas.

**The following tasks are important for the design of a BST web guiding system with a rotating frame guide or swivel roll guide. Our sales consultants are happy to support you in answering questions:**

## General Data:

- Machine type
- Place of installation
- Transparency of the material (transparent, translucent, changeable, reflective, opaque)
- Web speed
- Thickness of the material
- Web width

## Type of scanning:

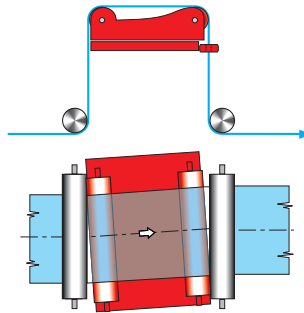
- Web edge
- Web center line
- Line/Contrast



# TAILORED SOLUTIONS FOR RELIABLE WEB GUIDING.

## Rotating frame guide (DF)

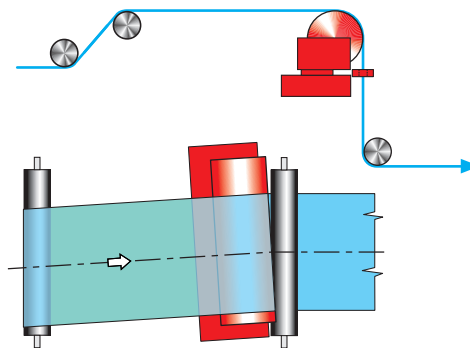
The BST rotating frame guide consists of a fixed lower frame and a rotating upper frame, whose pivot is located on the infeed of the web. This guiding device is used if the web path must be corrected within a short distance and a minimum of material stress. Further advantages are the variable installation positions and the low actuating forces required.



*Functional principle of the rotating frame guide*

## Swivel roller guide (SF)

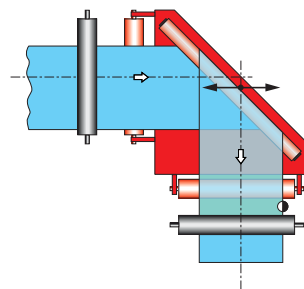
The BST swivel roll guide consists of a fixed lower frame and a moveable upper frame with one or two guiding rollers. The functional principle of this guiding device requires adequate long infeed and outfeed spans. Swivel roller guides are used where installation space is limited, the required threading of the web does not allow the use of a rotating frame guide or where the web is continually drifting away to the side (integral correction).



*Functional principle of the swivel roll guide*

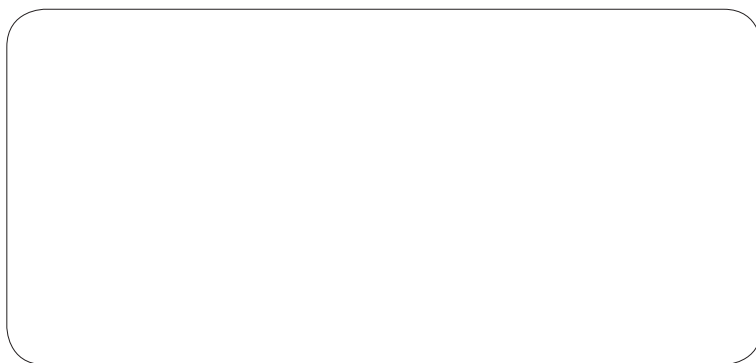
## Turning bar

The turning bar is used wherever a 90° turn in the direction of the web is required, together with an adjustment of the web alignment. The turning bar is installed at an angle of 45° to both the infeed and outfeed direction of the web. The web winds itself around the turning bar 180° and leaves the guiding device at right-angles to the infeed position.



*Functional principle of the turning bar*

Your local contact



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