MAXCESS®

FIFE

BETTER, FASTER, SMARTER

Fife Guiding Solutions

Advanced Guiding Systems for Web Handling

Web Guide Controllers

The web guide controller is the heart of the electronic guiding system. Fife controllers provide the control you need to operate effectively and efficiently. When combined with Fife sensors and actuators, controllers provide a highly accurate, closed-loop guiding system with a high dynamic response to the running web.

D-MAXE Series Web Guide Systems

- Compact, easy to integrate controller
- Available in single-, dual, and triple-drive version
- Pre-wired, pre-assembled solutions available even with the smallest guides
- Easy and intuitive user interface:
  OI-TS operator interface with colour touch-screen or
  OI-N operator interface with graphics and symbols on a large, easy to read, high-resolution LCD display
- Backward compatible with all existing Fife guiding systems
- Integrated networks:
  Ethernet/IP, Profinet IO, EtherCAT, Modbus/TCP
- additional networks possible via the operator interface OI-N (e.g. Profibus DP, ControlNet, DeviceNet, CanOpen)

OI-TS (Touchscreen)
Operator interface

OI-N (Network)
Operator interface

D-MAXE
Controller

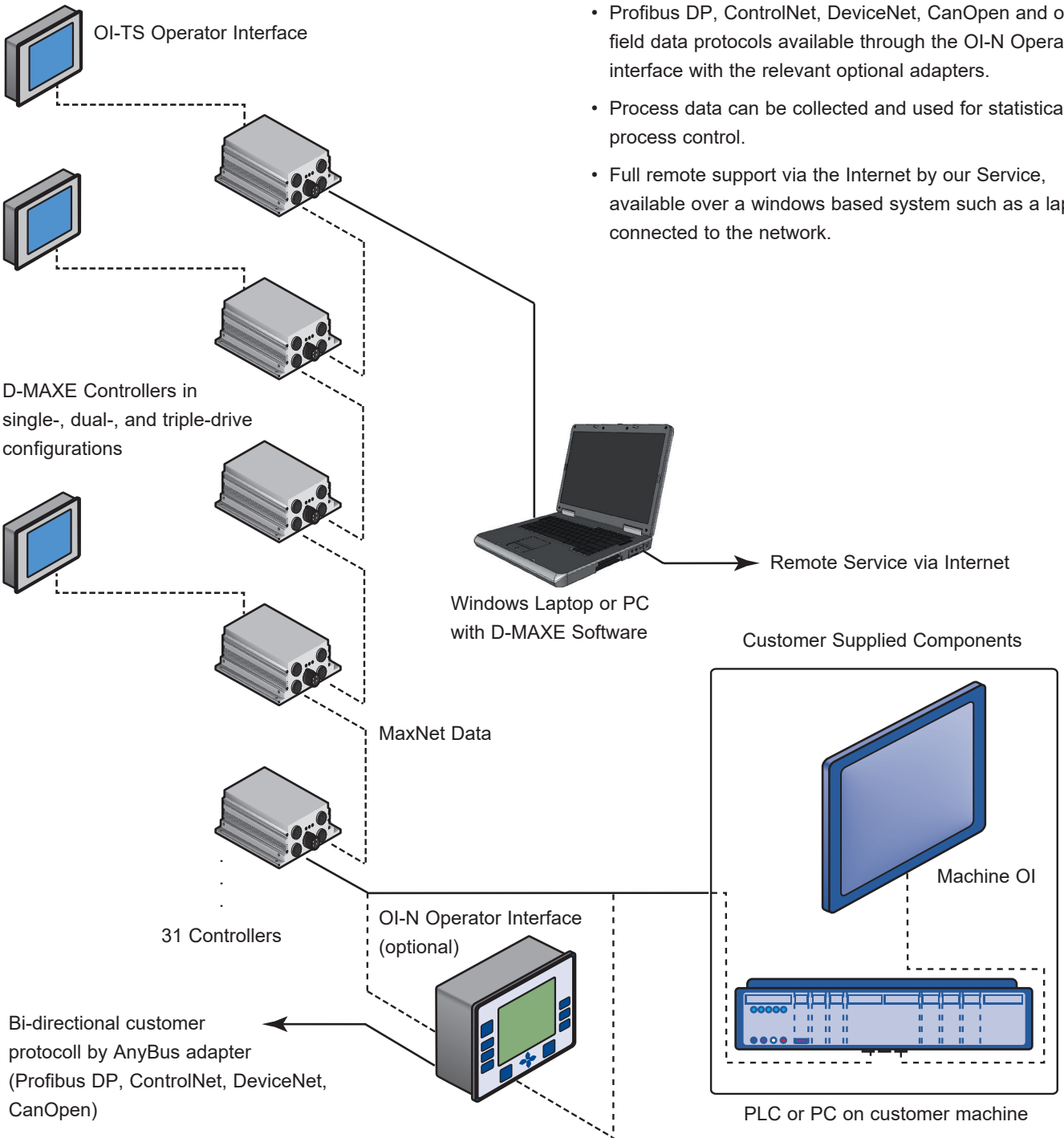
DP-20 Plus

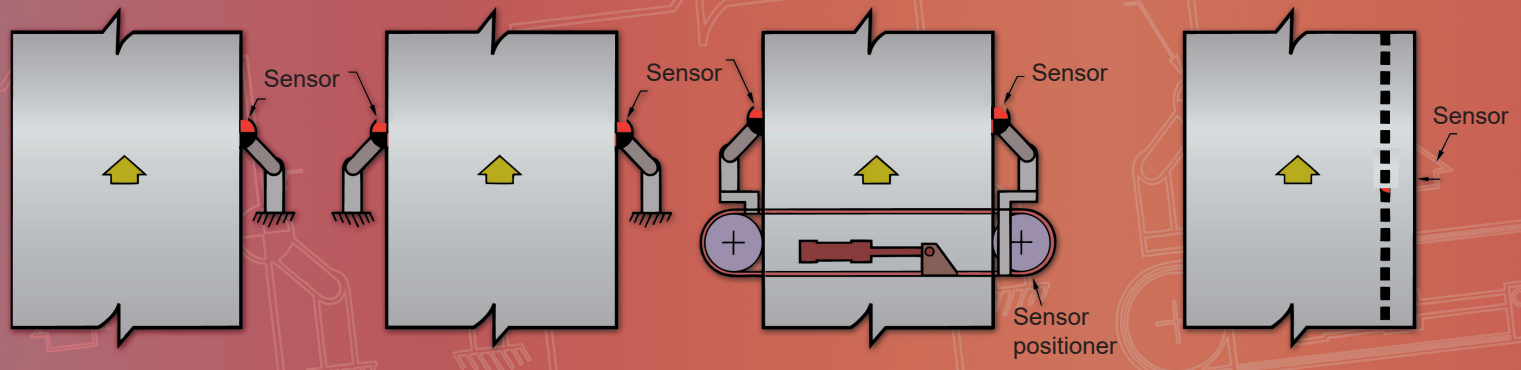
DP-20 Plus Web Guide Controller

- Precise web guide control that's easy to set up and operate
- Intuitive setup and user-friendly operation reduces downtime between runs
- Small form factor (144 x 144 x 103 mm) is easily integrated into machine panel
- Backward compatibility with DP-20 and DP-30 and certain CDP-01 applications

D-MAXE Network Capabilities

- Each D-MAXE features an integrated 2-port Ethernet switch which facilitates daisy-chaining several D-MAXE's in series (with no additional hardware required), star configuration (using a switch or the OI-N control panel) or a combination of both.
- Easy networking of multiple D-MAXE controllers (up to 31), with real time communication without additional components, thanks to the integrated Ethernet hardware.
- Virtual-OI Windows Software available for full interfacing of the D-MAXE Network with machine PCs and Laptops for control and service purposes.
- Easy interfacing to any machine PLC or PC via Ethernet.
- Embedded Profinet IO (Siemens), Ethernet/IP (Rockwell), EtherCAT (Omron, Beckhoff) and Modbus/TCP protocols available as option.
- Multiple control points - One or more colour touch-screen panel OI-TS available in parallel to control all devices in the whole network.
- Profibus DP, ControlNet, DeviceNet, CanOpen and other field data protocols available through the OI-N Operator interface with the relevant optional adapters.
- Process data can be collected and used for statistical process control.
- Full remote support via the Internet by our Service, available over a windows based system such as a laptop connected to the network.





Edge Guiding | **Fixed-Sensor Center Guide** | **Moving-Sensor Center Guide** | **Line or Pattern Guiding**

Sensor Types

One size does not fit all. For that very reason, Fife develops sensors to suit any guiding application. Our versatile line of sensors can accommodate edge guiding, line/pattern guiding or center guiding (fixed or moving) in any type of environment and for any type of material.

DSE-22 Infrared Sensor

Ultrasonic Sensors

- For single-edge or center guiding applications
- Suitable for many opaque and transparent materials
- Light-sensitive material is not affected
- Different gap widths available
- CE, UL and cUL certified

DSE-41 Ultrasonic Sensor

Infrared Sensors

- For single-edge or center guiding applications
- Suitable for many opaque materials as well as light nonwovens
- Different gap widths available
- Air sweep connection available
- CE, UL and cUL certified

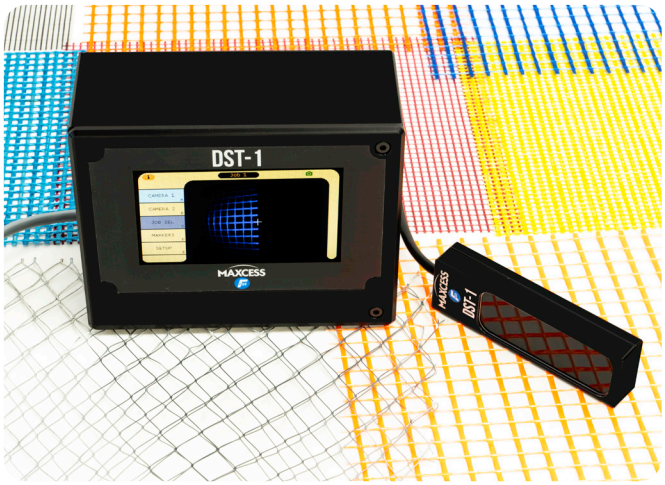
NEW - GuideLine Digital Line Guide Sensor

- Ability to easily guide to lines, edges of lines and simple graphic patterns such as bar codes
- Compatible with the popular D-MAXE Series Web Guiding System and the NEW Smart Drive Actuator
- Color camera with intuitive 5” color touchscreen
- High-speed industrial camera for high resolution even at higher speeds
- Analog and digital outputs available
- Articulating arm for easy setup

GuideLine - Digital Line Guide Sensor

DST-1 Object Recognition Sensor

From flexible packaging and carpet to batterie foils and more, the DST-1 Object Recognition Sensor dramatically improves setup time and material changeovers, providing the user with the ability to guide almost any material in three steps. With the latest product updates, the DST-1 Object Recognition Sensor is now faster to set up and easier to use.



DST-1 Digital Object Recognition Sensor

Pneumatische Sensoren

Pneumatic Sensors

- For edge or center guiding in pneumo-hydraulic systems
- suitable for many opaque and transparent materials

Special Application Sensors

Fife is able to design and build a tailored sensor solutions to meet the requirements of special customer applications, including for example:

- Fibre Optics Sensors (Temperature range up to 275°C)
- Capacitive and Inductive sensors
- Carpet Tuft Sensors
- Edge Palm Feeler
- ExactTrak Radar Sensor

Sensor Positioning

Sensor positioning devices are another powerful solution to increase the accuracy and productivity of a system. At the same time, the risk of injury is reduced. They are easy to install and can also be easily retrofitted into existing guiding systems.

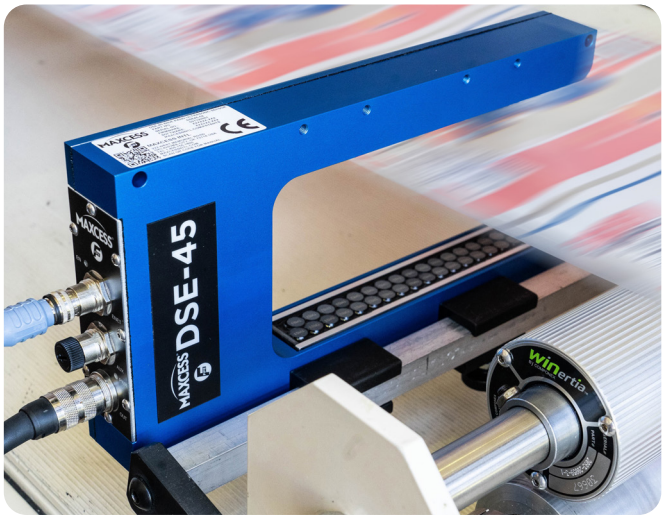
Pro-Trac 200

- For single-edge or center guiding applications
- Ideal for use in chasing systems, moving sensor center guiding systems, web width measurement systems, or simple automatic sensor positioning
- For continuous operation
- Maintenance-free, dust-tight design
- Custom design
  - Lengths up to a maximum of 4000 mm
  - For mounting of both single sensors and dual sensors
  - Different mounting options
  - Cable management chain to avoid cable damage
  - Available as electromechanical version, hydraulic or manual versions as option

Digital Wide Band Sensors

Key Features

- Touch-less sensor setup at format/material change:
  - No manual repositioning of the sensors
  - No calibration necessary
- Precise, repeatable Guide point:
  - Is saved in a recipe
  - Independent of the respective operator
- No moving parts:
  - Easy installation
  - High reliability
  - Maintenance-free
- Ideal for high precision, in-line web width measurement of opaque and transparent materials



DSE-45 Ultraschallsensor

DAC-005 Diode Array Camera

- Ideal solution for applications requiring a high precision within a wide field of view, from nonwovens to steel

DAC-005

- Robust IP-67 housing with drying cartridge, resistant to contamination, by dust particles, oil, vapors and water
- Ideal for edge and center guiding and for special applications such as multiple web detection and web width/web distance measurement
- Available with integrated LED illumination for close up applications, eliminating the need for a separate illumination

DSE-45 Ultrasonic Sensor

- No manual repositioning needed for web width changes
- Ability to track up to 16 web edges or 8 webs
- Either-edge and web width detection
- IP 65 rating for use in harsh environments
- Digital connectivity for easy setup
- 5 models - field of view ranges from 66 to 515 mm

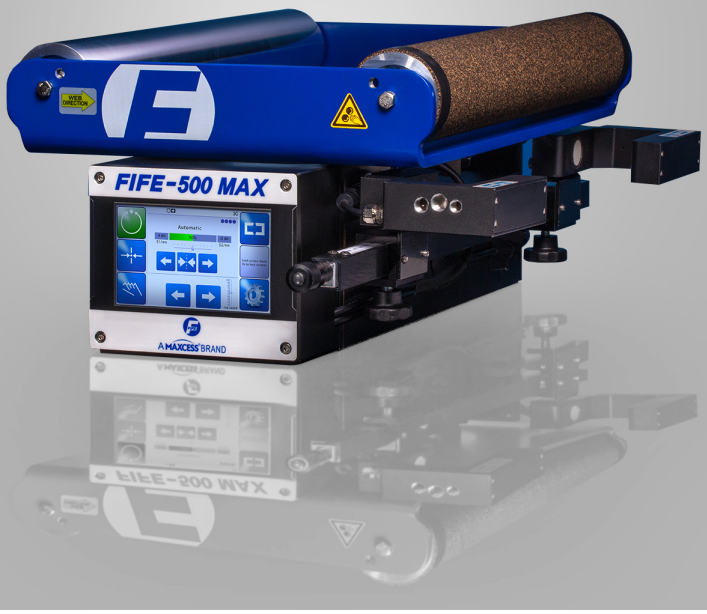
DSE-17 Infrared Sensor

- Wide proportional band reduces manual sensor repositioning
- Tracks up to four independent web edges simultaneously
- No opacity set up required
- Displays the edge position and self-diagnostic results through the built-in LED display

DSE-17 Infrared Sensor

FIFE-500 MAX

New web guide with accuracy perfected



Ideal for Narrow Web Applications

The FIFE-500 MAX takes all of the features customers loved from the FIFE-500 and maximizes everything. With added networking and communications, an intuitive 5 inch color touchscreen, a new 8 pole motor for smoother guiding, and greater accuracy, the FIFE-500 MAX leverages the latest technology at an attainable price point to improve performance and reduce maintenance. Utilizing brushless motors and even faster processing speeds allows the FIFE-500 MAX to quickly adapt to changes in the web, even at high line speeds. This minimizes material scrap.

NEW- Now available for web widths up to 1200 mm and tensions up to 800 N.

Key Features

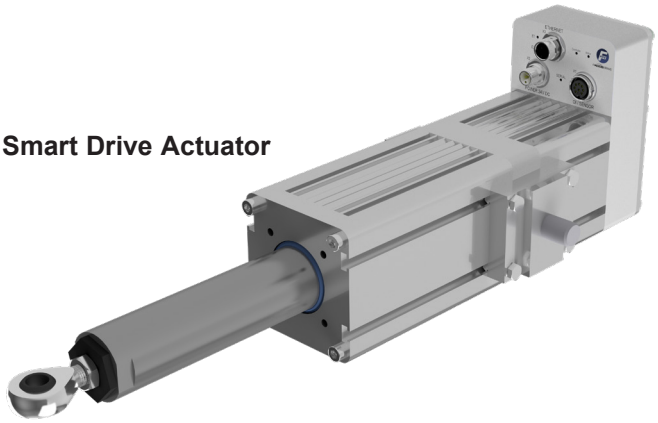
- Compact design fits easily in tight spaces
- Embedded communications:
  Ethernet/IP, CC-Link, ModBus/TCP
  (add on option for Profinet, EtherCAT)
- High accuracy
- Intuitive 5” color touchscreen
- Multiple languages available for easy localisation, quick setup and operation, with minimal training needed
- 8-pole, brushless motor for smoother guiding and reduced scrap
- Easy connection to your PLC
- Splice table as option
- Sensor brackets without / with optional fine adjustment
- Rollers with various coatings

Technical Specifications

- Roller Face: up to 1200 mm
- Roller Diameter: 50 mm, 60 mm, 80 mm, 100 mm and 120 mm
- Guide Span: up to 600 mm
- Maximum Tension: 800 N
- Power Supply: 24 VDC
- Ambient temperature: 0 - 60 °C
- Protection Class: IP-64 -Standard
  IP-65 - Optional
- Certification: cTUVus to UL61010-1
  CAN/CSA-C22.2 No. 61010-1
  CB-Certificate to IEC61010-1

Actuators

Fife electromechanical actuators are designed to be maintenance free with minimal backlash, which is a key component in producing the highest dynamic response in the industry, combined with the longest lifetime. Typically no stroke limiting switches are required. Position Feedback via built-in or emulated encoder is available as an option. A wide range of actuators of different thrusts and strokes is available to satisfy the requirements of any application, based upon total load, coefficient-of-friction, and performance requirements.



Smart Drive Actuator

NEU - Smart Drive Actuator

- Actuator with a designed thrust of 1200 to 10000 N
- Shifting speed: 15 to 80 mm/s
- Standard actuator stroke ranges from 50 to 400 mm
- Integrated processor for web guide control

LA-2

- Actuator with a maximum designed thrust of 190 N
- Maximum shifting speed: 25 mm/s
- Standard actuator stroke: 80 mm

GMA-1 und GMA-3

- Belt-driven actuator with a maximum nominal thrust of 2000 N
- Integrated servo center transducer
- Maximum shifting speed: 125 mm/s
- Standard actuator stroke ranges from 50 to 305 mm, longer strokes available upon request

LAB-8

- Belt-driven actuator with nominal thrust from 5000 to 12500 N
- Maximum shifting speed: 28 mm/s
- Standard actuator stroke ranges from 100 to 300 mm
- Operates only with dual-drive Fife D-MAXE controllers with VTB-60 junction box

LAB-10A

- Belt-driven actuator with a designed thrust from 1800 to 7100 N
- Shifting speed: 8 to 29 mm/s
- Standard actuator stroke ranges from 50 to 300 mm

LAG-17

- Heavy Duty Planetary Gear-driven actuator with a nominal thrust up to 30 kN
- Maximum shifting speed uo to 67 mm/s
- Standard actuator stroke ranges from 100 to 600 mm
- Inverter and processor can be supplied pre-wired in an electrical cabinet for easy installation

GMA Actuators

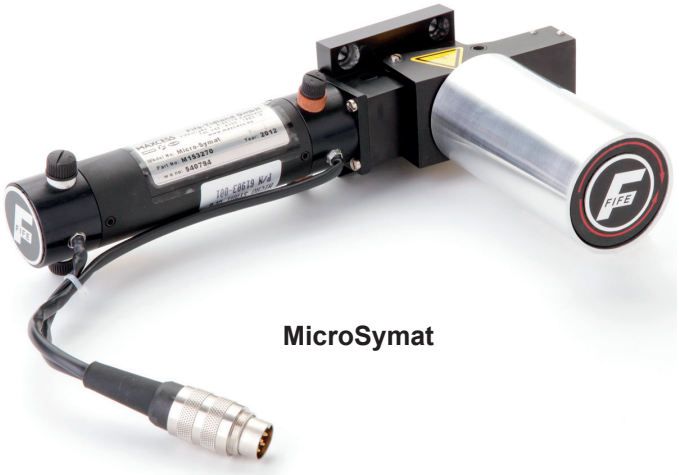
Intermediate Guides (OPG)

When space is limited, Fife Offset Pivot Guides (OPG) deliver web / strip position correction with minimal entry and exit span requirements. This type of guide is usually furnished with two rollers. The entire guide pivots to control web position and minimize web stress.

Optional extensions and adjustments as well as special designs are available on request for optimal installation in a customer system.

MicroSymat

- Extremely compact, single-roller design for guiding under tight space constraints
- Standard roller faces: 80 and 100 mm
- Maximum allowable tension: 100 N



MicroSymat

Symat 25/DS-25

- Versatile, compact guide capable of accommodating all threading styles
- Standard roller faces: 160 to 300 mm
- Maximum allowable tension: 200 N

Symat 70G

- Standard roller faces: 250 to 700 mm
- Maximum allowable tension: 800 N

Symat 25

Symat 120A/300A

- Dynamic and precise web control
- Standard roller faces: 1200/3000 mm
- Maximum allowable tension: 1500/3000 N

Symat 120A

Symat 20K/40K

- Designed to accommodate large webs and heavy duty applications
- Roller faces: 1200 to 5400 mm
- Maximum allowable tension: 5000/10000 N
- Available with electromechanical and hydraulic actuators

Steering Guides

Fife's innovative Steering Guides deliver precise web position by utilizing a long entry span. These versatile guiding assemblies provide immediate lateral correction for transient errors, while at the same time compensating for the web's steady state errors.

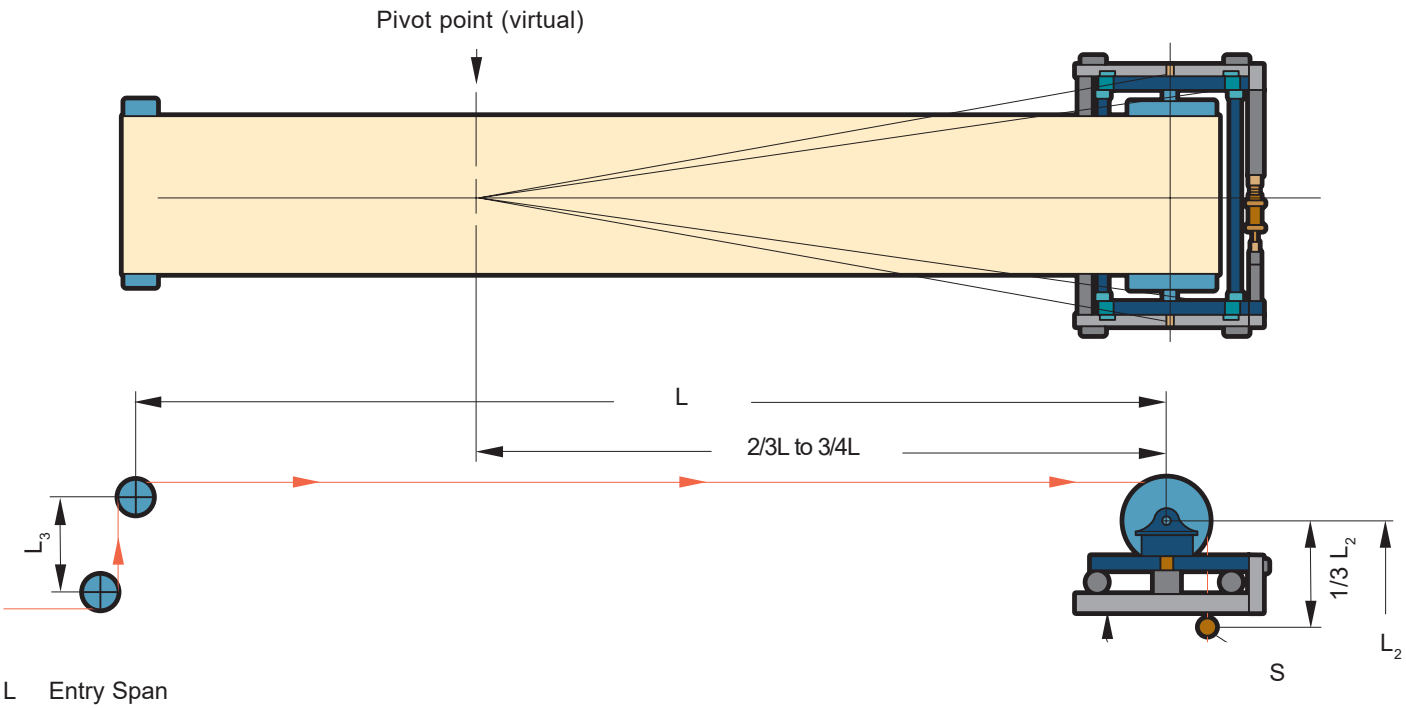
Kamberoller

- Standard roller faces: 400 to 15000 mm
- Available with electromechanical and hydraulic actuators
- Single-, double- or tri-roller arrangements available

Kantiroller

- Compact steering guide ideal for usage with narrow webs
- Accommodates web widths from less than 200 to 360 mm
- Available with electromechanical and hydraulic actuators
- Single, double or tri-roller arrangements available

Kantiroller



L Entry Span
L_2 Exit Span
L_3 Pre-Entry Span
S Sensor

Unwind/Rewind Guides

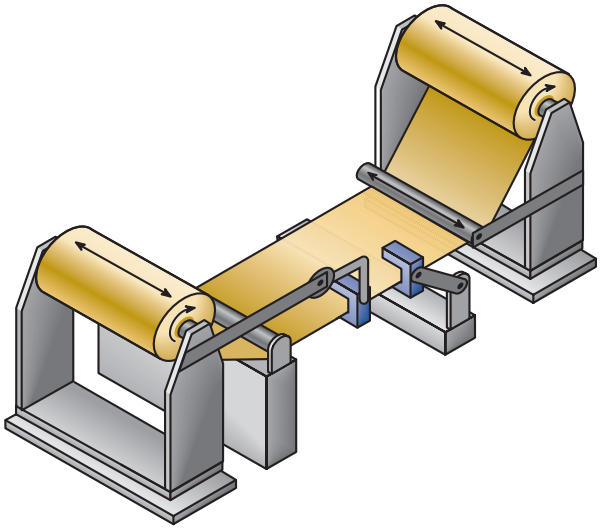
A typical unwind or rewind system consists of an actuator to keep the roll aligned during the winding process, a sensor and a controller. Maxcess can supply all the components, such as tension controls, shafts, safety chucks and of course the guiding system required by unwinders and rewinders. This means that these components can be optimally harmonised with each other.

Unwind Stands

- Roll stands shift laterally to compensate for web misalignment
- May require a directly mounted or slaved idler
- Easily adapts to existing assemblies
- Available with integrated tension control systems, shafts and safety chucks

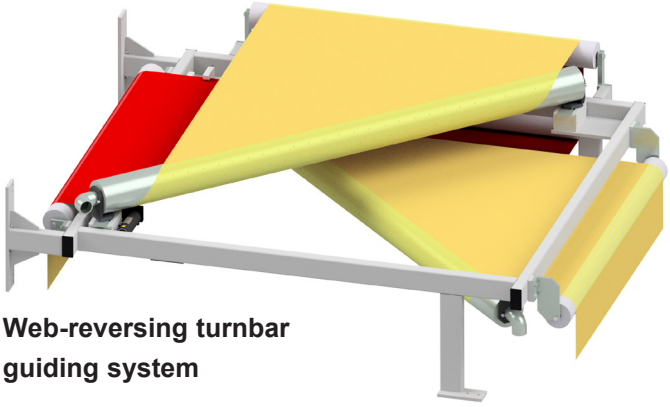
Rewind Stands

- Roll stands shift laterally to align with the edge of the approaching web
- Helps to prevent telescoping, ensuring evenly wound rolls
- Easily adapts to existing assemblies
- Available with integrated tension control systems, shafts and safety chucks

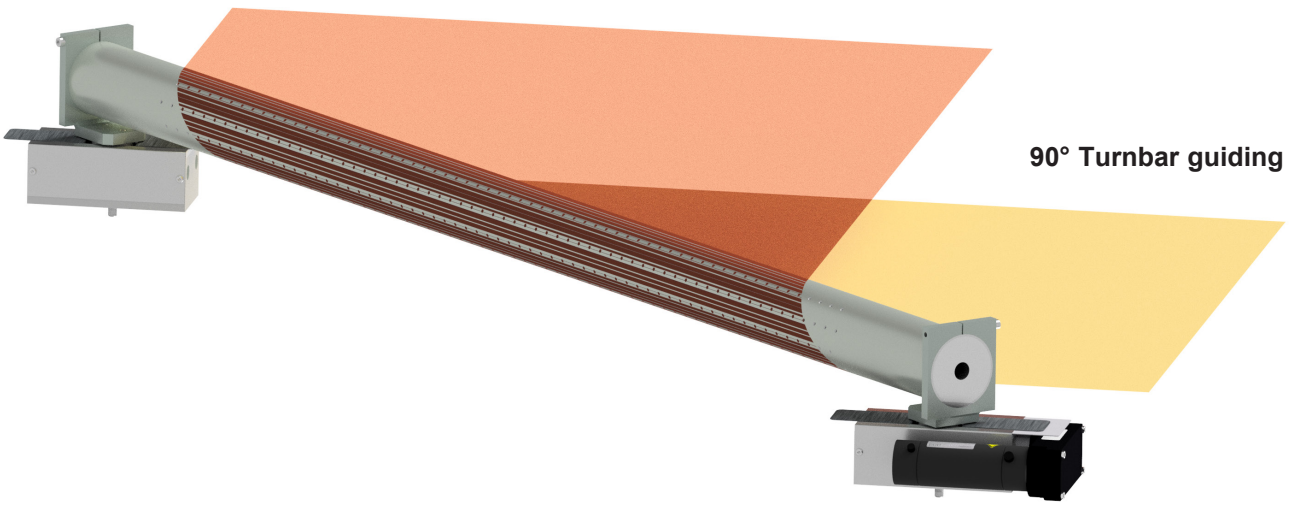


Turnbar Systems

- Turnbar systems not only guide the web but change the path by 90 degrees or reverse it.
- Custom designs available to meet any material and application requirements
- Ventilated bars available as option



Web-reversing turnbar guiding system

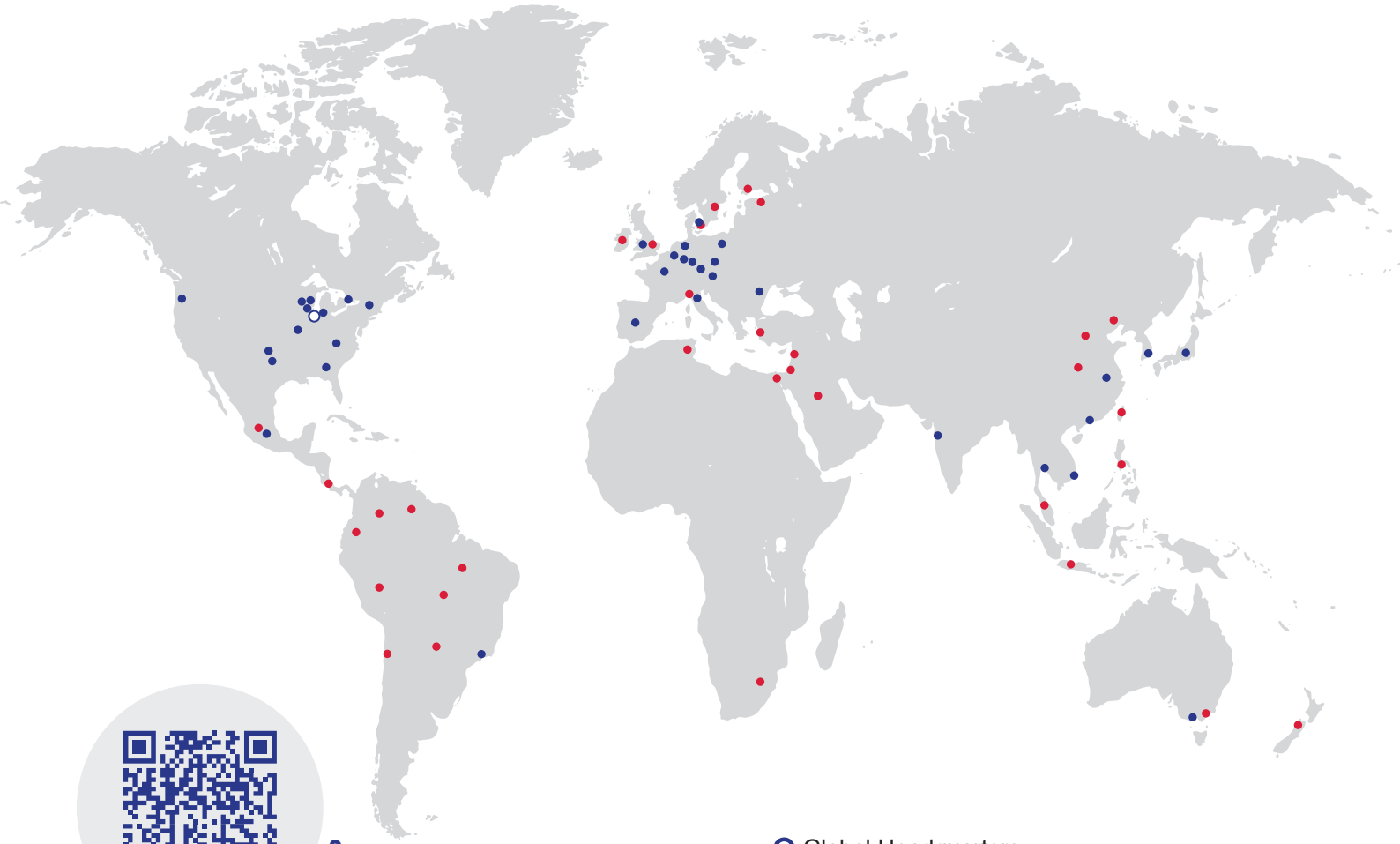


90° Turnbar guiding system

MAXCESS®

BETTER, FASTER, SMARTER

HOW TO CONTACT US



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