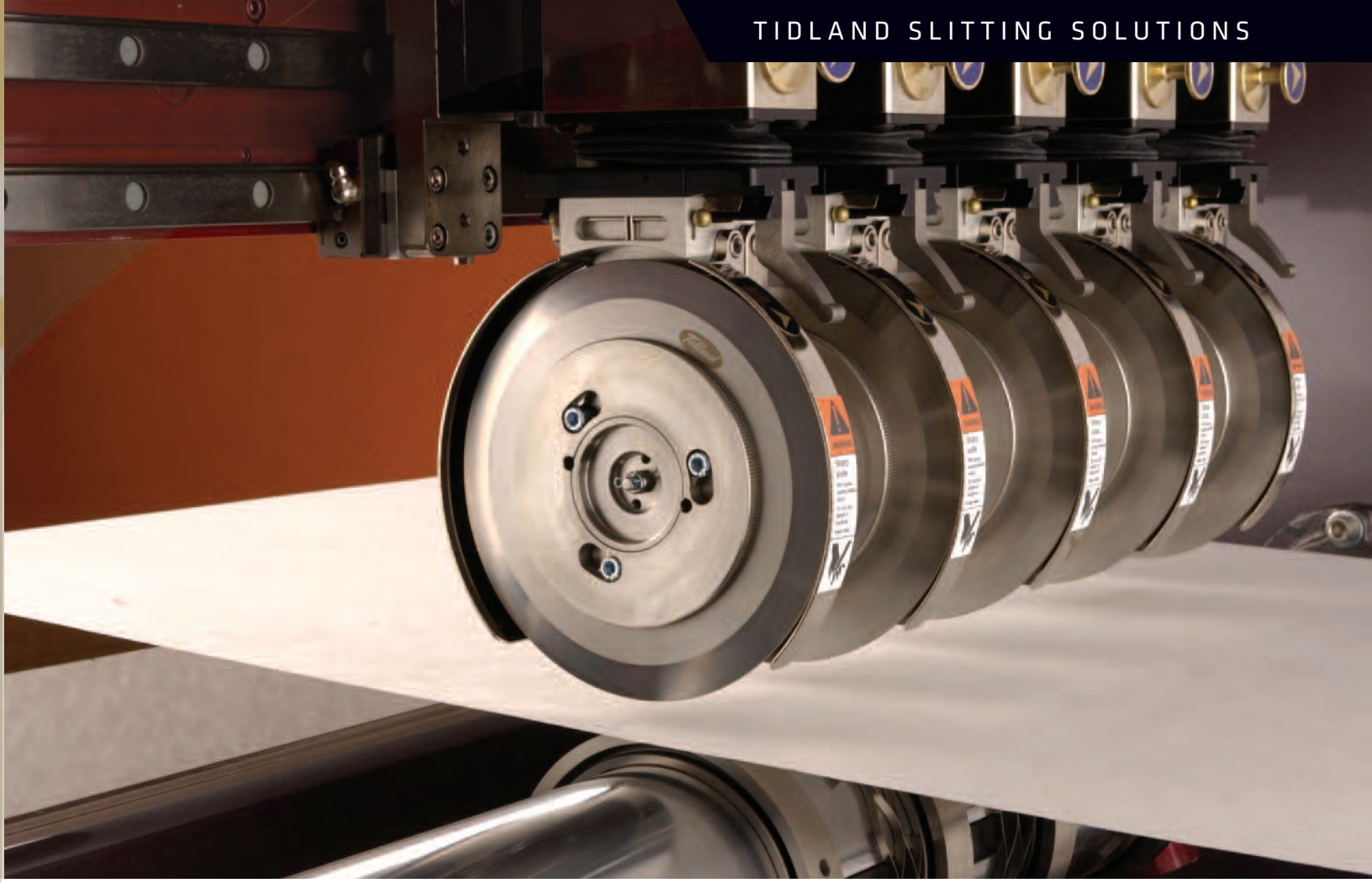


MAXCESS

MAGPOWR FIFE TIDLAND

TIDLAND SLITTING SOLUTIONS

Knifeholders and Slitter Positioning for Web Handling

MAXCESS

ESP

e-Knifeholder

SP-500

Edge-Trim

Versatility in a slitting operation is no longer simply an advantage, it's a requirement. Jobs and capacities can change quickly in today's market, and Tidland's slitting systems can meet any application, from a single knifeholder to a fully-automatic system. In addition, Tidland remains at the forefront of slitting technology, offering the most effective innovations in the industry.

Safety Through Technology

To experience Tidland's commitment to industry-leading technology, look no further than the e-Knifeholder, the industry's first fully-electronic knifeholder providing full control over blade overlap and side force. The e-Knifeholder received the **2009 Technology of the Year** award from industry group AIMCAL thanks to its innovative programmable features and reduction of downtime while increasing precision.

Reliable Service

Hand-in-hand with its industry-leading technology is Tidland's excellent service. Tidland prides itself on knowledgeable support and impeccable service that begins with the internal sales staff and continues beyond installation. Factory-trained in various service disciplines, including applications analysis, design and engineering, Tidland's reliable service team is dedicated to providing solutions specifically designed for your applications.

Cutting-Edge Education

Education is paramount to industry growth, and Tidland takes a leadership role in this area, providing online training programs that cover everything from web handling theory to real-world implementation of web handling techniques and technology.

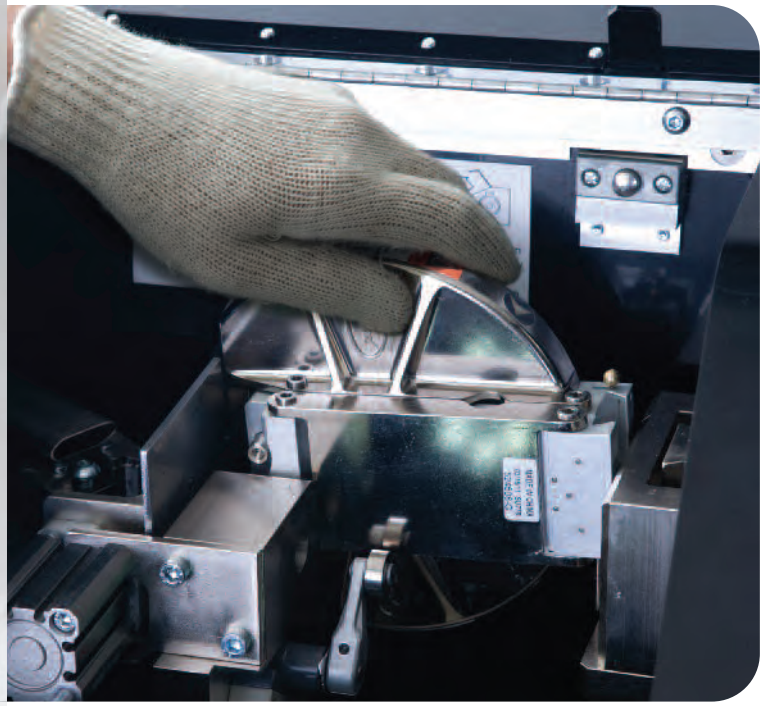
As part of Maxcess, Tidland can offer the most comprehensive array of accessories and periphery equipment in the industry, thanks to its partner brands MAGPOWR (Tension Control) and Fife (Web Guiding & Inspection). Maxcess provides a global reach, with operations in North America, South America, Europe, and Asia.

MAXCESS

MAGPOWR FIFE TIDLAND

In-house sharpening in 90 seconds

Reduce blade sharpening costs and improve operator safety with Tidland's new Blade Sharpening System. This self-enclosed unit quickly sharpens blades from Performance Series, e-Knifeholders or Series 'C' swing cartridge automatic and manual model knifeholders. Get a freshly sharpened blade in 90 seconds, without removing the blade from the cartridge or sending the blades out to be reground.



Because it's a Tidland product, the Blade Sharpening System is easy to use. Simply remove the lower knife cartridge from a Knifeholder and place it directly into the Blade Sharpening System. Push a button, wait 90 seconds, and you have a freshly sharpened blade.

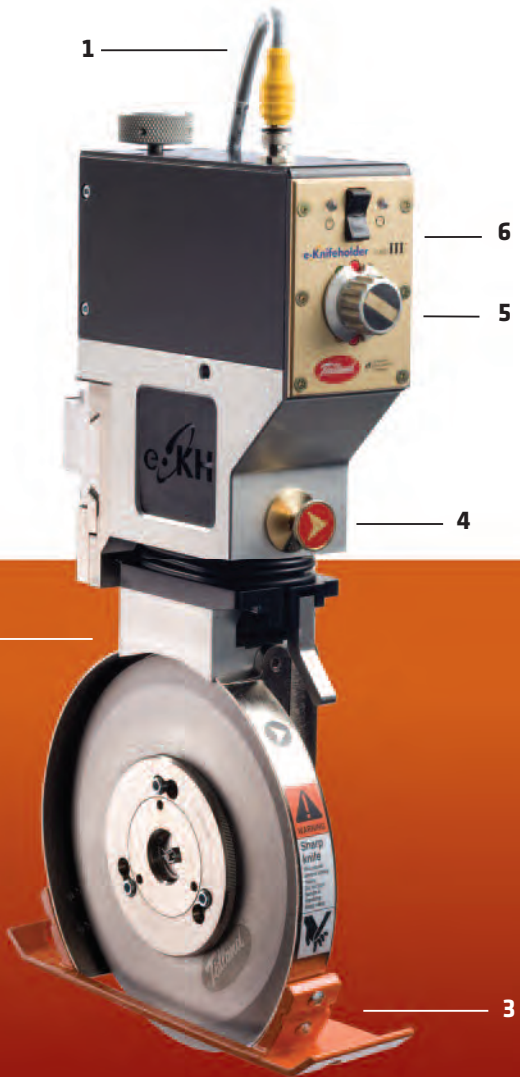
Key Benefits

- No more sending out blades for re-grind
- No need to remove the blades from the cartridge, saving time and improving operator safety
- Reduced need for backup blades
- Improved slit quality. Removes the temptation to run slightly dull blades to save re-grinding costs
- Reduced run-out of blades because you never remove the blade from the cartridge for sharpening
- Easy online ordering of replacement blades

Repeatable set-ups regardless of shift

Regardless of converting material, overspeed preference, or blade profile, sharpness and geometry, Tidland's new electronic knifeholder delivers the highest quality roll slit possible. Consistent results are achieved by minimizing operator input through the use of advanced 'Smart' functions, even providing self-calibration of the often difficult to assess but extremely important setup functions of overlap and side force.

The e-Knifeholder is not only easy to use, it's very easy to learn. In fact, an operator can be trained and up and running in 90 seconds.



Key Benefits

- Improved consistency and reliability in slit quality
- Self-calibrates overlap and side force to minimize the potential for operator error
- Proper settings reduce blade wear, contributing to less downtime and lower operating costs
- Electronic operation eliminates dust and grime commonly associated with pneumatic operations
- Operators can be fully trained in 90 seconds
- Two models available: Class II for standard application and Class III for mill-duty

FEATURES

1. Single Power and Communications Cable
2. Removable and Reversible Cartridge
3. Optional Safety Blade Guard Attachment
4. Cant Angle Key
5. Setup Knob
6. Incremental Downstroke Adjustment

Shear

Crush

Razor

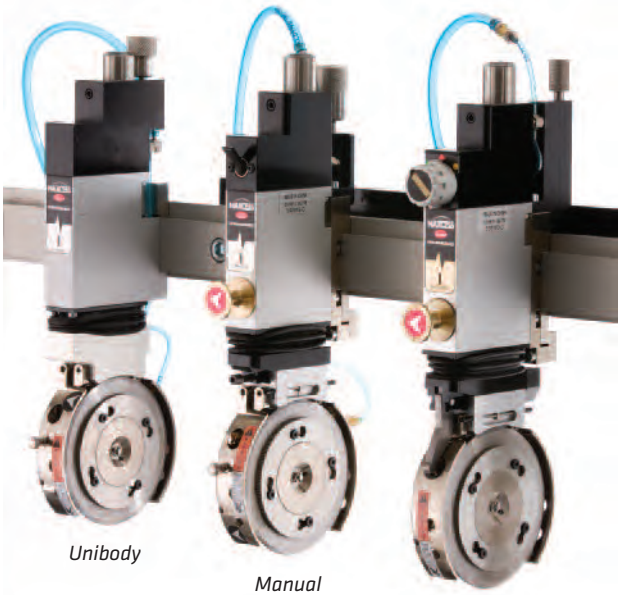
Performance Series Knifeholder

Faster setup times, remarkably increased productivity, and unrivaled finished roll quality. Tidland's Performance Series Knifeholder delivers reliability and performance to any slitting operation – from light converting to mill-duty operations.

Available in three sizes, these innovative knifeholders can accommodate shear, crush or razor slitting of just about any material. Automatic and Manual models also feature a unique 180° reversible blade cartridge, allowing use of both sides of the anvil ring and extending blade life.

Key Benefits

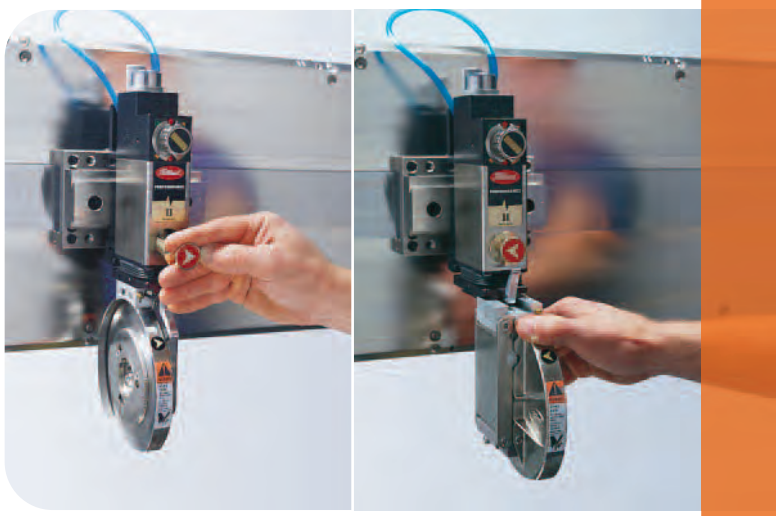
- Operator-friendly setup features for increased productivity and reduced downtime
- Modular mounting options for easy retrofit to any machine
- Robust construction to withstand harsh industrial environments
- Precise process controls for improved roll quality
- Optional 360° Blade Guard and Blade Guard Attachment reduce the risk of operator injury
- Automatic, Manual or Unibody models available



Unibody

Manual

Automatic

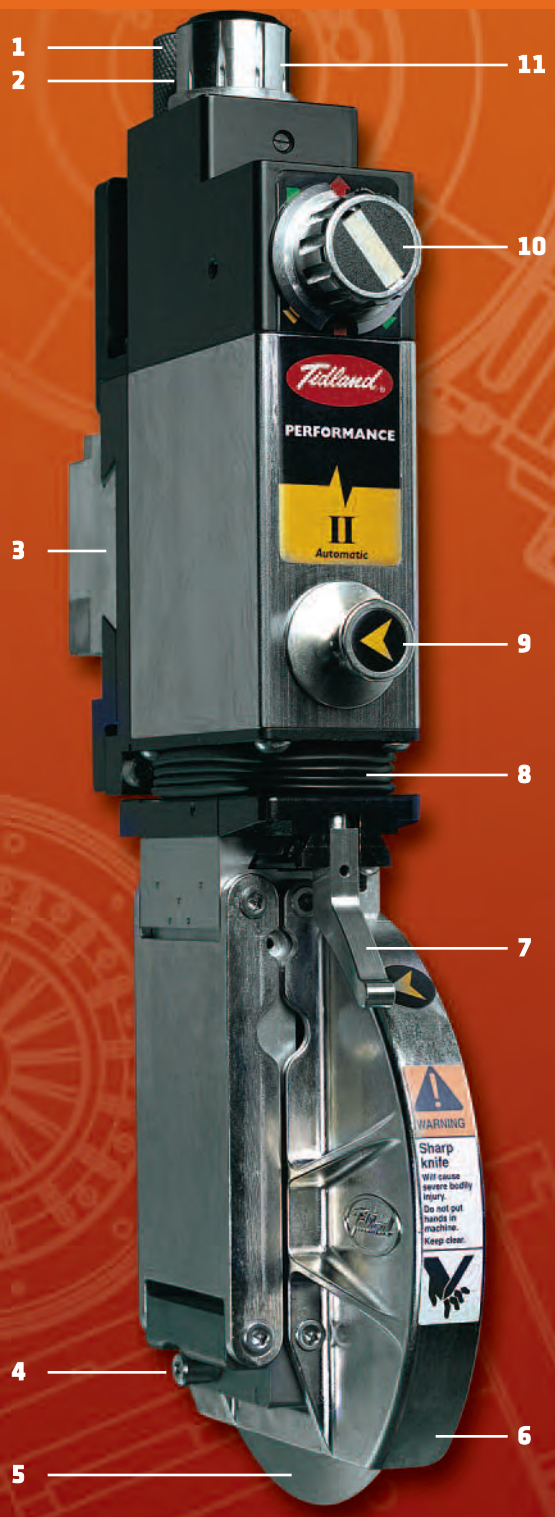


Removable and reversible blade cartridge.

Specifications

Class I	Class II	Class III
Light Converting, Flexible Packaging, Finished Product Converters	Mainstream Converting	Mills
Typical Materials	**Typical Materials**	**Typical Materials**
Paper, films, coated papers, foil-covered papers, film-paper laminates, co-extruded films, polypropylenes	Paper, coated papers, foils, fine printing papers, chrome-coated, poly-coated, paperboard, non-wovens, all films	Coated & non-coated papers, tissues, newsprint, kraft papers, chipboard, roofing felt, floor covering fiberglass
Type of Slitting	**Type of Slitting**	**Type of Slitting**
Shear Crush/Score Razor	Shear Crush/Score Razor	Shear Crush/Score
Cartridge Type	**Cartridge Type**	**Cartridge Type**
Swing Crush/Score Razor	Swing Crush/Score Razor	Swing Crush/Score
Minimum Slit Width*	**Minimum Slit Width***	**Minimum Slit Width***
25 mm (1.0 inch)	50.8 mm (2.0 inches)	76.2 mm (3.0 inches)
Blade Diameter	**Blade Diameter**	**Blade Diameter**
90 mm (3.5 inches)	150 mm (5.91 inches)	200 mm (7.87 inches)
Maximum Speed**	**Maximum Speed****	**Maximum Speed****
1,000 mpm 3,500 fpm	1,700 mpm 5,500 fpm	3,000 mpm 10,000 fpm

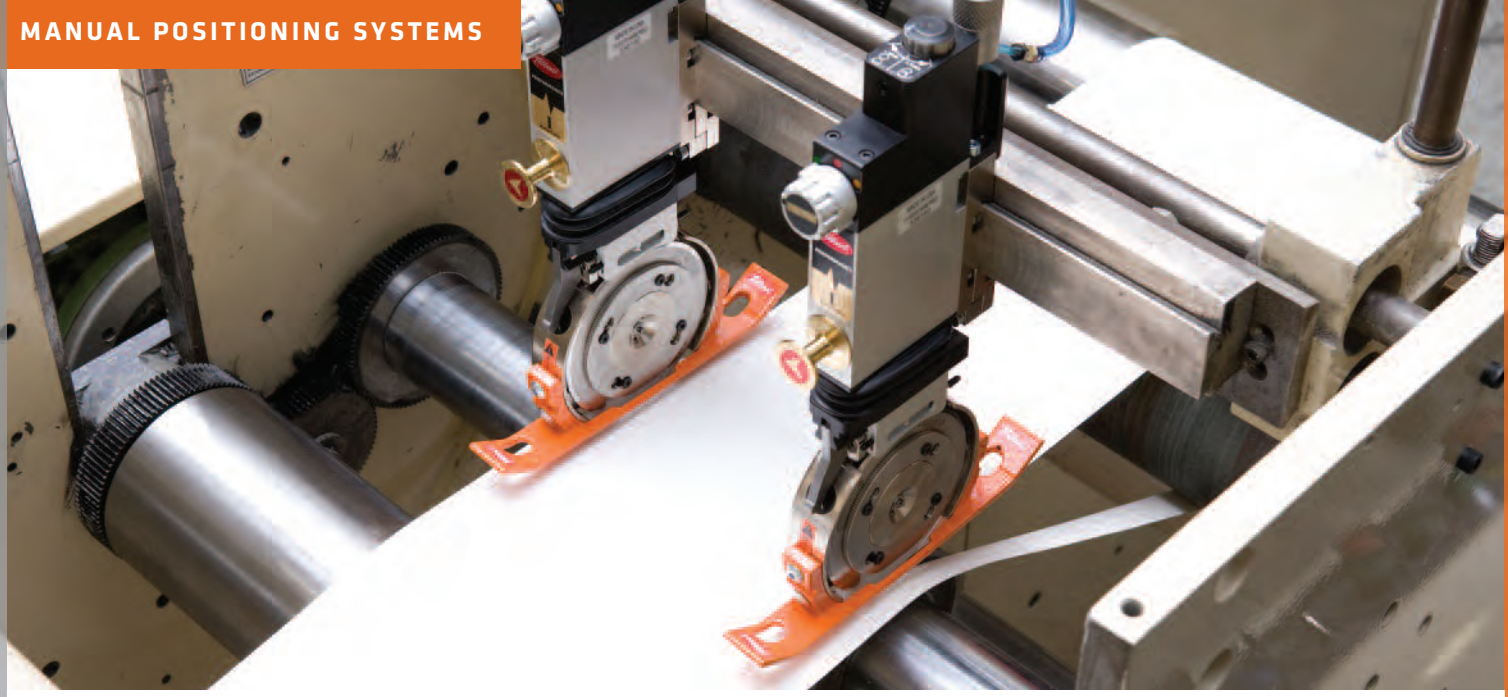
* For typical knife sequence. ** Dependent upon material and application.



KNIFEHOLDER MOUNT
1. Traverse knob/Pneumatic lock
2. Quick disconnect fitting
3. Dovetail guidebar mount

BLADE CARTRIDGE
4. Blade lock
5. Knife blade
6. Blade guard

CONTROL BODY
7. Cartridge release lever
8. Bellows
9. Cant angle key
10. Setup knob
11. Depth adjustment knob

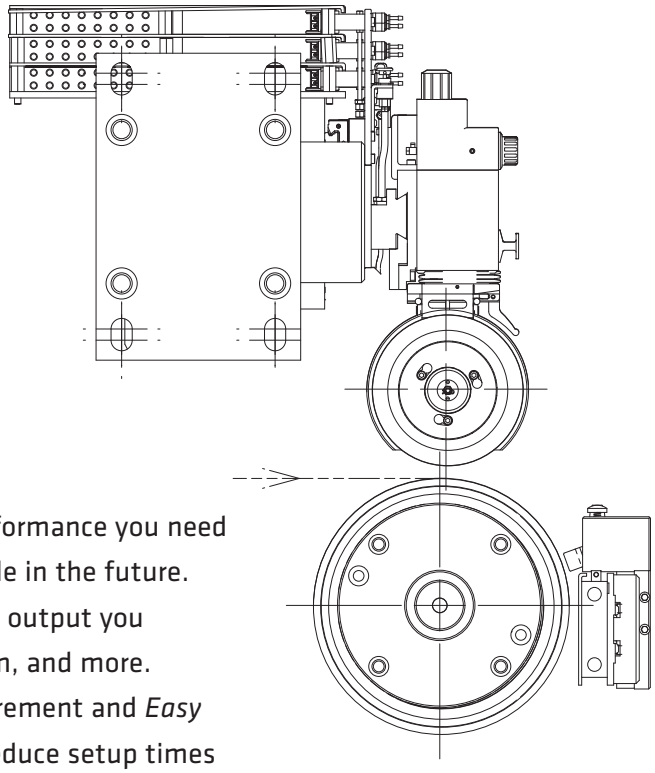


Tidland's MSP™ Modular Slitter Positioning is more than just a slitter, it's an approach. A methodology that gives you an advanced, tailored, manual slitting system using modular pre-engineered components. That way, if you don't need the feature, you don't pay for the feature.

By its very nature, an MSP slitting system is practical for just about any converting application. Start with a manual slitter that combines upper knives, lower knives, and knife mounting options to suit your operation, and keep your options open for future expansion with easy and affordable upgrades to create an automatic system.

Key Benefits

- Modular design allows you to choose only the features you need
- Unmatched slit edge quality
- Increased production capabilities
- Fast, precise slitter setup
- Reduced operator error and downtime
- Reliability and durability
- Flexibility for expansion
- Options available to increase accuracy and efficiency



MSP systems provide the performance you need now, with the flexibility to upgrade in the future. Upgrades provide the high quality output you would expect from an MSP system, and more. Enhancements like digital measurement and *Easy* Glider linear positioning further reduce setup times and increase consistency.

Digital Measurement System

Measures knife placement to ± 0.05 mm (0.002 inch) accuracy. Reduces operator error and speeds up repositioning times. LED displays read-out in metric or inch units.

Digital Measurement System (DMS)

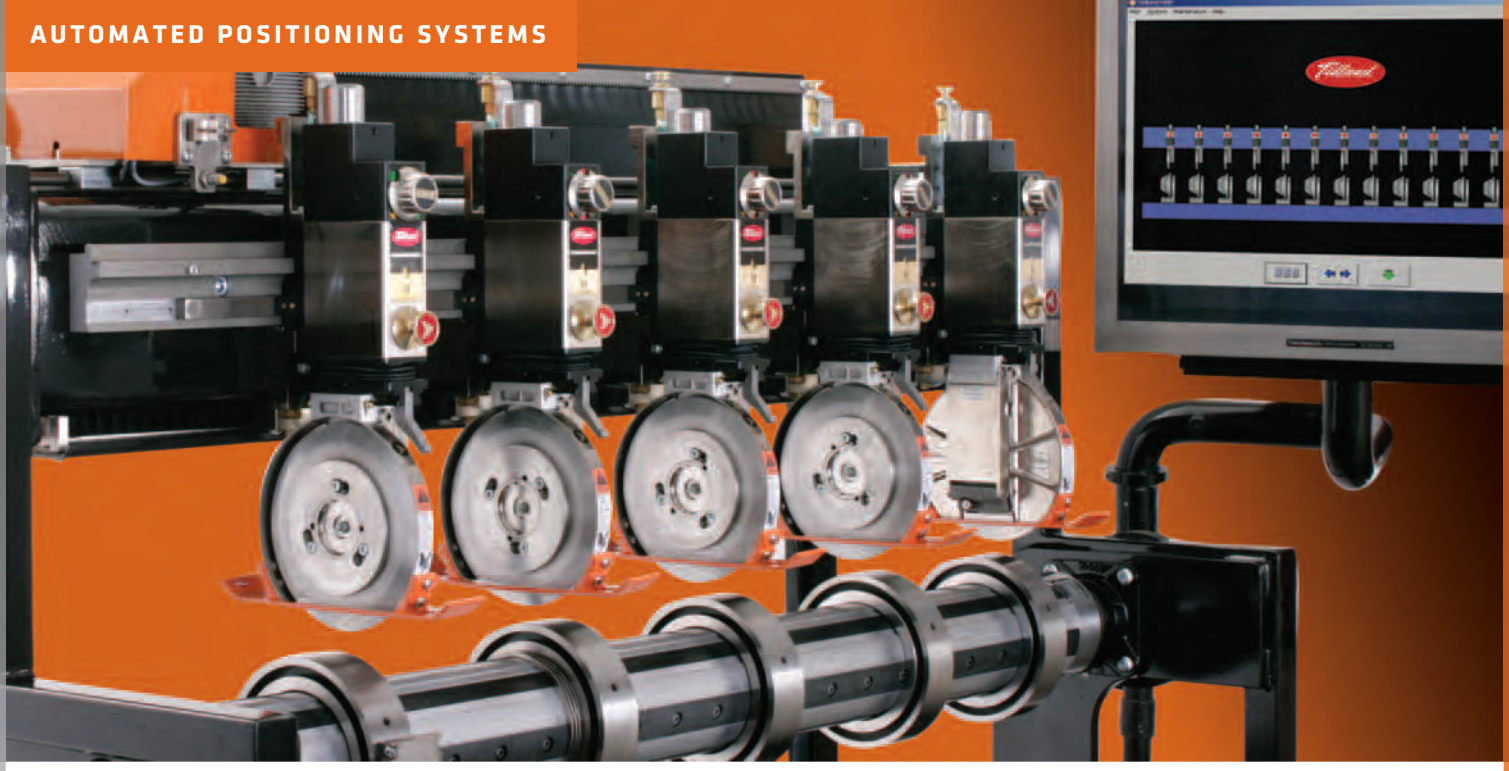
Easy Glider Linear Positioning

Provides faster, smoother movement of knifeholders. Also enables addition of automatic positioning.

Key Benefits

- Consistent, accurate slitter positioning
- Reduced operator error
- Faster setup times

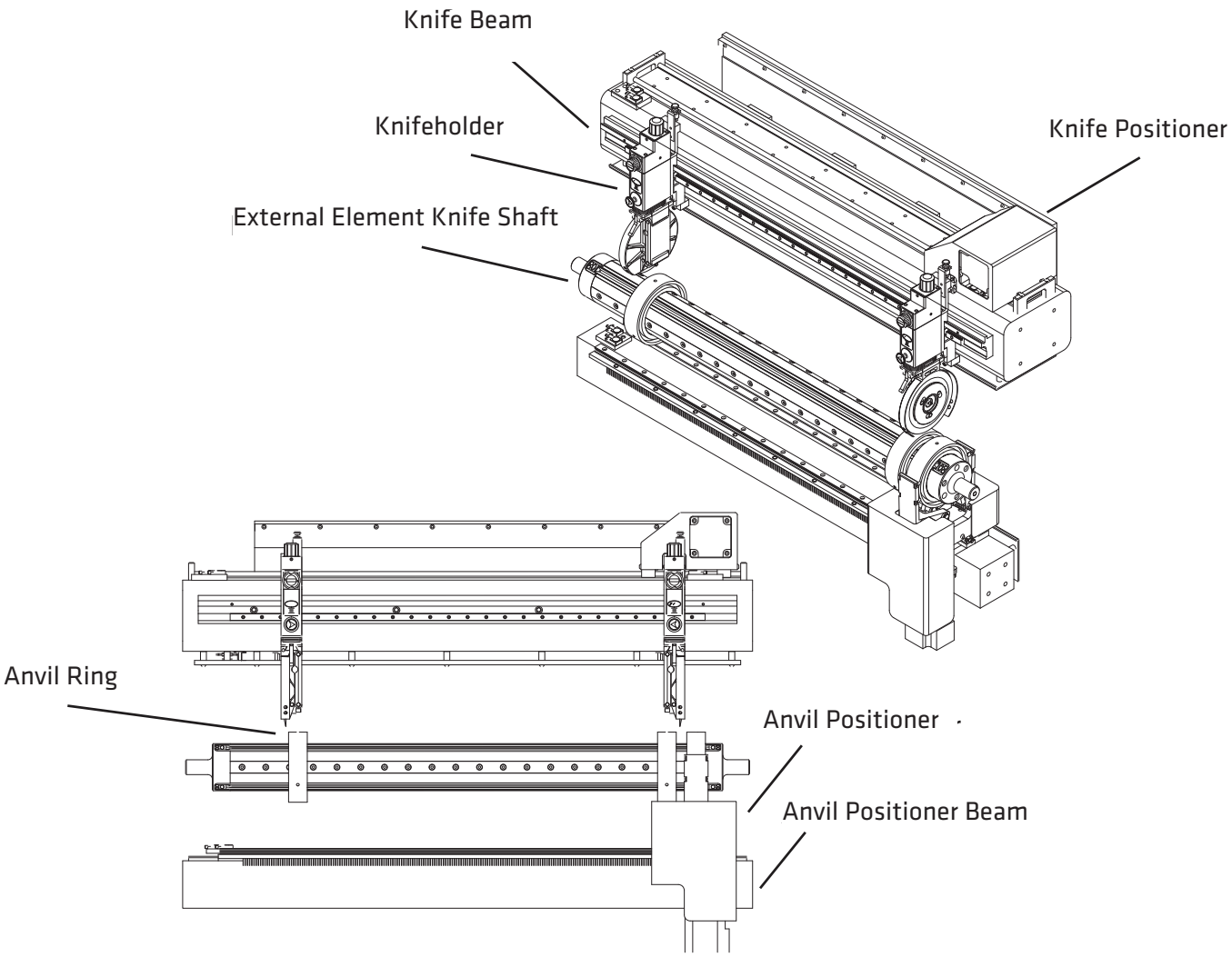
Manual positioning system with crush knifeholders



Automated Positioning Systems combine the latest technology and proven components to increase the speed and accuracy of knife positioning, minimize the frequency and complexity of maintenance, and reduce the risk of operator error. Customizable options like lower knives, slitter shafts, and drive mechanisms ensure a perfect fit for your operation.

Key Benefits

- Customizable base system adapts to your operations
- Highly accurate, consistent operation
- Minimal blade contact decreases setup time and increases operator safety
- Improves blade life, delivering higher quality edges and noticeable dust reduction
- Fewer moving parts reduces the frequency and complexity of maintenance
- Easy-to-use interface via a PC or existing HMI



Tidland Slitter Model SP-500

Tidland's newest automated positioning system is the best mix of new technology and proven performance. The Model SP-500 is a drop-in slitter designed to improve your profitability and production efficiency by increasing positioning speed, accuracy, and consistency. Choose from two options for lower knives to ensure the best slit quality and consistency for your application.

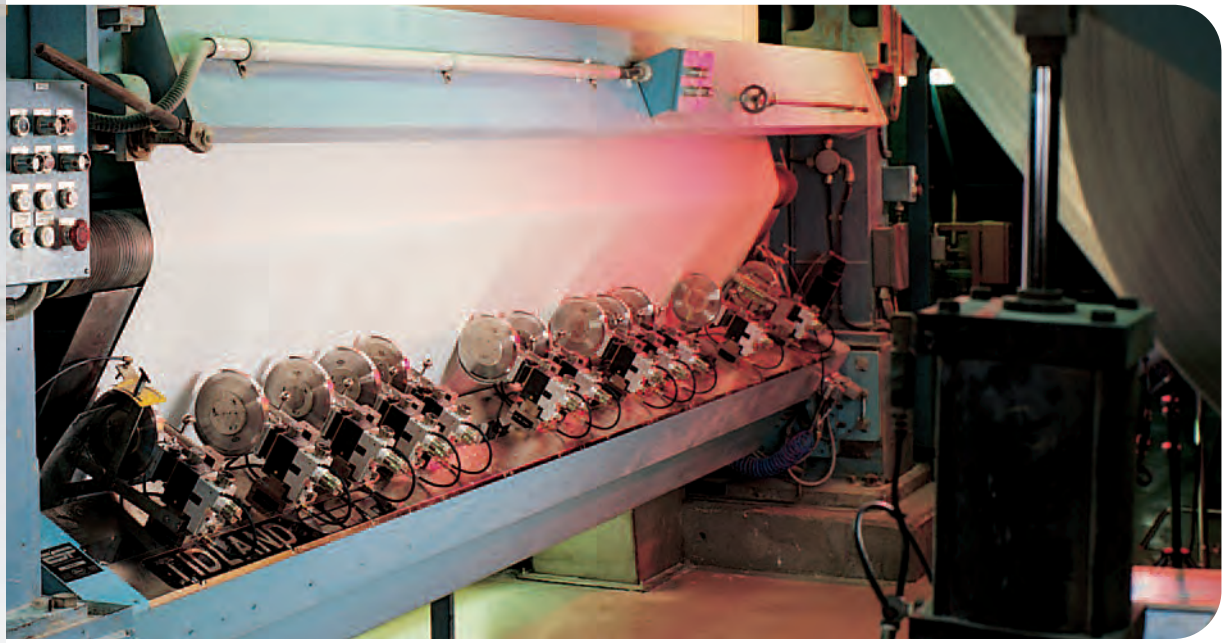
Slitter Shaft

Tidland offers a wide range of slitter shafts with a 25 mm (1 inch) minimum slit width. For shear applications, a pneumatic shaft instantly locks knife rings in place, saving time and money. Anvil shafts are also available for crush applications.

Motor

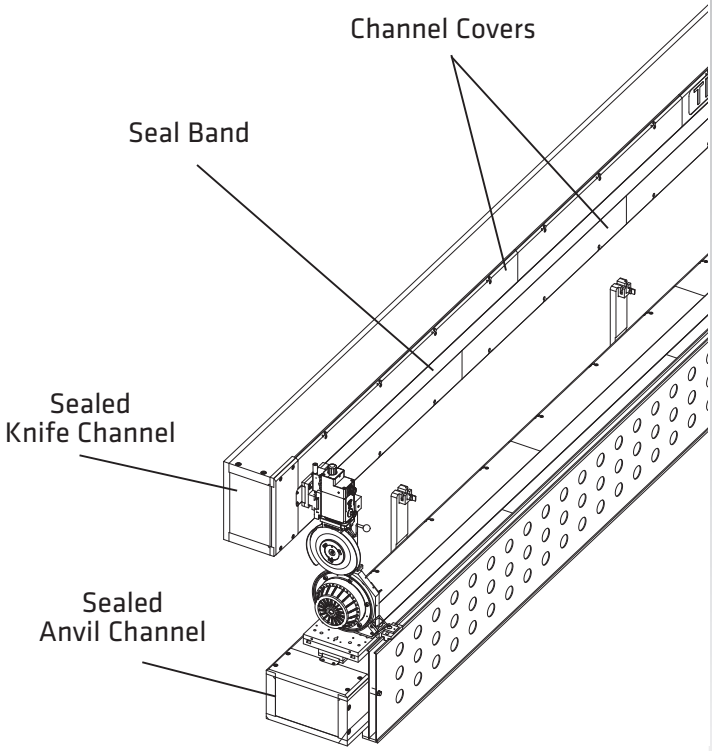
Individually motor driven anvils are best suited for wide webs and high speeds. Minimum 152.4 mm (6 inch) slit width.

With durable steel construction and enclosed channels, Tidland's ESP™ - Electronic Slitter Positioning system delivers reliable, trouble-free slitting in 24/365 mill finishing operations and other large-scale converting operations. The ESP is capable of repositioning 10 slits in under a minute, and accurate to within ±0.05 mm (0.002 inch). Sealed channels keep critical positioning components free of dust and debris ensuring that it will always work, while fully electronic positioning reduces operator error and increases safety. This custom-engineered ESP system is sure to increase production capacity and drastically reduce downtime. The ESP's modular design allows for easy retrofit to most mill winders, and can be mounted at any angle for vertical or horizontal web paths.



Key Benefits

- Custom-engineered to your specific needs
- Adapts easily to center wind, center surface or bi-wind machines
- Designed for demanding environments, providing low maintenance requirements for continuous operations
- Reposition upper and lower knives simultaneously in either direction with the web in place
- Knives are repositioned without homing, even after a power outage occurs
- Multiple software options available to interface with mill computer systems
- Unlimited storage of slit patterns can be quickly recalled to speed changeover
- Affordable installations typically require no more than 48 hours
- Upgrade from manual to fully automatic, with installation taking an average of 12 hours



Edge-Trim

This self-contained shear slitting system is designed specifically for trimming the edges of a continuously moving flexible web. Built for reliable operation in any environment, Tidland's Edge-Trim system will help you greatly reduce repositioning time and ensure trimming accuracy.

Instead of expensive cross-web hardware, Edge-Trim has both upper slitter and driven anvil ring mounted on a common C-frame on linear rails. Setup time is reduced or eliminated because the blade-to-anvil geometric relationship is never disturbed during slitting repositioning.

Key Benefits

- Robust design for mill-duty/heavy-duty
- Quick setup
- Modular and flexible for a wide range of operations

Edge-Trim

Hitchiker

For applications involving multiple slits, Tidland's Hitchiker is a durable and reliable solution for reducing web-out slitter setup time and improving slit quality. This mechanically linked slitter system allows repositioning of knifeholders and anvil rings simultaneously, maintaining the critical blade-to-anvil relationship.

Hitchiker

Key Benefits

- Mill-duty performance and durability
- Increased slitter setup accuracy and repeatability
- Faster order changes
- Ease of maintenance
- Easy retrofit

Use this chart to find the Tidland slitting system that best suits your application needs. Customized solutions are also available.
For assistance, please call your local support team (listed on the back cover) or visit www.maxcessintl.com.

	Anvil Drive	Manual			Automatic		
		Converting	Mill-Duty	PM Winder	Converting	Mill-Duty	PM Winder
MANUAL POSITIONING SYSTEMS							
	Shaft Drive	X	X				
	Anvil Motors	X	X				
AUTOMATED POSITIONING SYSTEMS							
	Shaft Drive				X		
	Anvil Motors				X	X	
ESP® – ELECTRONIC SLITTER POSITIONING							
	Anvil Motors	X	X	X	X	X	X
EDGE-TRIM							
	Anvil Motors	X	X	X	X	X	X
HITCHIKER™							
	Anvil Motors	X	X	X			

Converting:
Paper, film, foil, non-wovens, flexible packaging, etc. Secondary winders, sheeters, laminators, coaters, etc.

Mill-Duty:
Paper, film, foil, non-wovens, board, fiberglass, etc. Secondary winders, salvage winders, sheeters etc.

PM (Paper Machine) Winder:
24/365 Operation

MAXCESS

MAGPOWR FIFE TIDLAND

★ Manufacturing Facilities
● Local Maxcess Representatives

NORTH AMERICA
Tel +1.360.834.2345
Fax +1.360.834.5865
sales@maxcessintl.com
www.maxcessintl.com

SOUTH AMERICA
Tel +55.11.3959.0990
Fax +55.11.3856.0990
southamerica@maxcessintl.com
www.maxcessintl.com.br

EUROPE
Tel +49.6195.7002.0
Fax +49.6195.7002.933
sales@maxcess.eu
www.maxcess.eu

INDIA
Tel +91.22.27602633
Fax +91.22.27602634
india@maxcessintl.com
www.maxcess.in

CHINA
Tel +86.756.881.9398
Fax +86.756.881.9393
info@maxcessintl.com.cn
www.maxcessintl.com.cn

JAPAN
Tel +81.43.421.1622
Fax +81.43.421.2895
japan@maxcessintl.com
www.maxcess.jp

KOREA, TAIWAN AND SE ASIA
Tel +65.9620.3883
Fax +65.6235.4818
asia@maxcessintl.com