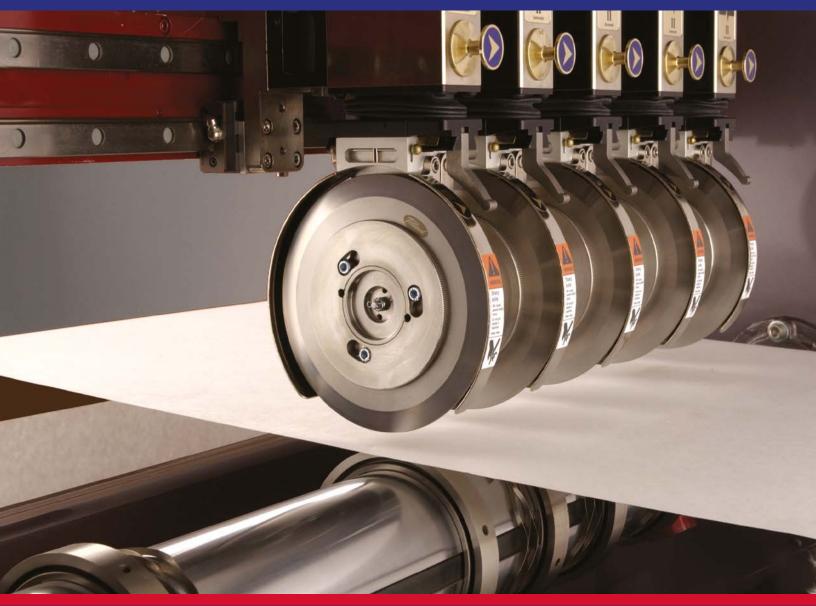




#### BETTER, FASTER, SMARTER



# **Slitting Solutions**

Knifeholders and Slitting Systems for Precision Web Handling

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## About Maxcess Slitting Solutions

## The Tidland Advantage

The right solution for your operation, developed and supported by an experienced team, will deliver value for years to come. Our designers, technicians, sales and support personnel draw from decades of experience in the web handling industry to help our customers secure their own competitive advantage. From a single knifeholder to fully automatic multi-slit systems, Tidland's slitting solutions provide the quality, reliability and versatility your applications require.



## Safer By Design

At Tidland, we design our products with safety in mind. We consider how operators and technicians interact with our slitting products and innovate ways to both minimize interaction and maximize protection. The Control Series Knifeholder, an update to the industry's first fully electronic knifeholder, allows operators to program overlap and sideforce from a screen rather than adjust settings at the knifeholder itself. The award-winning 360 Degree Blade Guard for the Performance Series and Control Series ensures that slitter blades are covered when retracted. These are just the latest examples of Tidland's ongoing commitment to, and innovation in, operator safety.

### **Unparalleled Customer Support**

Others may claim to offer comprehensive support, but Tidland knows your operation requires more. Experienced in various disciplines, including applications analysis, design and engineering, Tidland's customer service team is dedicated to understanding your application and providing the best solution. Our service technicians, who can be deployed globally at a moment's notice, aren't just factorytrained, they're industry experts.

### **Worldwide Service and Support**

As part of the Maxcess team, Tidland personnel can offer the most comprehensive array of accessories and complementary equipment in the industry, thanks to our partner brands of RotoMetrics (Rotary Dies and Support Tooling), Fife (Web Guiding & Inspection), MAGPOWR (Tension Control), Webex (Precision Rolls), Valley Roller (Rubber Coverings), and Componex (Precision Rolls). Maxcess also provides a global reach, with operations in the Americas, Asia, Europe, and Australia.



## **Control Series Knifeholder**

### **Repeatable Setups**

Regardless of material, overspeed preference, blade profile or geometry, Tidland's Control Series electronic knifeholders deliver the highest quality roll slit possible. Available in two models, Control and Control Plus, and featuring an LEDbacklit touchscreen interface, mill-duty durability and available wireless operation, the new Control Series represents a dramatic improvement in knifeholder technology. Step up to the Control Plus model for ultimate slit quality control. Featuring closed-loop side force control and real-time monitoring via the on-board touchscreen or a PC interface, the Control Plus ensures settings are consistently maintained.





#### **Key Benefits**

- All-electronic knifeholders with 360 blade guard minimize operator intervention and maximize the safety of your slitting operation
- Auto-calibration of side force and blade overlap increases slit accuracy and consistency, reducing scrap
- LED-backlit touchscreen is easy to use, even with gloved hands
- Control Plus adds closed-loop side force control and real-time monitoring to ensure settings are maintained
- Knifeholder can be controlled locally or via easy-to-use HMI
- Easily integrated into Tidland Automatic Slitter
   Positioning Systems
- Available wireless operation from any Wi-Fi
  enabled device

#### **Features**

- 1. Single power and communication cable
- 2. Removable and reversible cartridge
- 3. Standard 360 Degree Blade Guard
- 4. Cant angle key
- 5. LED Touchscreen

## **Performance Series** Knifeholder

Tidland's Performance Series Knifeholder delivers reliability and performance to any slitting operation - from light converting to mill-duty operation. Available in three sizes, these innovative knifeholders can accommodate shear, crush or razor slitting of just about any material.







Shear

Crush

Razor

#### **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 Degree Blade Guard reduces risk of operator injury

#### **Knifeholder Mount**

- 1. Traverse knob/pneumatic lock
- 2. Quick disconnect fitting
- 3. Dovetail guidebar mount

#### **Blade Cartridge**

- 4. Blade lock
- 5. Engaged knife blade
- 6. Blade guard

#### **Control Body**

- 7. Cartridge release lever
- 8. Bellows
- 9. Cant angle key
- 10. Function control knob
- 11. Depth adjustment knob



## **Knifeholders**



### **Advantage Series Knifeholders**

Tidland's Advantage Series 19 knifeholder provides a minimum slit width of only 19.5 mm (0.768 inches), while delivering high slit quality and extended blade life. A 180° reversible shear blade cartridge allows you to use both sides of the bottom knife ring, extending blade life and reducing operating costs. With the versatility offered by optional crush (score) or razor blade cartridges, the knifeholder can handle a range of materials and applications.



#### Precision Lock Crush Slitter Knifeholder

Made of durable, die-cast metal and quality materials, Precision Lock Knifeholders are suitable for typical crush slitting in narrow web applications. Setup, installation and adjustments are a snap using a simple, effective toggle quick-clamp.

## Blades, Bottom Knife Rings, and Anvils

Tidland offers a wide range of blades, from simple stocked standard designs for our knifeholders to special blade materials and designs.

## **Slitting Safety**

There is no acceptable level of accidents; one is too many. That's why we think about safety issues with every product we design and manufacture. Innovations like our blade guard safety attachment provide extra protection and can be easily retrofitted to any Tidland slitter. Tidland Knifeholders also feature a removable cartridge, so blades can be safely changed on a workbench.

#### Bench-Mount Fixture and Safety Gloves

Tidland's convenient bench-mount fixture mounts easily to any workbench with two screws to hold the knifeholder cartridge securely, freeing up operator hands while performing basic maintenance on the knifeholder. adjustments are a snap using a simple, effective toggle quick-clamp.

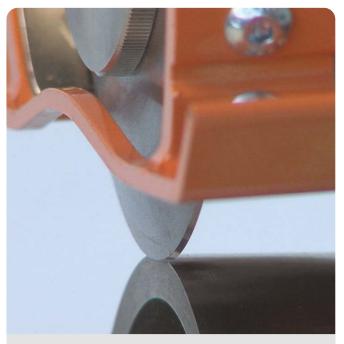


## 360 Degree Blade Guards

The 360 Degree Blade Guard protects an operator from sharp blades while handling knifeholders off of the machine. Available for Class I, Class II, and Class III Tidland knifeholders.

### **Blade Guard Safety Attachments**

Each blade guard attaches directly to the existing knifeholder, acting as an extension to alert operators when they are too close to the blade, giving them more time to react.



360 Degree Blade Guard, blade exposed for slitting



360 Degree Blade Guard, position when blade retracts

MANUAL SYSTEMS

## **Manual Slitting Systems**

### **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 accuracy.

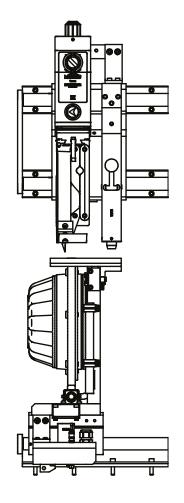
Instead of expensive cross-web hardware, the Edge-Trim has both upper slitter and driven anvil rings mounted on a common C-frame on linear THK rails. Setup time is reduced or eliminated because the blade-to-anvil geometric relationship is never disturbed during repositioning.





## Hitchiker

For applications involving multiple slits, Tidland's Hitchiker reduces slitter setup time and improves slit quality. This mechanically linked slitter system allows repositioning of knifeholders and anvil rings simultaneously, maintaining the critical blade-to-anvil relationship.



- Mill-duty performance and durability
- Increased slitter setup accuracy and repeatability
- Faster order changes
- Ease of maintenance
- Easy retrofit
- Available with Performance Series
   or Control Series Knifeholders

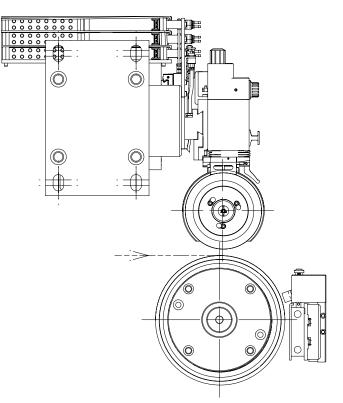


#### Shaft based solutions

Tidland's MSP Modular Slitter Positioning is a customtailored manual slitting system using modular, pre-engineered components. MSP systems provide the performance you need now, with the flexibility to upgrade in the future.

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 (shear slitting) or anvil (crush slitting), and knife mounting options to suit your operation. Keep your options open for future expansion, with easy and affordable upgrades to create an automatic system.





- Consistent, accurate slitter positioning
- Simple operation and maintenance
- Reduced operator error
- Faster setup times

## Options Manual Slitting Systems

## **Easy Glider Linear Positioning**

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



### **Digital Measurement System**

Measures knife placement to  $\pm$  0.3 mm (0.012 inch) accuracy. Reduces operator error and speeds up repositioning times.



#### **DuraGlide Guide Bar**

Hard coat anodized for durability and quick and easy adjustment. Completely interchangeable with our Performance series and EZ Glide guide bar configurations.

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

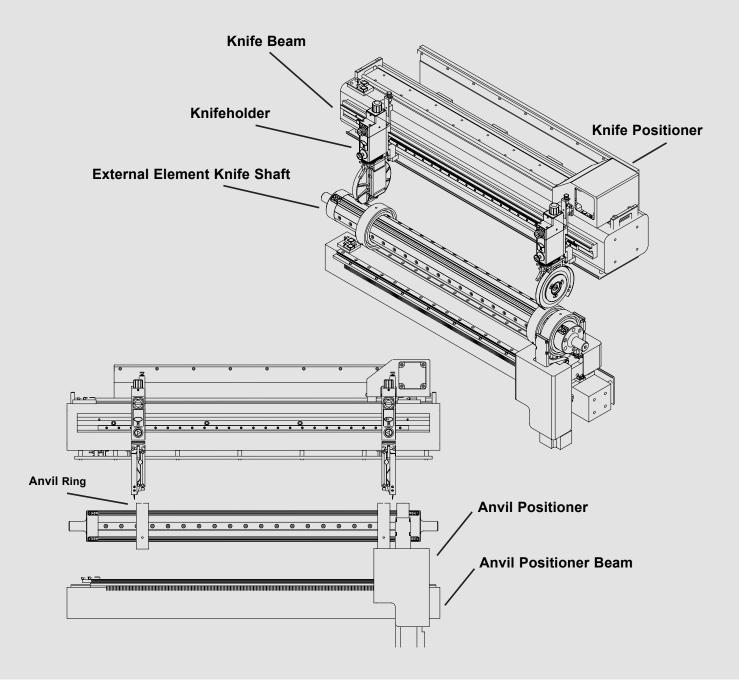
## Sequential Positioned Automated Systems



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

- Customizable base system adapts to your operations
- Highly accurate, consistent operation
- Minimal blade contact decreases setup time and increases operator safety
- Fewer moving parts reduces the frequency and complexity of maintenance
- Easy-to-use interface via a PC, existing HMI or customer PLC





### Tidland Slitter Model SP-500/MSP-A

This drop-in slitter is the best mix of new technology and proven performance, designed to improve your profitability and production efficiency by increasing positioning speed, accuracy and consistency. Choose from single motor driven or bottom shaft driven designs to ensure the best slit quality and consistency for your application. PC and PLC-based designs are also available.

## **Slitter Shafts**

Tidland offers a wide range of slitter shafts with a 30 mm (1.18 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.

#### **Motors**

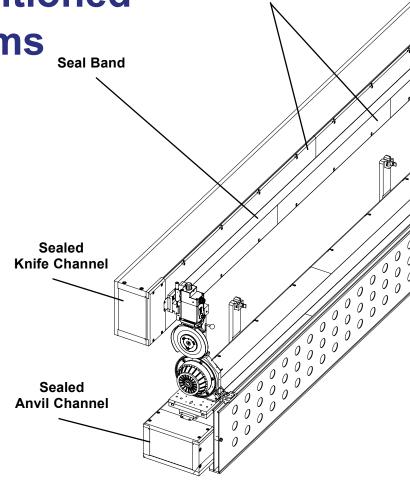
Individually motor driven anvils provide better handling than shaft driven designs in wide web and high speed applications.

Channel Covers

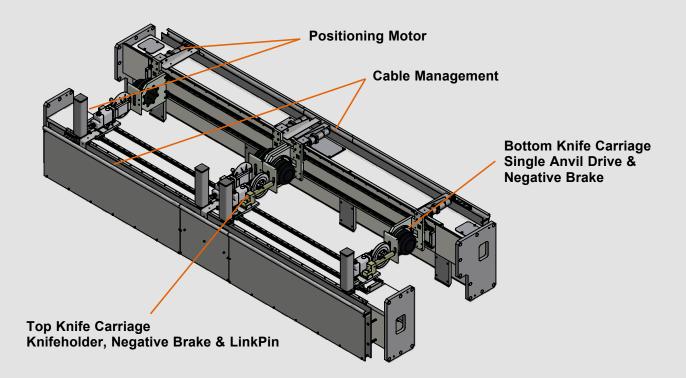
## Synchronous Positioned Automated Systems

#### MSP-E/ESP Electronic Slitter Positioning System

With steel construction and enclosed channels, Tidland's Electronic Slitter Positioning system delivers reliable, troublefree slitting in 24/365 mill finishing operations and large-scale converting. The system is capable of positioning all knives in less than 30 seconds, with accuracy within  $\pm$  0.1 mm (0.004 inch). Optional sealed channels keep critical positioning components free of dust and debris, ensuring worry-free operation, while fully-electronic positioning reduces operator error and increases safety. A modular design allows for easy retrofit to most mill winders, and can be mounted at any angle for vertical or horizontal web paths. PC or PLC-based systems are also available.



- Adapts easily to center wind, center surface
   or bi-wind machines
- Designed for demanding environments
- Low maintenance requirements for continuous operations
- Repositions upper and lower knives
   simultaneously in either direction with the
   web in place
- Repositions knifes without homing, even after a power outage occurs
- Multiple software options available to interface
   with mill computer systems
- Retrieves unlimited stored patterns
- Upgrade form manual to fully automatic. Installation averages 12 hours



### Long Term Support and Service

Tidland engineers have updated the Decoder Package assembly of existing Electronic Slitter Positioning Systems to replace the hose and fittings with a new air manifold design for improved reliability and ease of maintenance. With stateof-the-art components, we've combined two boards into one, moving away from proprietary to off-the-shelf components. With these improvements as well as using the latest Absolute Magnetic Strip Encoder technology, we've increased the life of the package and reduced long term maintenance costs.







## Knifeholder Selection Reference

Upgrade your slitter performance. Use this chart to find the size of Tidland Knifeholder that is right for you. For assistance, call 1.844.MAXCESS or visit us at maxcessintl. com to find your nearest Field Sales Engineer.

ADVANTAGE	CLASS I	CLASS II	CLASS III		
TYPICAL APPLICATIONS					
Light Converting, Flexible Packaging, Finished Product Converters	Light Converting, Flexible Packaging, Finished Product Converters	Mainstream Converting	Mills		
TYPICAL MATERIALS					
Paper Films, Coated Paper Foil Covered Paper Film–Paper Laminates Co-extruded Films Polypropylenes	Paper Films, Coated Paper Foil Covered Paper Film–Paper Laminates Co-extruded Films Polypropylenes	Paper Coated Papers Foils Fine Printing Papers Chrome-Coated Poly-Coated Paperboard Nonwovens All Films	Coated & Non-Coated Papers Tissues Newsprint Kraft Papers Chipboard Roofing Felt Floor Covering Fiberglass		
MINIMUM SLIT WIDTH					
19.5 mm (0.768 inches)	1 inch	2 inches	3 inches		



#### HOW TO CONTACT US



#### GLOBAL HEADQUARTERS & AMERICAS

(S) +1-844-MAXCESS
 금 +1-405-755-8425
 ☑ sales@maxcessintl.com

#### EUROPE HEADQUARTERS

(S) +49-6195-7002-0
 ☑ sales@maxcess.eu

#### ASIA PACIFIC

№ +86-400-830-1898
 ☑ asia.sales@maxcessintl.com

#### ✓ Web maxcess.com

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