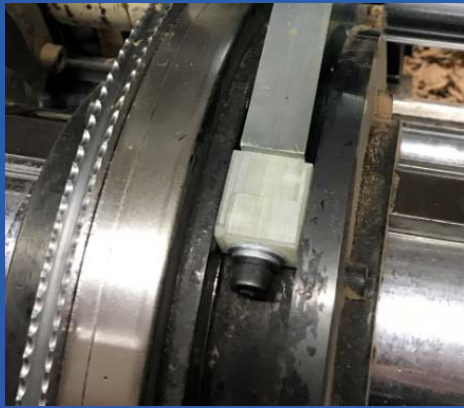


EST.  1926

SAUER SYSTEM

Innovative Mechanical Tooling Solutions

TAKE THE NEXT STEP TO **BLAST YOUR MACHINE INTO ORBIT**



Why Saturn Upgrades?

- One of the most iconic machines in the corrugated industry
- Machine built on sound mechanical principals
- Opportunities for true upgrades that make a difference



Photo caption or another photo can
be placed here

Why Saturn Upgrades?

- Upgrades are mechanical, and are therefore not prone to failure
- Upgrades specially designed for Saturn flexos, designed with extensive knowledge of the machine
- Every upgrade offers value over the OEM component

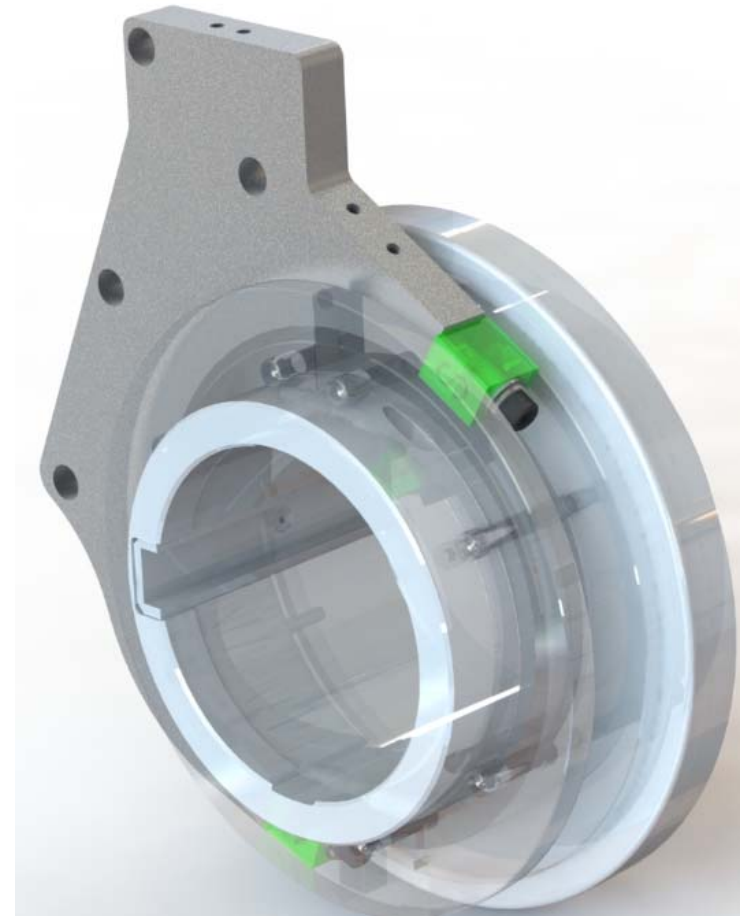
Saturn Upgrade Benefits

- Increased productivity
- Improved quality and box squareness
- Reduced costs – short and long term
- Reduced downtime for maintenance

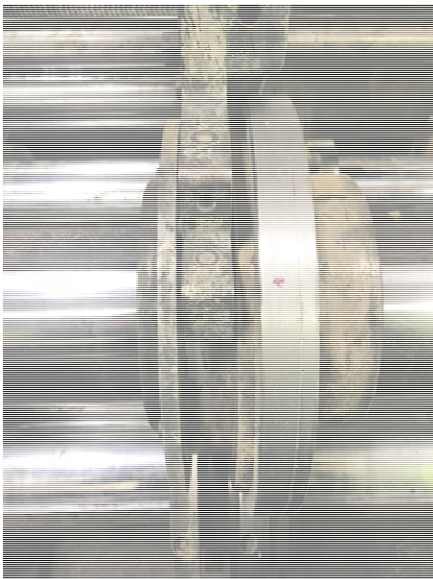


Yoke Upgrade

- Solves the “carbide button” issue
- Dramatic reduction in maintenance downtime
- Improved slotting and folding
- Reduced cost of replacing knives



Yoke Upgrade – “Carbide Button Issue”



OEM Style
yoke with
carbide
buttons



Adjustments
are not easy to
make, and are
often put off,
even when
lateral play is
detected



Yoke Upgrade - Features

- Adjustments can be made in under a minute
- Easy visual inspection of yoke blocks
- No special tools or knowledge required
- Superior material characteristics

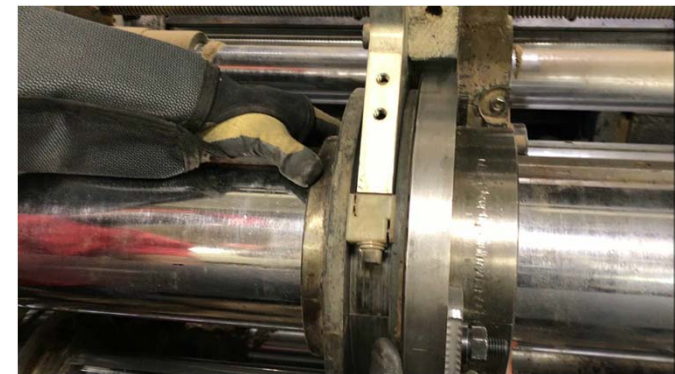
Yoke Upgrade – Making an Adjustment



Checking head for lateral play



Adjusting the yoke block



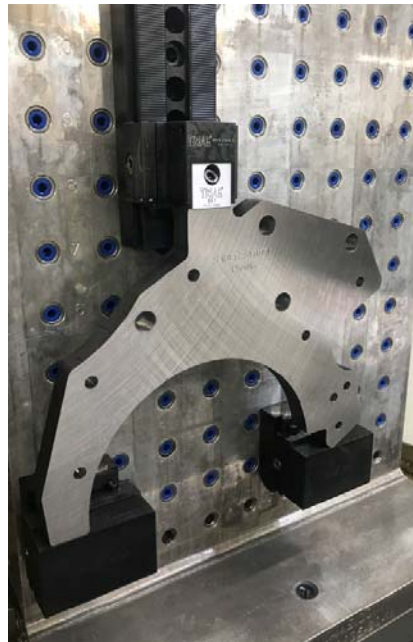
Re-checking head for lateral play

Yoke Upgrade – “Single Position Set”

- Slotter Yokes
- Creaser Yokes
- Spare Yoke Blocks
- Split Nuts

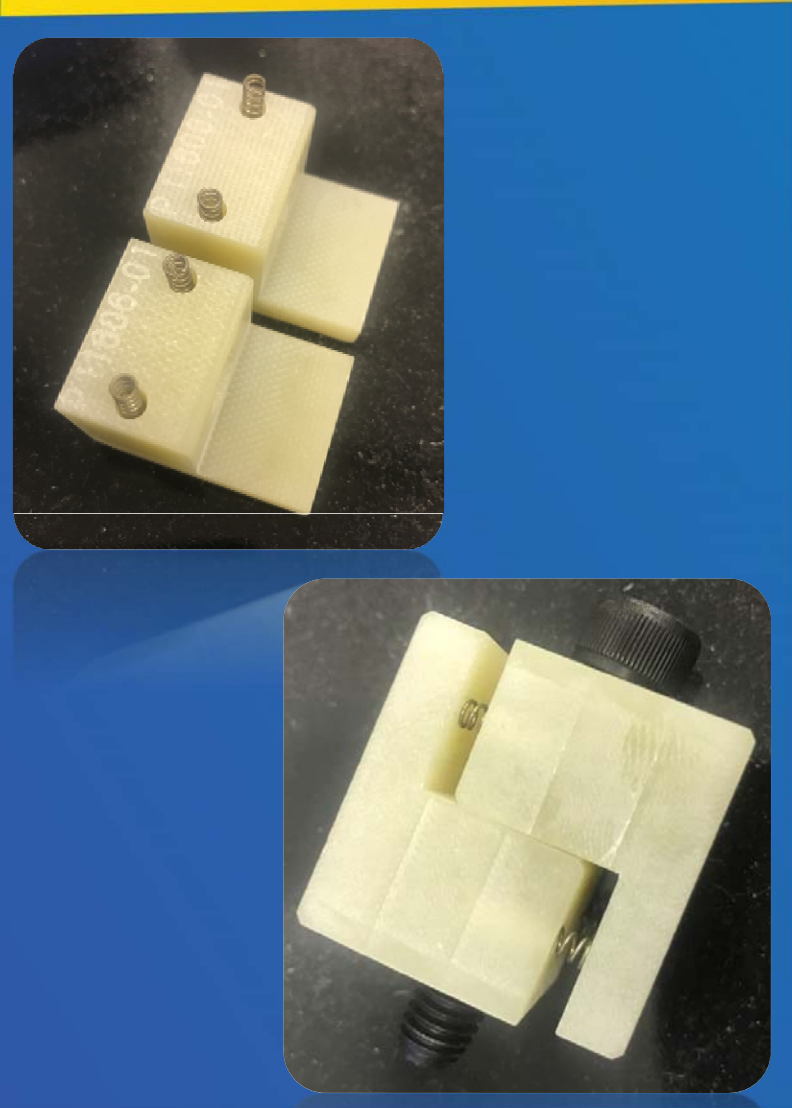


Yoke Upgrade - Production



Yoke Upgrade – Material Characteristics

- Made from fiberglass-based composite
- Extremely resistant to surface abrasion
- Won't generate heat during production



Creaser Yoke Upgrade



- Especially effective application
- Small diameter creasing heads tend to wear out the yoke plates faster than the slotter heads
- Creasing heads with play will walk along the shaft, creating score lines that are off-center
- Sauer creaser yokes allow for adjustment in under a minute per yoke

Creaser Yoke Upgrade



OEM STYLE CREASER YOKES



SAUER SHOE SYSTEM CREASER YOKES



Slotter heads and Creasing heads



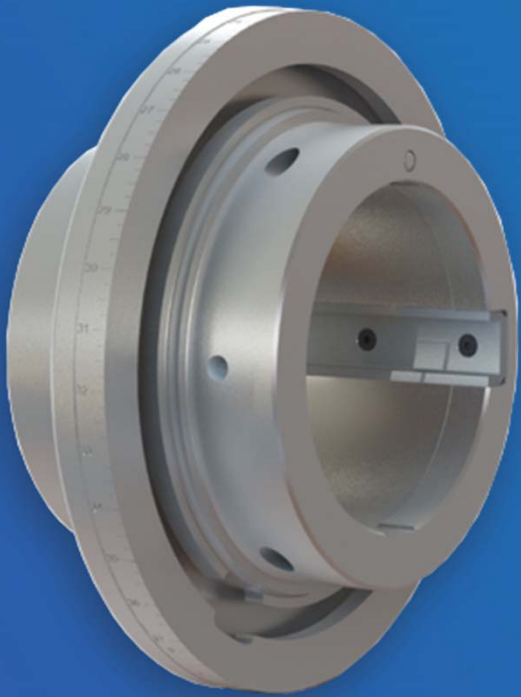


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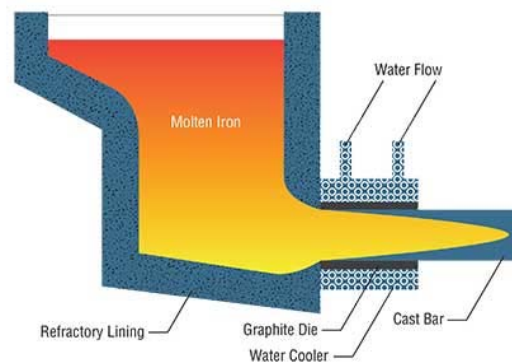
Slotter Heads & Creasing Heads – Special Features

- Upper heads are fully index stamped
- Yoked upper heads come with a replaceable steel insert keyway
- All yoked heads feature emergency set-screw hole

Slotter heads and creasing heads – material advantages



- Manufactures from Dura-bar extruded grey iron
- Manufactured to OEM tolerances or better
- Sauer design parameters incorporated



Slotter heads and creasing heads



Full set of upper slotter heads

- Lower pricing OEM
- Faster delivery than OEM
- Superior construction and materials
- Ship as complete assemblies with wear plates and blades upon request

Yoke Wear Plates



- Upper wear plates utilize a three-piece system – wear plates can be flipped for twice the life
- Chamfered edges for safety
- Made of the highest quantity tool steel and hardened to 58-60 RC

Lower Yoke Wear Plates

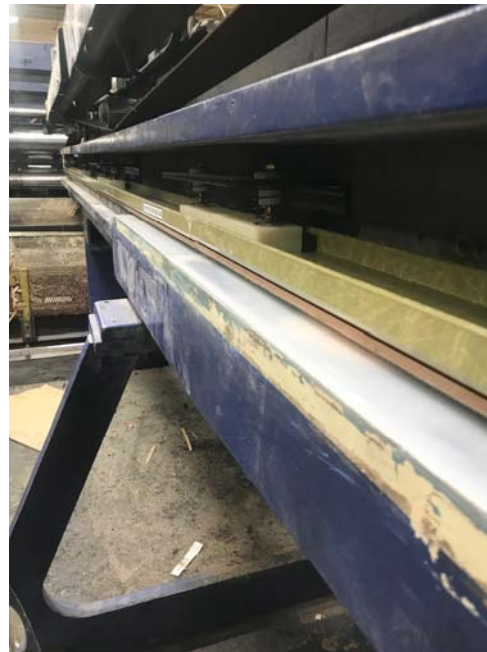


- Chamfered lower wear plates are a requirement for utilizing our yoke upgrade
- Sharp edges can cause damage to the yoke block when the lower shaft moves
- Previous wear from the carbide button can also cause premature damage to the yoke blocks

Roller Eliminator



Before



After

- Eliminates issues with hold-down rollers
- Reduced maintenance requirements
- Improved belt tracking
- Improved board transfer

Roller Eliminator



Before



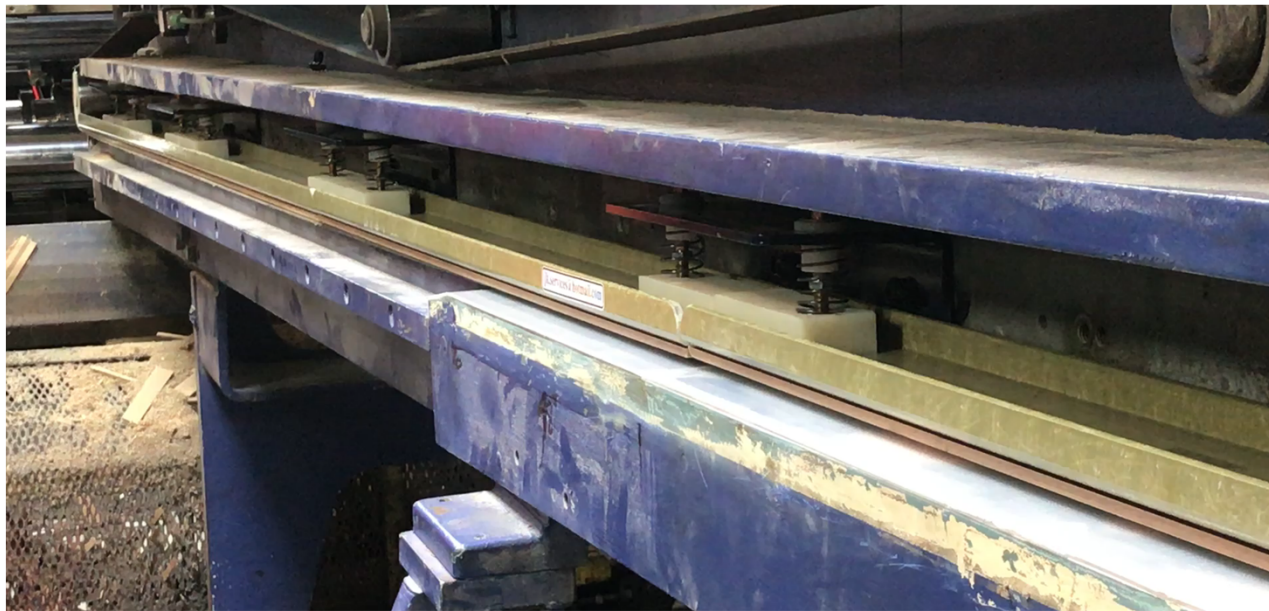
After

Roller Eliminator

- Provides a uniform and smooth surface for the belt to ride on, and a continuous nip
- No maintenance required/no adjustments required
- Replaces rollers with ultra-durable, spring-loaded boxes
- Eliminates potential twisting and tracking issues



Roller Eliminator



Continuous nip

Roller Eliminator – Spear Recover



Before

After



- Optional service provided with roller eliminator installation
- Reconditions the riding surface for boxes going through the folding rails
- Eliminates catch points and unevenness in the folding rails

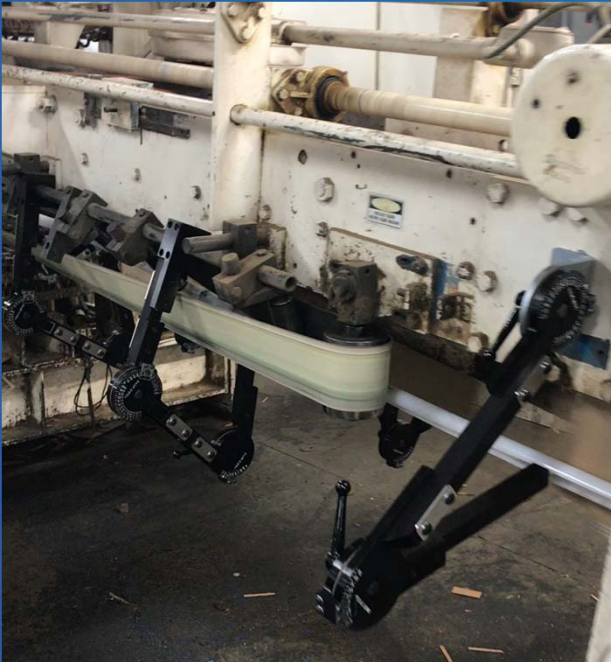
FRX Adjustable Folding Rod System



- Add-on system (interacts with existing folding belts)
- Improved control of sheets running through the folding section
- Easy and repeatable adjustments, no tools required
- Customized to each machine and application

FRX Adjustable Folding Rod System

- Helps reduce “snapping” motion from folding belts
- Reduces skew, fishtail and plowing
- Quickest possible solution for going from inside glue to outside glue
- Utilizes UHMW rod and aircraft grade aluminum folding arms



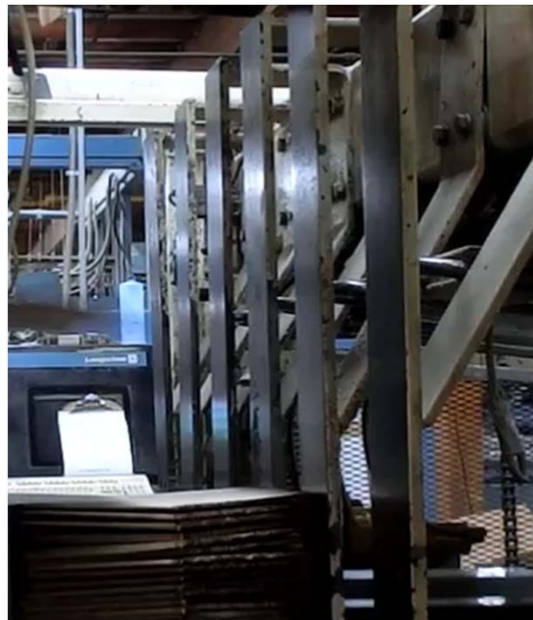
FRX Adjustable Folding Rod System



FRX Adjustable Folding Rod System



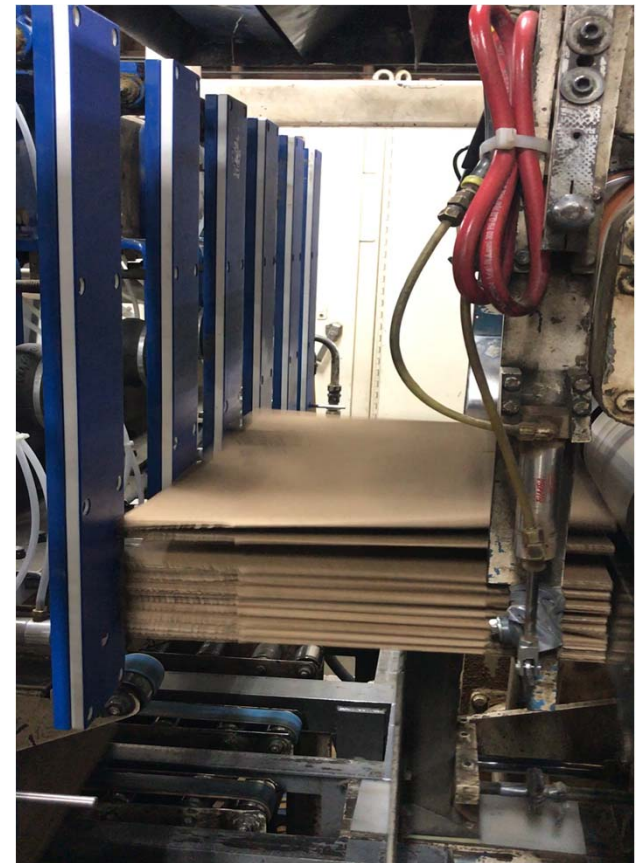
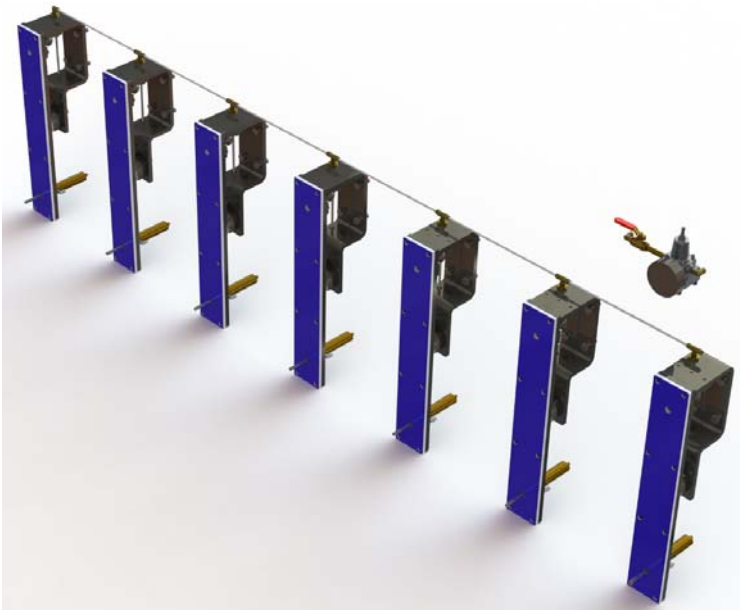
Air Spring Backstops



OEM Backstops

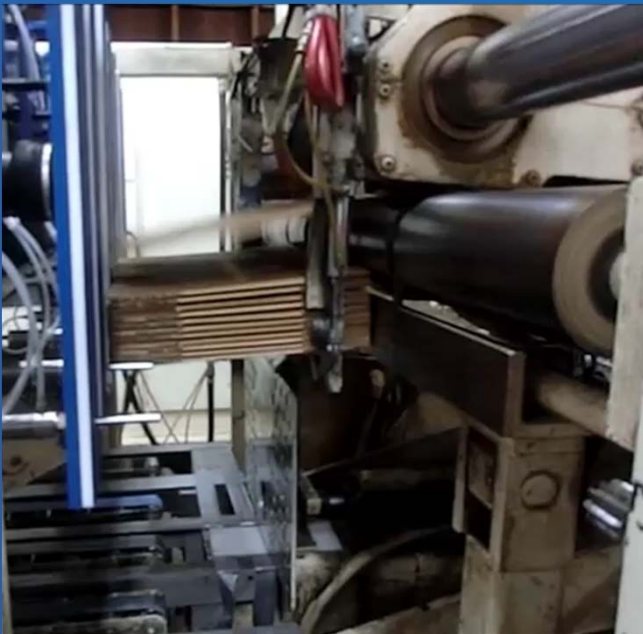
- OEM backstops consist of welded metal plates without any cushioning
- The backstops absorb the full impact of incoming boxes, which transfers to the entire counter-ejector
- Backstops tend to break over time and are often involved in jam-ups
- The lack of cushioning or give leads to damage to the lead edge of incoming boxes

Air Spring Backstops



Air Spring Backstops

- Air-spring backstops are a complete redesign
- The backstops feature a pivot point and air spring to cushion the impact of incoming boxes
- In addition, the backstops have composite wear pads on the front to help absorb the impact
- In the event of a jam-up, the air can be



Trombones



- Virtually indestructible
- Utilizes fiberglass for reinforcement
- Utilizes UHMW guide blocks
- In stock for immediate shipment

Counter-Ejector Shock Eliminator



- Immediate reduction in stock to the counter-ejector
- Dramatic reduction in noise



- The only wear components is very inexpensive to replace
- Installs in 15 minutes

Counter-Ejector Valve Upgrade



- Larger ports allow for more consistent air flow
- Counter-ejector timing will instantly become more consistent, reliable and repeatable
- The end result is fewer jam-ups in the counter-ejector

Counter-Ejector Valve Upgrade



Before



After



THANK YOU

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