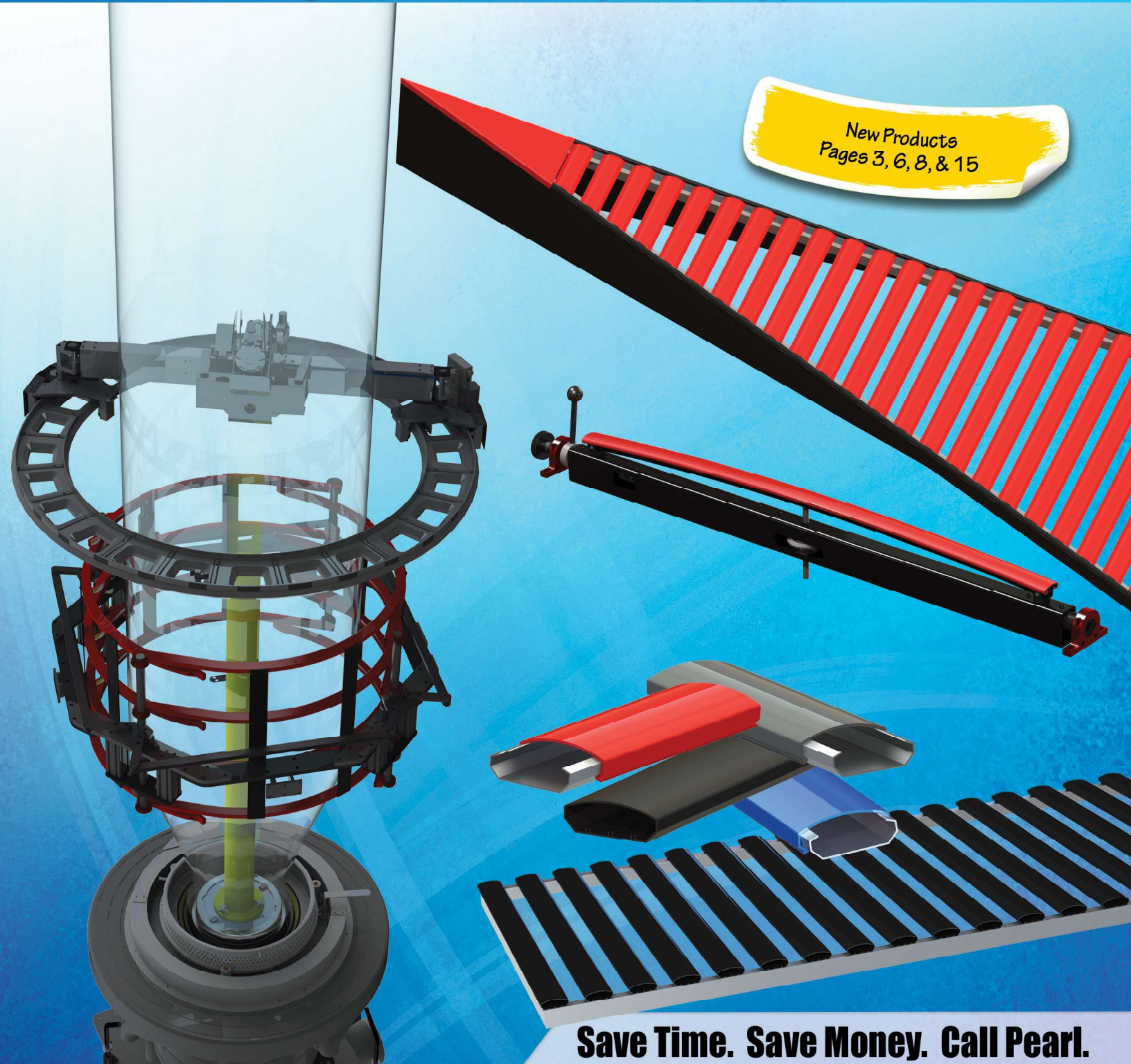




# Extrusion Catalog 2016

Revolutionizing the extrusion industry with quality product solutions!

New Products  
Pages 3, 6, 8, & 15

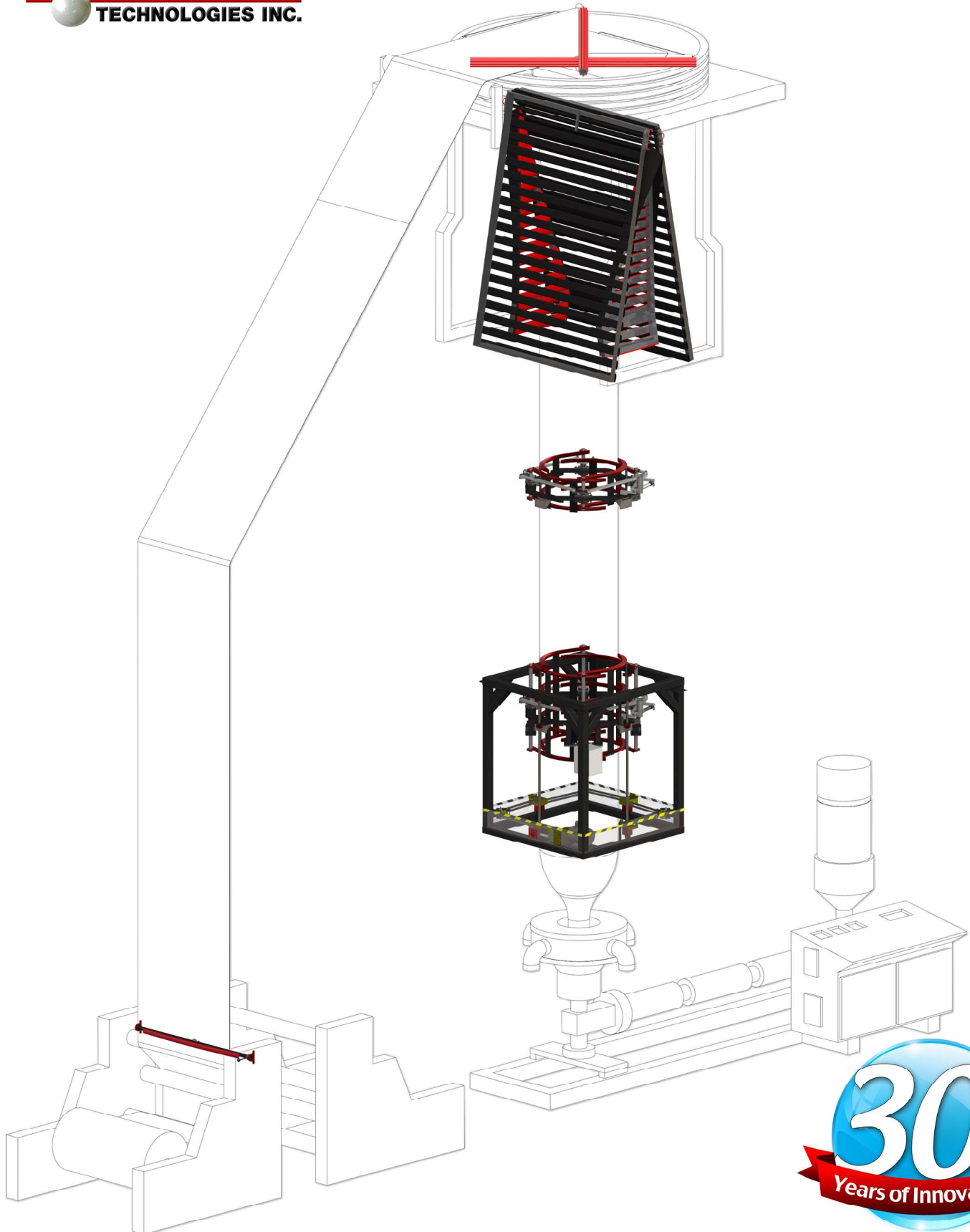


**Save Time. Save Money. Call Pearl.**

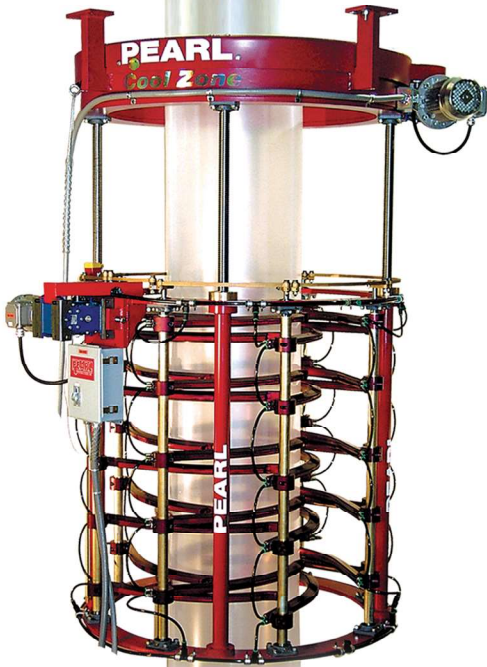
# Get Better Film, Faster



Pearl can make your blown film lines perform better than ever. Improve gauge control, roll quality and film clarity, while reducing maintenance and increasing output!



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## Material Surface Properties

### Choose Which Material Will Be Best For Your Application

Specifications	CFWS-1 (Super Slip) CFWS-4 & 5	CFWS-1HT CFWS-5HT	CFWS-2 (Ultra Slip) CFWS-3 & 6	CFWS-2BHT CFWS-6BHT	CFSM24-1 CFSM24-CL & 6
Appearance	gray plastic	gray plastic	red plastic	blue plastic	black or red
Material	formulated plastic	formulated plastic	formulated plastic	formulated plastic	surface modified aluminum
Dynamic COF*	0.17	0.14	0.12	0.10	0.06
Hardness	tough plastic	hi-slip plastic	hi-slip plastic	ultra hi-slip	72c rockwell
Max cont. temp	240°F (115°C)	245°F (118°C)	190°F (88°C)	190°F (88°C)	450°F (232°C)
Typical film use	LDPE, HDPE, PP, LLDPE, Nylon, BOPP	most film types	Metallocenes, Shrink, Butyls, Surlyn, Medical	most film types	all film types



\* COF = Coefficient of Friction

# Original Tent Slats & Backers

- Eliminate Wrinkles
- Improve Bubble Stability
- Better Film & Roll Quality
- Lower Friction = Increased Output
- Up to 10+ Years Life Expectancy

This original slat cover has proven to be superior to wooden tent slats. It is 25% more slippery and has a longer service life (ten years or more). Customers report immediate improvement upon installation! One customer recently called and said, "...it was the best money our company has ever spent!"



*"Snap over" your existing wooden slats in minutes! Exact retrofits for OEM's Gloucester (CFWS-1) & Kiefel (CFWS-5).*



## CFWS-1

The original slat cover, developed in 1987, working on thousands of film lines throughout the world today.

## CFWS-5

Same successful formula used in our CFWS-1. Can retrofit directly over the wood on any Kiefel line.

## CFAL-1

Convection cooling backer can reduce tent surface temperatures by 30-40°F. Allows Pearl's slats to fit any line.

## CFAL-5

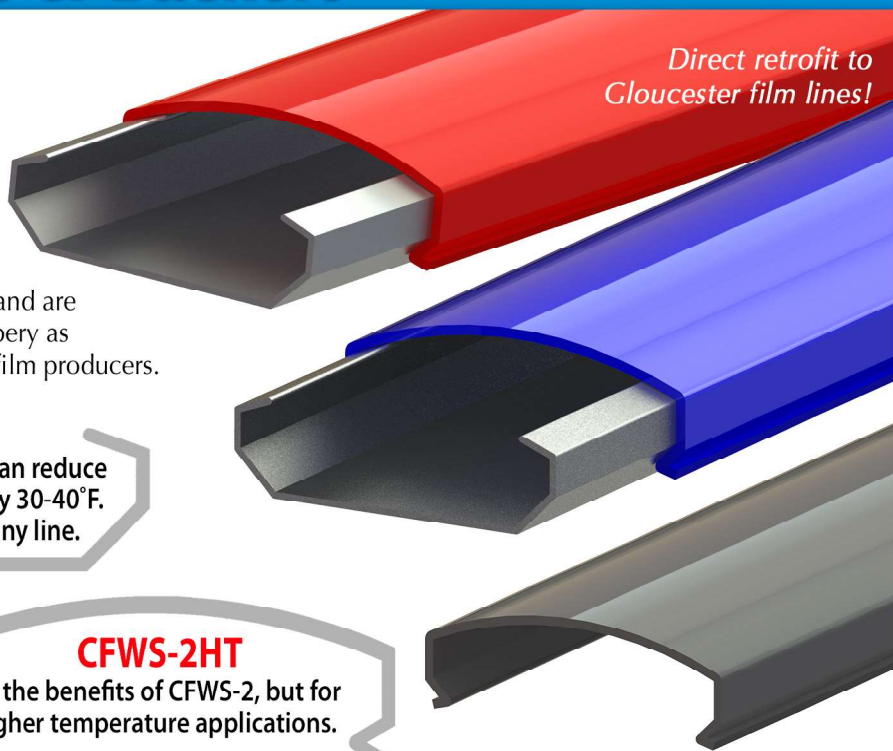
Convection cooling backer made for CFWS-5. Can retro to fit to any line.

patented

# Ultra-Low COF Slats & Backers

- Our Premium Tent Slat for All Resins
- 50% Lower Friction than Wooden Slats
- Wrinkle Free Webs at Higher Output
- Incredible Film & Roll Quality
- Up to 10+ Years Life Expectancy

These Ultra-Low COF slats were designed for tacky films and are 25% more slippery than our original slats. Nearly as slippery as Teflon®, they wear like iron! Very popular with medical film producers.



## CFAL-1

Convection cooling backer can reduce tent surface temperatures by 30-40°F. Allows slats to retrofit to any line.

## CFWS-2

Developed in 1992 for tacky films such as Surlyns, butyls, stretch, EVA blends & linear low films.

## CFWS-2HT

All the benefits of CFWS-2, but for higher temperature applications.

# The Extreme Tent Slat



- The "Ultimate" Tent Slat
- As Slippery as Teflon®
- Harder than Tool Steel
- Will Not Mark or Scratch Film
- Built to Last a Lifetime

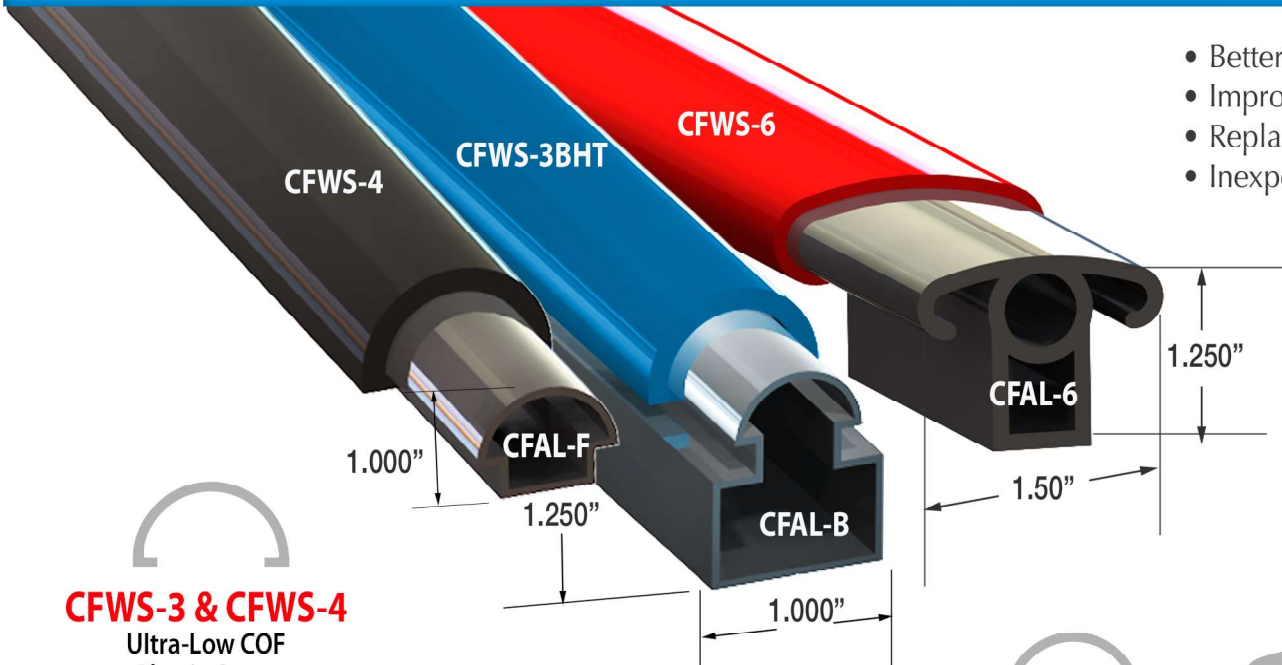
Optional custom made panels available to simplify installation into your existing framework.

**CFSM24-1** Developed in 2003, after unparalleled success with our cage arms utilizing this high tech surface modification, SM24 is 40% as slippery than Teflon® and harder than tool steel. We believe it is a permanent tent slat that may never wear out. These have been retrofitted to replace air collaspers as well as carbon fiber roller tents.



CFSM24-1 slats require little or no maintenance and can be cleaned with Scotch-Brite® without causing any damage. These slats will yield the highest possible outputs while providing important bubble stability. No more worries about marking even the most sensitive films. Helps remove sags, wrinkles or other problems associated with drag/friction.

# Retrofit Side Guides



- Better Bubble Control
- Improve Roll Quality
- Replaceable Wear Covers
- Inexpensive Innovation

**CFWS-3 & CFWS-4**  
Ultra-Low COF  
Plastic Cover

**CFAL-F**  
Flexible Backer

**CFAL-LC**  
Chilled Backer

**CFWS-6**  
Ultra-Low COF  
Plastic Cover

**CFAL-B**  
Box Type Backer

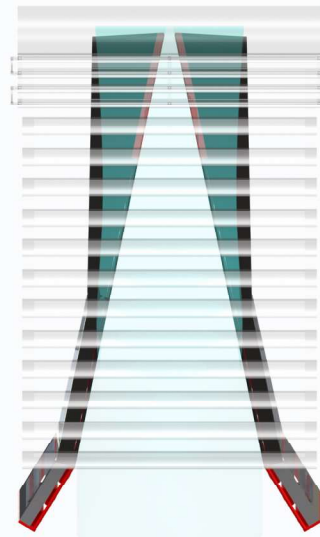
**CFAL-6**  
Aluminum Backer

## Gusset Boards

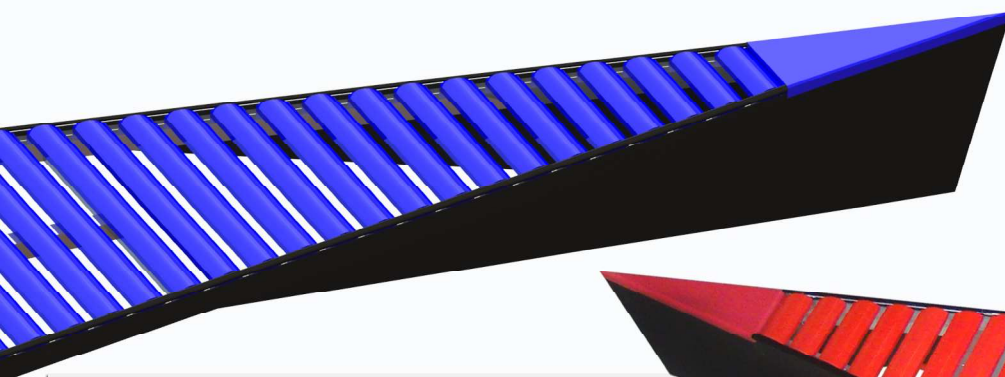
- 30% Less Drag than Wood
- 40% Lighter in Weight
- 50% Cooler when Running
- Custom Designed

Pearl designs and builds the best gusset boards on the planet. Our wrinkle-free, high quality gussets are made specifically to match your tent and film specifications. By running cooler, they prevent gusset blocking. Pearl offers unique options such as removable tips, which allow for full layflats without the hassle of removing the gusset boards.

All Ultra-Low COF wearstrip covering gussets can be quickly replaced by snapping on new pieces, making permanent gussets.



Shown in a deep gusset operation with tips installed



Every gusset is custom made and hand crafted for fit & finish to ensure quality!



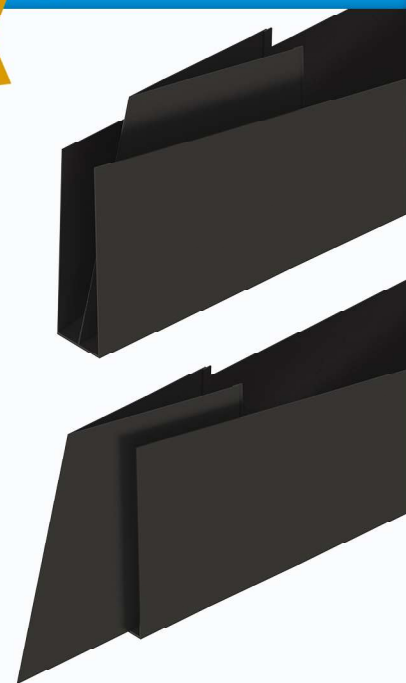
## Gusset Board with Retractable Nose

- Quickly Change from Gusset to Layflat
- Easy Push-Button Operation
- Reduce Downtime
- Retrofit to Any Application

**New!**

A revolutionary new gusset design that will forever change gusseting. Our new design allows for running both full gussets and full layflats without having to remove a gusset, or gusset nose, due to tower obstruction. With the flip of a switch, the nose retracts into the gusset board on guide rails. We offer 2 versions—partial and full. The partial option leaves the face of the gusset board intact to while our full option retracts the whole nose and works best when space is at a premium.

Nose up for gusseting and nose down for retraction to run full layflat.



# Removable Tip Gussets



Shown in a full layflat operation with tips removed.



- Quick Release Tips
- Allow Full Layflats
- Use as Side Guides
- Custom Designed

**Remove tips in seconds with just the flip of 1 or 2 clamps!**

This innovative feature has become popular with many film producers. Tips are designed to be removable to avoid obstructions that otherwise prevent running full layflats! Locating pins and destaco clamps make removal and assembly very simple. Without noses, the gussets can be used as side guides!

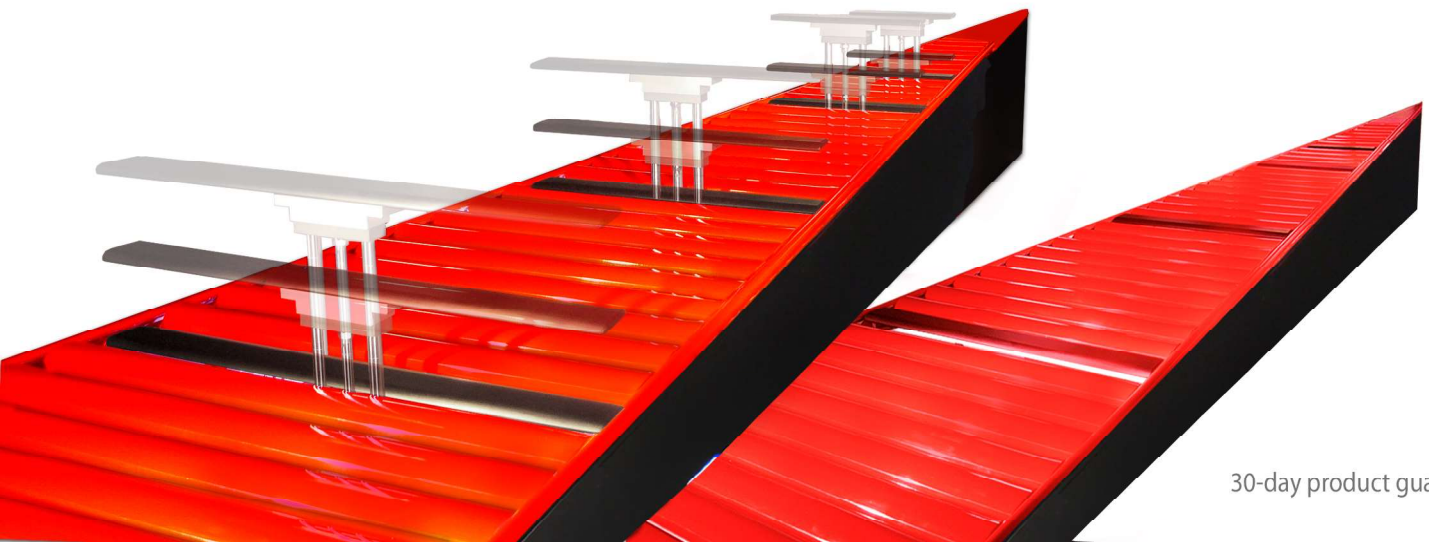
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# Gusset/Side Guide Combo

***This Gusset can do it all, no matter the layflat range!***

Get more out of your existing extrusion lines. Pearl's new Gusset/Side Guide combo allows flexibility for producing large layflat ranges for both gusseting and bubble stabilization throughout the collapsing process. Guided bubbles optimize both film and roll quality. In today's market, making your lines more flexible for a broader range of products on the same equipment is important.

- Gusset Innovation with Movable Slats
- Push Button Controlled Actuation
- Effective for Big Blow-up Ratios
- Flexible for Today's Manufacturing
- Removable Tip (optional)
- Custom Designed for Your Application

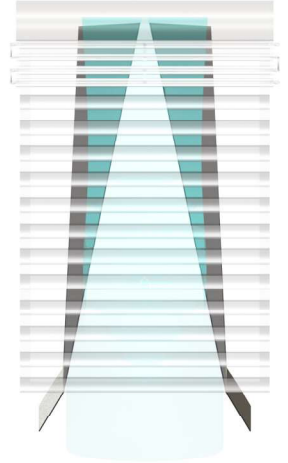


# SM24 Post Gussets

- Non-stick Finish
- Prevent Scratching of Film & Marring of Ink
- Custom Sizes



Standard Pearl SM24 Lemo-style Post Gussets.



Pearl's ultimate SM24, made famous by our retrofit rollerless cage arms, is now available on our post gussets. SM24 gussets are the ultimate for gusseting almost any resin type, providing better gussets at higher outputs without marking film or scratching ink.

# Gusset Actuation Controls

**New!**

- Allows for Automation of Gusseting Processing Adjustments
- Independent Control of Each Gusset
- Separate Upper and Lower Actuator Control
- Motorized or Automated

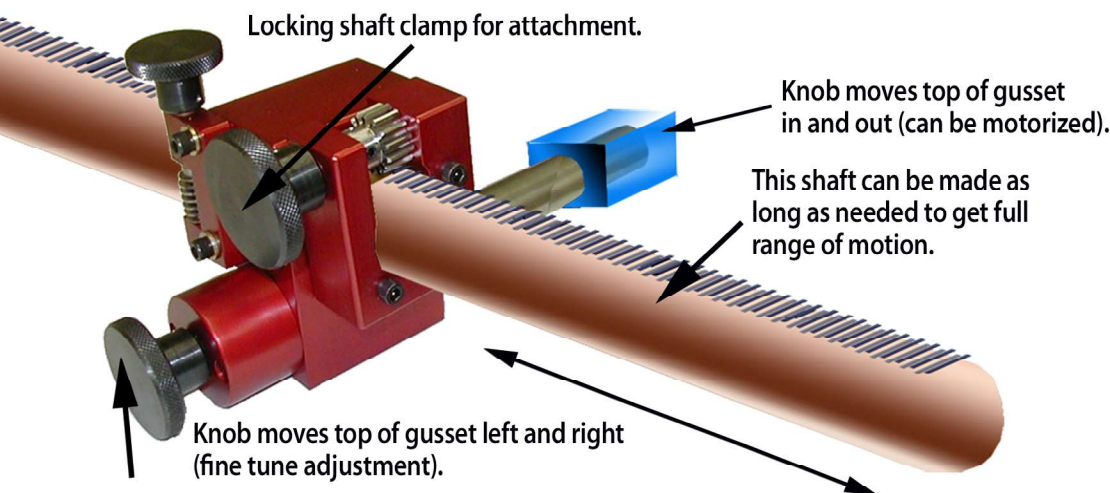
Pearl's Gusset Actuation Control system is an additional option for an advanced automated control system, which includes a touchscreen that gives operators a digital readout of locations and allows for storage of specific recipes reducing setup times and scrap.



# Post Gusset Adjusters

- Allow for Precision Gusset Board Adjustment in 3 Different Directions
- Precision Adjustment Creates Less Scrap in Set-up Procedures
- Fit Any Post Gusseting Situation
- Fit on 1-1/2" Gear Shaft

*Order at any length!*





# Side Guides

- Keep Bubble Centered in the Frame
- Made with Ultra-Low COF\* Slats
- Ultra Light-weight
- Custom Made

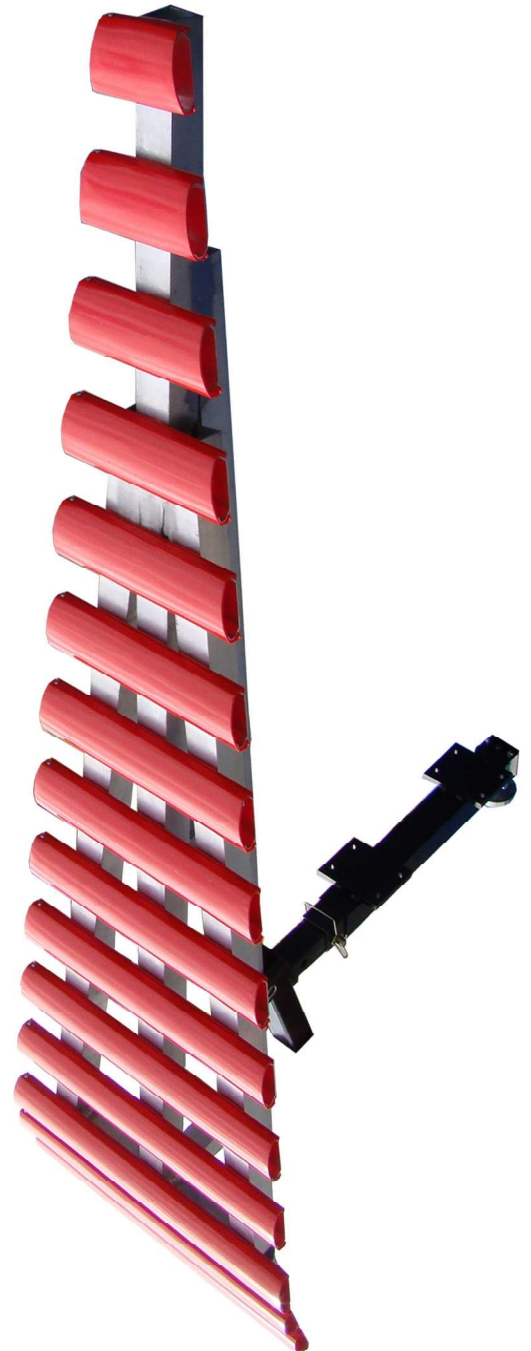
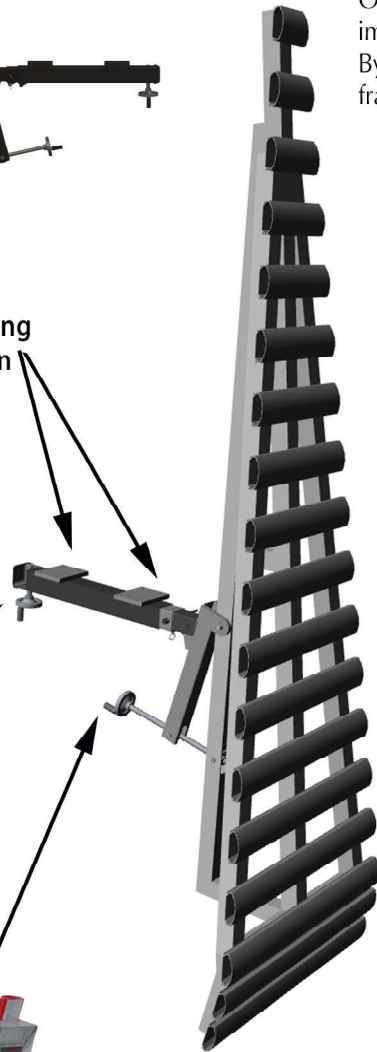
Our simple side guide design gives maximum stability, improving roll quality while creating minimum friction. By balancing friction around the bubble in the tent frame, optimum control of the bubble is achieved.



Mounts to mezzanine ceiling with jack that telescopes in and out for adjustability.

Handle may be mounted to the floor or can be installed underneath for adjustment from below.

This handle adjusts the tilt of the side guide to match your bubble's angle.

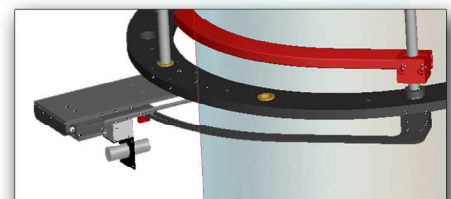
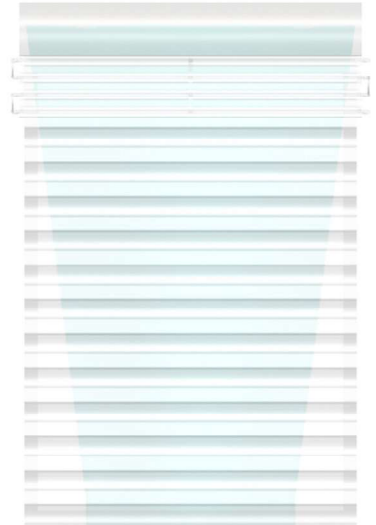


\* Coefficient of Friction

# The Perfect Bubble Guide and Z-Lift

- Centers Bubble Perfectly
- Optimizes Gauge Quality & Output
- Extreme Rollerless SM24 Arms
- Pendant Control In & Out with Stops
- Custom Designed to Your Line

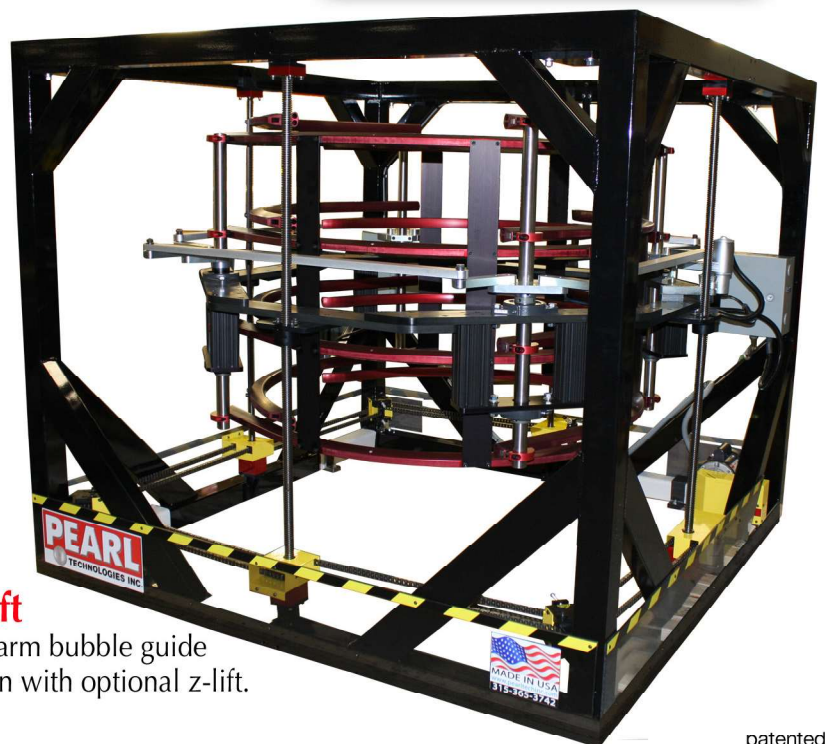
Finally, a simple solution for perfectly centering the bubble directly over the die for maximum film control and quality. Why spend hundreds of thousands of dollars on film lines only to use 2x4's or cardboard cores to center your film. Which is only guessing at best!



Ask about our optional bubble diameter sensor!



*Available in 2, 3 or 4 levels of arms for better control.*



## Z-Lift

Four arm bubble guide shown with optional z-lift.

# Rollerless SM24 Cage Arms

*Any size, shape, or design!*



- The "Ultimate" Cage Arm
- No Maintenance
- No Marking or Pinching
- No More Rollers to Replace



**SM24**  
harder than  
tool steel,  
lower COF  
than Teflon®  
"liquid chill"



### Gloucester Retro:

Simply slip off old troublesome roller arms and slip on one of Pearl's exact retrofits for quick and easy installation. Experience immediate improvements on your film line.



### Alpine & Reinhold Retro:

Hundreds of cages have been retrofitted with our easy replacement arms. Arms can be installed quickly & easily.



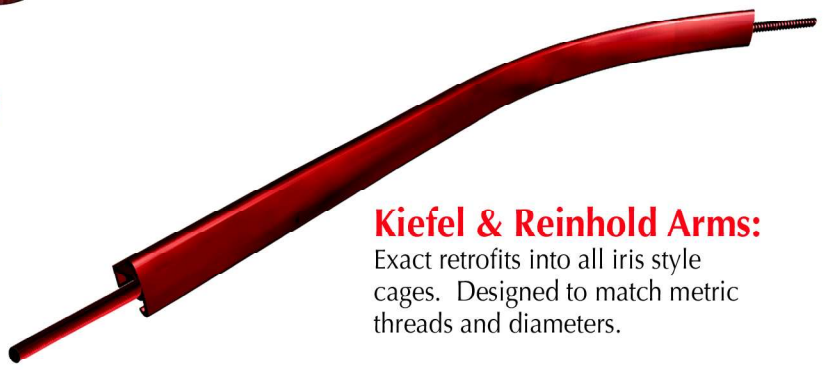
### Dolci Retro:

SM24 arms are made to fit rare and unique cages.



### Gammatec Retro:

Hundreds of cages have been retrofitted with these arms. Complete with metric threads. Bolt on arm and have better film in less than an hour!



### Kiefel & Reinhold Arms:

Exact retrofits into all iris style cages. Designed to match metric threads and diameters.



### Reifenhauser & W&H:

Pearl's SM24 arms are custom made to retrofit into your existing aluminum castings. No additional hardware is needed.



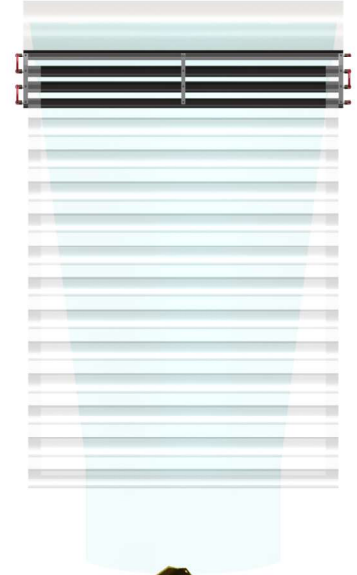
### Sano & Custom Arms:

Retrofit arms can be made in any shape or size. The arm shown below is 120" (3050 mm) long. Arms can be covered with our Ultra-Low COF red plastic or utilize our SM24 extreme surface modified coating.

# Pre-Nip Chiller Spreaders

- Increase Output by 10-20%
- Improve Film Quality
- Save on Anti-block Additives
- Eliminate Film Blocking
- Stop Wrinkles from Nip Rolls
- Remove Sag on Unwind
- Custom Designed for your Line

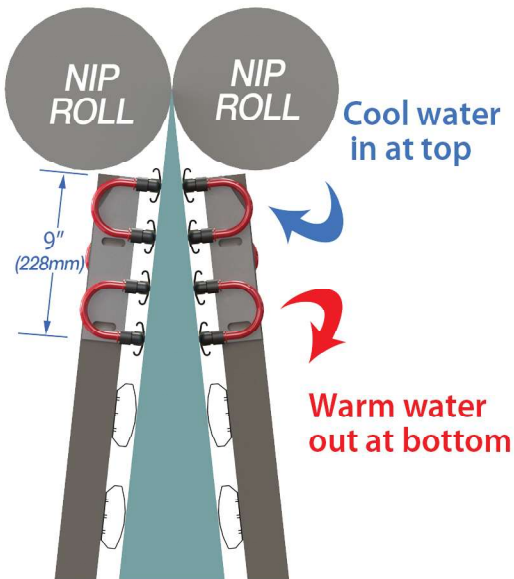
Pre-Nips require only 9" of vertical space on the collapsing frame. In most cases, you only remove the top slats or rollers and install!



Pearl understands the importance of lowering bubble temperatures in blown film applications. Count on our Pre-Nip Chiller/Spreaders to maximize output by keeping your film running cooler all year round.

Stop wasting money on expensive additives that affect the quality of your film. Let the technology of Pearl's Pre-Nip Chillers run your film lines 30-50°F cooler. This guarantees faster output, lowering your costs. Ready to ship in less than a week.

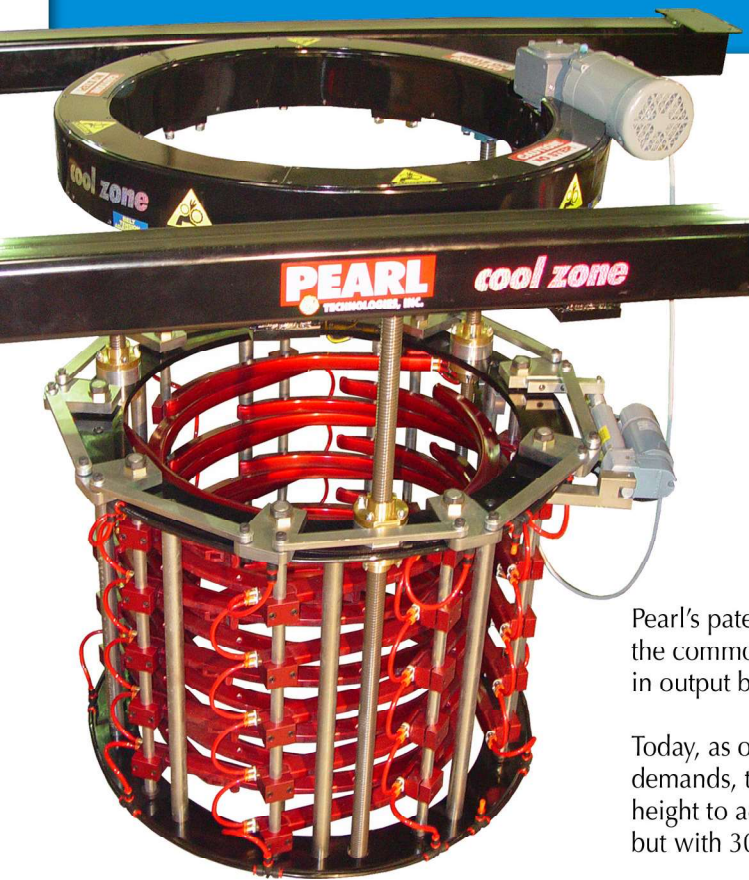
Customers with thick films have reported increases in their outputs by as much as 50%!



***...this innovation combined with our SM24 technology has proven extremely successful!***

Stand alone chiller option available.

## Chilled Bubble Cages



- Improve Roll Quality
- Eliminate Blocking
- Increase Output 10+%
- Boost Profitability
- Great for Low Ceilings

Pearl's patented "liquid chilled" bubble cage was developed for our customers in the commodity market where every penny counts. These cages are yielding increases in output by a minimum of 10%, with reports exceeding 25% in some cases.

Today, as our customers expand their capabilities to meet a broader range of customer demands, they often find themselves needing for larger layflats, but lack the ceiling height to accommodate it. Pearl's revolutionary cages can achieve the same results, but with 30% lower nip height.

## Tube Slitters & Tube Slitter Carriage



- Tool-less Blade Changes
- Replace Blades "On-the-Fly"
- Self-guiding Optional Bearing System
- Long-life Tru-Kote Coated Blades
- Virtually Zero Maintenance Required

### Tube Slitter Carriage

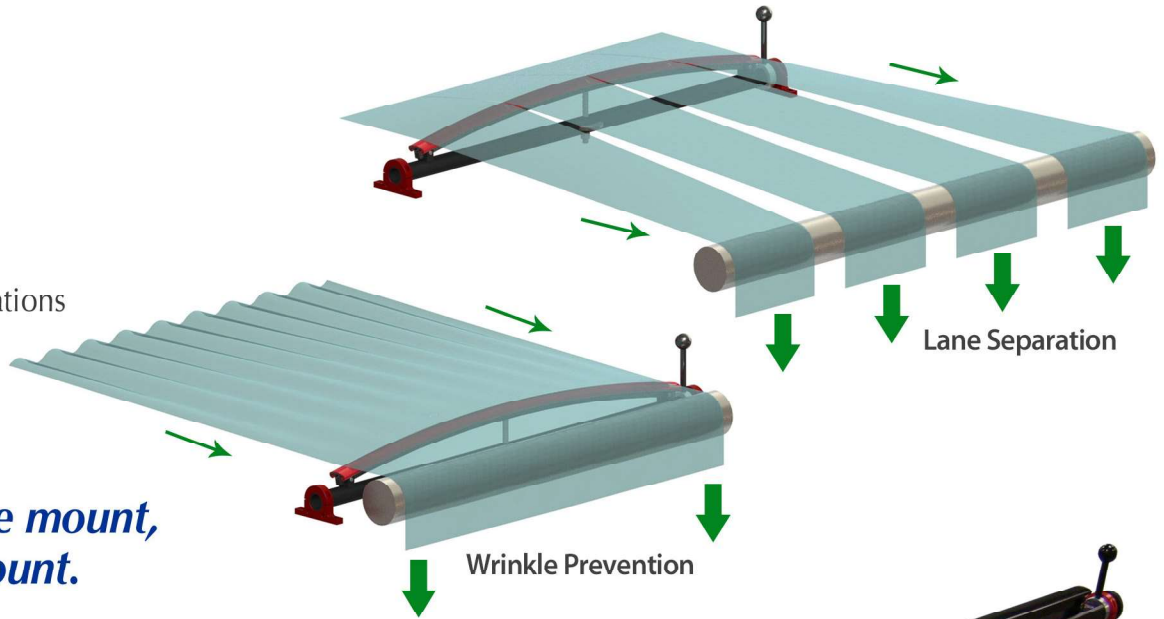
- Adjustable Weighted sled
- Linear ball bearing movement
- Adjustable across full width
- Vertical or horizontal running

### 2 versions available:

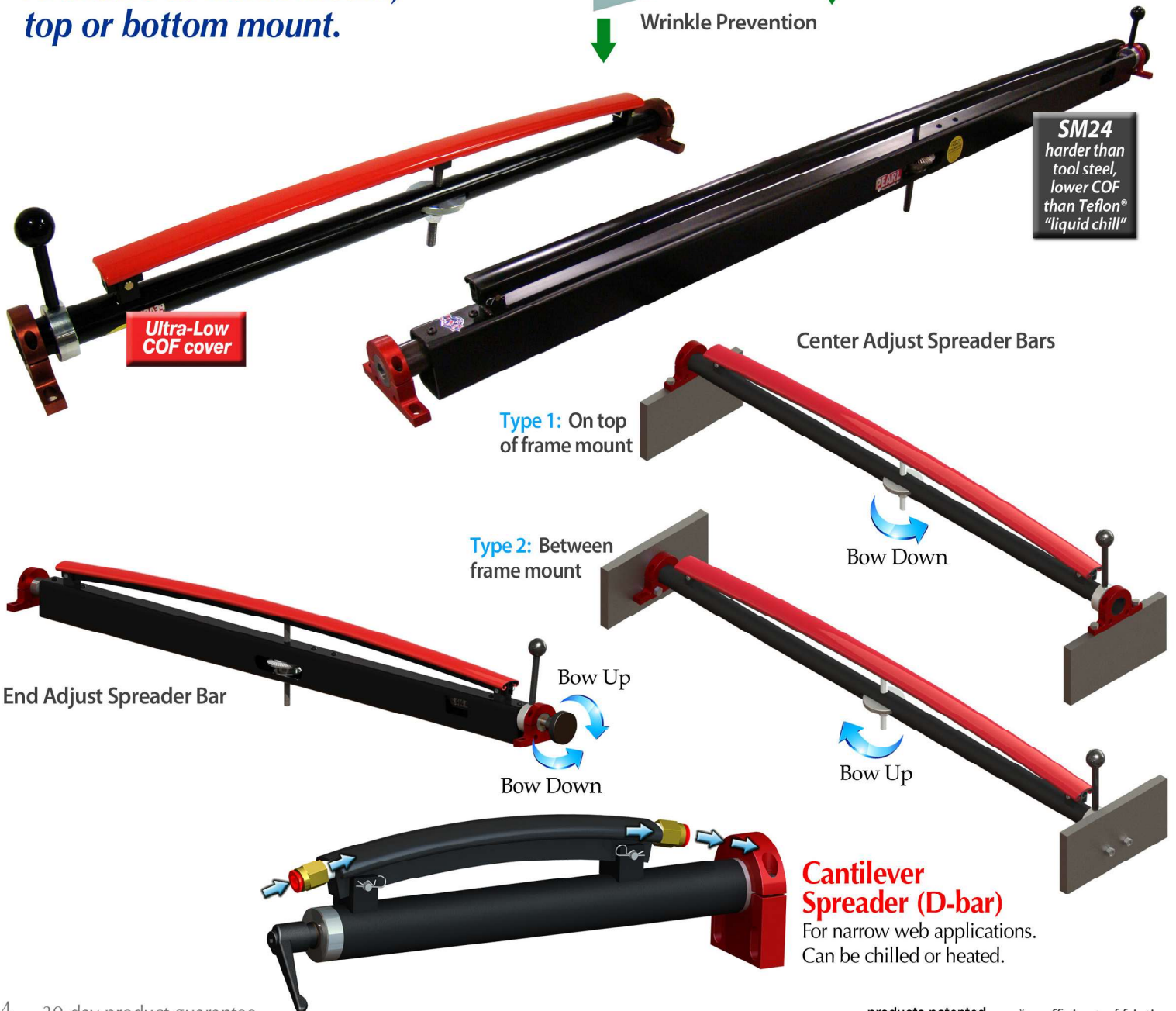
- Guide Wheels on Bearings
- SM24 Low Friction Slitter

# Made to Order Spreader "D" Bars

- Wrinkle Free Webs
- Perfect for Thin Webs
- Will Not Scratch Web
- Zero Tension Required
- No Moving Parts
- Spread Lanes of Webs
- Self-cleaning
- Custom Built to Specifications

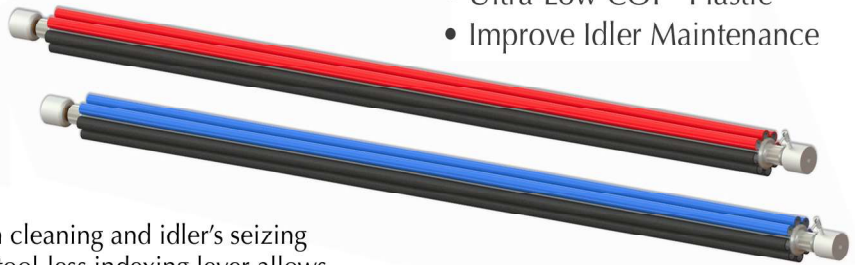
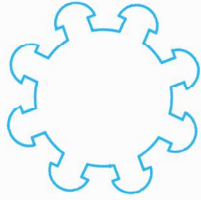


*Available as inside mount, top or bottom mount.*



**New!**

## Ultra-Low COF Fixed Idler



- Ultra-Low COF\* Plastic
- Improve Idler Maintenance

Pearl's Idler bars significantly improve issues associated with cleaning and idler's seizing bearings. Our Idler does not rotate with the film. A simple tool-less indexing lever allows rotation of 90° at a time to different COF's, which reduces friction and surface contact without inducing stress on the bubble.

Improve your blown film process by reducing maintenance with Pearl's Idlers.



## Airless Turning Bars

- SM24 or Ultra-Low COF\* Plastic
- Reduced Surface Contact
- Custom Made to Your Specifications

These bars have been successful in several applications. They are based on a very rigid lightweight aluminum extrusion that can be covered with our Ultra-Low COF plastic replaceable strips, or can be treated with our SM24 coating. All turning bars are custom built to fit your application.

## Air Distribution Manifold

Pearl's Air Distribution Manifolds are a proven advancement from vintage sheet metal designs and provide maximum air distribution for all blown film applications. The high impact construction allows for energy conservation and eliminates corrosion and particulate contamination. The Low Boy design allows a unit to fit comfortably under most die carts, maximizing space. Designs with insulating features reduce condensation in high humidity situations.

- Allows Even Distribution to All Air Ring Types
- Engineered Airflow Surfaces Reduce Friction
- Helps Stabilize and Control Bubble
- High Impact Engineered Construction
- Various Inlet and Outlet Sizes Available



Lowboy



Hiboy



Nano

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**Just a phone call away!**

**PEARL**  
 TECHNOLOGIES INC.

