

# BELT CONVEYOR PRODUCTS



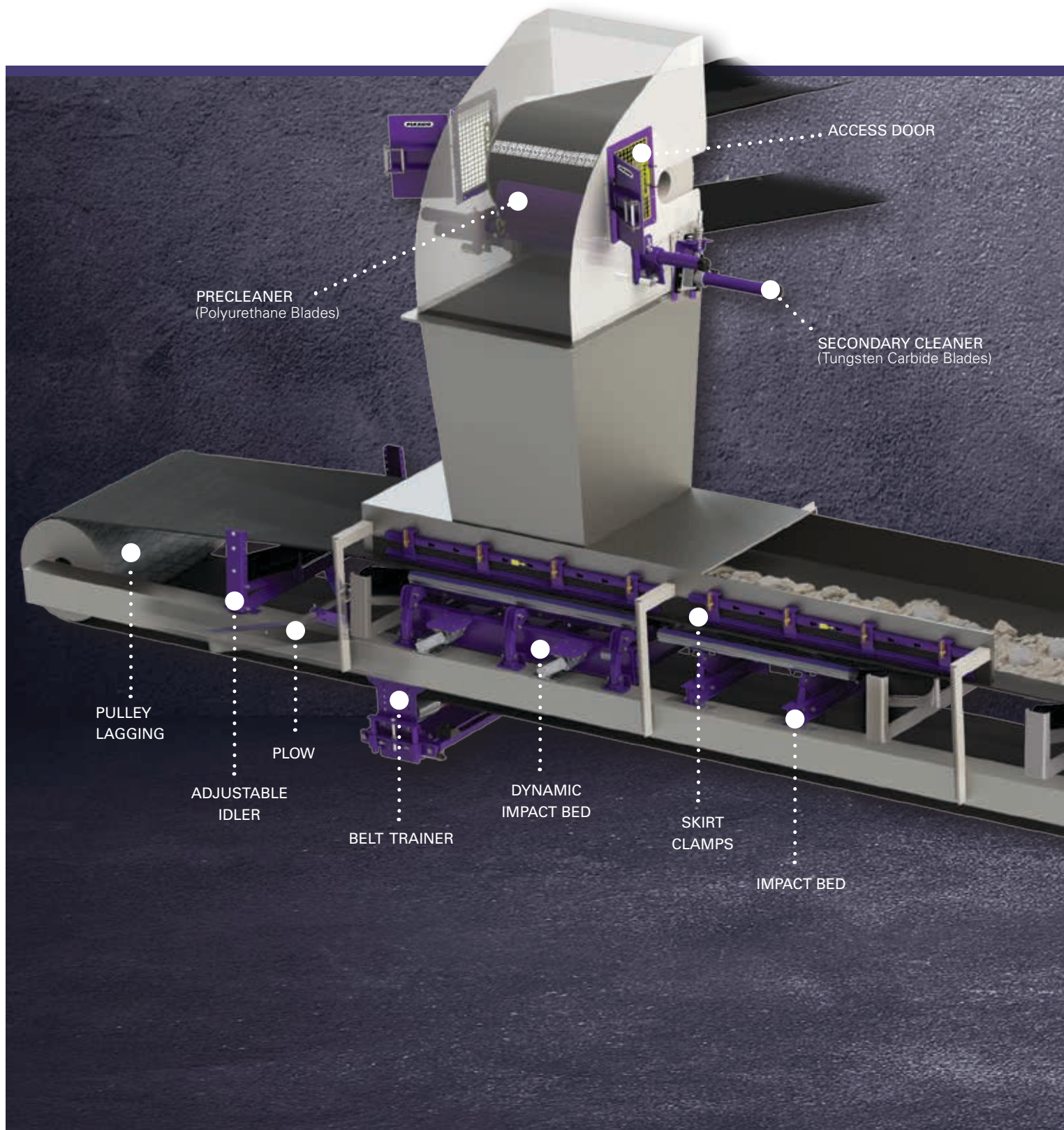
*Keep your line  
up and running.*



*Partners in Productivity*



# SOLUTIONS FOR EVERY ISSUE ALONG THE BELT LINE





With over 100 years of experience in the belt conveyor industry, Flexco knows that keeping your line running smoothly is essential to the success of your operation. That's why we've developed a comprehensive line of innovative belt conveyor products that address the key issues you face.

## Carryback

Material that sticks to the belt after it leaves the transfer point and continues falling off along the conveyor's return side. To address carryback, we offer:

- Belt Cleaners
- Belt Plows
- Cleaner Blades

## Belt Slip

Occurs when the head pulley is not adequately gripping the belt due to a loss of friction. To combat slippage, we offer:

- Ceramic Pulley Lagging
- Rubber Pulley Lagging

## Mistracking

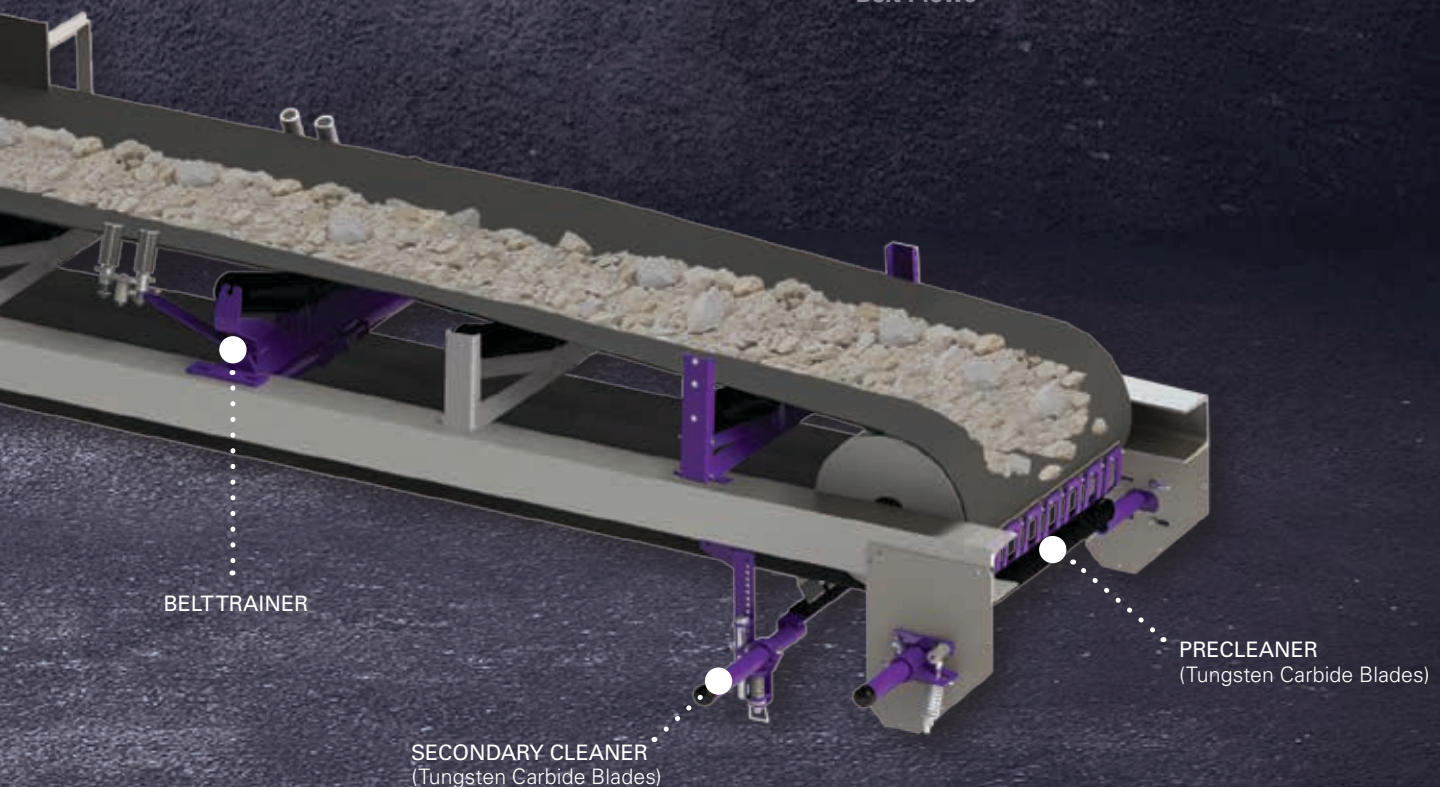
Belt drifts to one side or the other, resulting in material spillage, uneven belt wear, and possible system damage. To inhibit mistracking, we offer:

- Belt Trainers
- Belt Positioners

## Spillage

Material that spills off the belt, typically at transfer and load points. To curb spillage, we offer:

- Skirt Clamps
- Impact Beds
- Belt Plows







## ***Innovative Designs, Superior Engineering, Industry Expertise***

Since 1907, we've been dedicated to improving belt performance and productivity. That's meant spending a lot of time in the field, working alongside customers and learning about their everyday challenges—first-hand.

We use that hard-won knowledge to design belt conveyor products that work better and last longer. In fact, we pioneered many of the advanced features that have since become industry standards.

### **Cleaner Innovations**

- Patented, Faceted Blade Profile—These blades continually renew their edges, creating more efficient cleaning
- Better-Performing Tungsten Carbide Cleaner Blades—After years of testing and research, we've created blades that last longer and wear more evenly
- Heavy-Duty Spring Tensioning Systems—An important part of our cleaning systems, our tensioners enable easy visual inspection and maintain proper tension
- "Material Path" Cleaning—This unique option lets you match your cleaner width to your actual material path, reducing differential blade wear
- Larger Diameter Poles—Our poles are designed to resist the powerful twisting forces caused by continuous belt motion

### **Belt Tracking Innovations**

- Pivot-and-Tilt technology—Special sensors detect belt wander, then guide the belt back to the correct path

### **Impact Bed Innovations**

- Velocity Reduction Technology™ —An exclusive feature of our impact beds, this technology deadens impact energy for less rebound and material degradation
- Slide-Out Service™ —Designed for fast and safe complete bar change-outs

### **Lagging Innovations**

- An 80%-Ceramic Solution—We were the first to market with this option
- Incredibly Fast Installation—Our weld-on lagging is 50% faster to install than other lagging products





*Minline® – When “standard” products just won’t do.*

*Flexco Minline® products have been designed and engineered to work—day in and day out—in some of the toughest applications in the world. Regardless of the application, whether it be underground coal mining, port loading facilities, or other heavy tonnage applications that test the strength and durability of your conveyor system, Minline is the answer. Customers have come to expect a Flexco cleaner, impact bed or tracker with the Minline brand by its name to excel—even in situations where other products have failed.*

*Next to Minline endorsed products, you’ll find this mark:*



## **Flexco Belt Conveyor Products Deliver Benefits for Your Belt—And Your Bottom Line**



### **Budget Savings**

- Flexco cleaners and other belt conveyor products increase the life of the belt by reducing wear from carryback, mistracking, and other issues. Given the cost of belting, being able to keep your belts longer can mean substantial savings.
- Our products also help reduce wear on other key conveyor components, like rollers, pulleys, splices, and more. That saves you even more money.
- By cutting down on carryback, spillage, and other belt problems, our products also reduce safety hazards. And as you know, accidents can be costly—in terms of lost productivity and possible fines.



### **Lower Maintenance Costs**

- Because they reduce carryback and spillage, our belt conveyor products cut down on time-consuming cleanup.
- When your belt and other important conveyor components are protected from damage, you can spend less time making repairs and less money buying replacement components. In fact, studies show that reducing carryback from 3 percent to 1 percent can result in a 67 percent reduction in maintenance costs.



### **Consistent, Efficient Performance**

- Unscheduled shutdowns for maintenance or repairs mean serious production losses. Our belt conveyor products help you maximize uptime by correcting the issues—such as mistracking and carryback—that typically cause system damage.



### **Greater Safety**

- Studies show that approximately 42 percent of conveyor-related accidents occur during maintenance activities. Our cleaners and other belt conveyor products minimize the need for maintenance and reduce the risk of accidents.



### **Serviceability**

- Proper servicing of products, such as belt cleaners and impact beds, is key to ensuring effective and long-lasting performance. That’s why all Flexco products are designed with features that make regular servicing easy.
- We are continually enhancing our already service-friendly products, making them even easier to maintain. For example, we’ve added an easy-to-replace blade cartridge to our MHS Heavy-Duty Secondary Cleaner, and Slide-Out Service™ bars to our DRX™ Impact Beds.



# YOUR ISSUE: CARRYBACK OUR SOLUTION: ADVANCED CLEANING SYSTEMS

## Step 1 Understand Your Options

### BELT CLEANERS

#### Precleaners

- Mounted to the head pulley and below the material flow
- Ideal for removing large pieces of material—typically about 60–70 percent of initial carryback
- Blade width/material path options

#### Secondary cleaners

- Located just past where the belt leaves the head pulley—and anywhere else down the beltline
- Especially good at removing fines, increasing cleaning efficiency to 90+ percent

### BLADE OPTIONS

#### Polyurethane

- Easier on the belt
- Works well with mechanical splices
- Economical
- Specialty formulations for high heat, chemical resistance, or water removal

#### Tungsten carbide:

- Superior cleaning efficiency
- Long wear



## Step 2 10 Key Criteria for Analyzing Your Conveyor System

- 1 Your belt speed and belt width\*
- 2 What types of splices are present and their condition\*
- 3 Any unusual characteristics of your load or environment (extreme heat, abrasiveness, mud, etc.)—a specialty cleaner that can withstand these conditions may be necessary\*
- 4 Whether the belt reverses
- 5 Your conveyor structure width
- 6 Your pulley diameter—typically, the larger the pulley, the larger the required cleaner
- 7 Your pulley condition—if the pulley is worn or not perfectly round, a segmented blade may clean more effectively
- 8 Where you plan to position the cleaner and how much room there is to accommodate it
- 9 The material's path on the belt—matching the cleaner to the material path reduces differential blade wear
- 10 Your desired level of performance and upkeep

\* **Note:** CEMA has created an application classification guide that addresses these three criteria. Further explanation of this is found on Page 7.

## Step 3 Determine Whether You Need a Complete Solution

Some operators want their belts as clean as possible; others are comfortable with a certain amount of renegade material.

To achieve maximum cleaning efficiency, it's best to bring

together a precleaner and one or more secondary cleaners to form a comprehensive system. If you only want to install a single cleaner, try to target the area—such as the head pulley—where it will have the greatest effect.



# BLADE AND CLEANER OPTIONS



## Precleaner Options

Application Description	EZP-LS	EZP1	EZP1 High Temp	MSP	MMP	MHP	MHCP	H-Type® (XF2 & XF)	H-Type® (HV & HV2)	High Temp V-Tip
Belt Width*	300 – 1500 mm 12" – 60"	300 – 1800 mm 12" – 72"	300 – 1800 mm 12" – 72"	600 – 2100 mm 24" – 84"	600 – 2400 mm 24" – 96"	600 – 2400 mm 24" – 96"	600 – 2400 mm 24" – 96"	450 – 1800 mm 18" – 72"	50 – 1800 mm 18" – 72"	450 – 1200 mm 18" – 48"
Belt Speed**	<2.5 m/sec 500 fpm	<3.5 m/sec 700 fpm	<3.5 m/sec 700 fpm	<3.5 m/sec 700 fpm	<5.0 m/sec 1000 fpm	<7.5 m/sec 1500 fpm	<6.0 m/sec 1200 fpm	<5.0 m/sec 1000 fpm	<7.5 m/sec 1500 fpm	<5.0 m/sec 1000 fpm
Head Pulley Diameter	150 – 550 mm 6" – 22"	250 – 900 mm 10" – 36"	250 – 900 mm 10" – 36"	400 – 1050 mm 16" – 42"	400 – 1200 mm 16" – 48"	500 – 2100 mm 20" – 84"	500 – 1200 mm 20" – 48"	250 – 1175 mm 10" – 47"	250 – 1675 mm 10" – 67"	200 – 875 mm 8" – 35"
Temperature Range	-35 to 82°C -30 to 180°F	-35 to 82°C -30 to 180°F	up to 135°C (275°F) with spikes to 163°C (325°F)	-35 to 82°C -30 to 180°F	-35 to 82°C -30 to 180°F	-35 to 82°C -30 to 180°F	-35 to 82°C -30 to 180°F	-35 to 82°C -30 to 180°F	-35 to 82°C -30 to 180°F	up to 204°C (400°F) with spikes to 232°C (450°F)
Blade	ConShear LS	ConShear	ConShear	ConShear	TuffShear	MegaShear	SuperShear	HXF, HXF2	HV	HV
Reversing Belts	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Mechanical Fasteners	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No

\*Special sizes available upon request.

\*\*Belt speeds can be higher in vulcanized applications.



## Secondary Cleaner Options

Application Description	EZS2 (C-Tip)	FMS (V-Tip)	FMS (C-Tip)	MHS (V-Tip)	MDWS	P-Type® (C-Tip)	P-Type (V-Tip)	P-Type LS (C-Tip)	U-Type® (F-Blade)	U-Type (C-Blade)	U-Type (V-Blade)
Belt Width*	450 – 1800 mm 18" – 72"	600 – 2100 mm 24" – 84"	600 – 2400 mm 24" – 96"	600 – 2400 mm 24" – 96"	600 – 2400 mm 24" – 96"	450 – 1800 mm 18" – 72"	450 – 1800 mm 18" – 72"	450 – 1350 mm 18" – 54"	450 – 2100 mm 18" – 84"	450 – 2100 mm 18" – 84"	450 – 2100 mm 18" – 84"
Belt Speed**	<3.5 m/sec 700 fpm	<6.0 m/sec 1200 fpm	<5.0 m/sec 1000 fpm	<7.5 m/sec 1500 fpm	<5.0 m/sec 1000 fpm	<5.0 m/sec 1000 fpm	<6.0 m/sec 1200 fpm	<5.0 m/sec 1000 fpm	<5.0 m/sec 1000 fpm	<6.0 m/sec 1200 fpm	<7.5 m/sec 1500 fpm
Temperature Range	-35 to 93°C -30 to 200°F	-35 to 82°C -30 to 180°F	-35 to 82°C -30 to 180°F	-35 to 82°C -30 to 180°F	-35 to 82°C -30 to 180°F	-35 to 82°C -30 to 180°F	-35 to 82°C -30 to 180°F	-35 to 82°C -30 to 180°F	-35 to 82°C -30 to 180°F	-35 to 82°C -30 to 180°F	-35 to 82°C -30 to 180°F
Reversing Belts	No	No	No	Yes	Yes	No	No	No	No	No	No
Work with Mechanical Fasteners	Yes	No	Yes	No	Yes	Yes	No	Yes	Yes	Yes	No

Application Description	R-Type® (C-Tip)	R-Type (V-Tip)	EZS2 High Temp	Y-Type SD Polyurethane	Y-Type HD Polyurethane	Y-Type SD Carbide	Y-Type HD Carbide	Chevron	Motorized Brush Cleaner
Belt Width*	450 – 1800 mm 18" – 72"	450 – 1800 mm 18" – 72"	1450 – 1800 mm 18" – 72"	450 – 1200 mm 18" – 48"	900 – 1800 mm 36" – 72"	450 – 1200 mm 18" – 48"	900 – 1800 mm 36" – 72"	450 – 1500 mm 18" – 60"	450 – 2100 mm 18" – 84"
Belt Speed**	<5.0 m/sec 1000 fpm	<6.0 m/sec 1200 fpm	<3.5 m/sec 700 fpm	<3.0 m/sec 600 fpm	<3.8 m/sec 750 fpm	<3.0 m/sec 600 fpm	<3.8 m/sec 750 fpm	<2.5 m/sec 500 fpm	<3.5 m/sec 700 fpm
Temperature Range	-35 to 82°C -30 to 180°F	-35 to 82°C -30 to 180°F	up to 204°C (400°F) with spikes to 232°C (450°F)	-35 to 82°C -30 to 180°F	-35 to 82°C -30 to 180°F	-35 to 82°C -30 to 180°F	-35 to 82°C -30 to 180°F	-35 to 82°C -30 to 180°F	-29 to 82°C -20 to 180°F
Reversing Belts	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	No
Work with Mechanical Fasteners	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes

\*Special sizes available upon request.

\*\*Belt speeds can be higher in vulcanized applications.





# FLEXCO PRECLEANERS

FEATURES & APPLICATIONS

All cleaners are also available in stainless steel.



## EZP-LS "Limited Space" Precleaner

- Compact design with shorter pole length
- Standard-duty, solid-blade design
- Visual tension check
- Do-it-yourself installation and minimal maintenance

Maximum Belt Speed\*: 2.5 m/sec (500 fpm)

Pulley Diameter from 150–550 mm (6"–22")

Applications: Brick/Block Plants, Ready Mix Plants, Road/Mobile Equipment



## EZP-LS Stainless Steel Food Grade Precleaner

- Stainless steel components for superior corrosion resistance
- Standard-duty, solid-blade design
- Visual tension check
- White food-grade, chemical-resistant ConShear™ blade

Maximum Belt Speed\*: 2.5 m/sec (500 fpm)

Pulley Diameter from 150–550 mm (6"–22")

Applications: Fermentation Byproducts, Pre-processed Foods



## EZP-LS High-Temp Precleaner

- Compact design with shorter pole length
- Standard-duty, solid-blade design rated up to 135° C (275° F)
- Can handle temperature spikes to 163° C (325° F)
- Visual tension check
- Do-it-yourself installation and minimal maintenance

Maximum Belt Speed\*: 2.5 m/sec (500 fpm)

Pulley Diameter from 150–550 mm (6"–22")

Applications: Coke, Clinker, Cement, Asphalt



## EZP1 Precleaner

- Standard-duty, with 60 mm (2 3/8") diameter pole
- Visual tension check
- Requires just 100 mm (4") of horizontal clearance
- Do-it-yourself installation and minimal maintenance

Maximum Belt Speed\*: 3.5 m/sec (700 fpm)

Pulley Diameter from 250–900 mm (10"–36")

Applications: Aggregate, Sand & Gravel, Cement, Wood Processing, Recycling

Cleaner Key:

● WET

● STICKY

● DRY

● HIGH TEMPERATURE

● CORROSIVE





## **EZP1 High-Temp Precleaner**

- Standard-duty, solid-blade design rated up to 135° C (275° F)
- Can handle temperature spikes to 163° C (325° F)
- Visual tension check
- Requires just 100 mm (4") of horizontal clearance
- Do-it-yourself installation and minimal maintenance

*Maximum Belt Speed\*: 3.5 m/sec (700 fpm)*

*Pulley Diameter from 250–900 mm (10"–36")*

*Applications: Coke, Clinker, Cement, Asphalt*



## **EZP1 Stainless Steel Food Grade Precleaner**

- Stainless steel components for superior corrosion resistance
- Standard-duty, solid-blade design
- Visual tension check
- White food-grade, chemical-resistant ConShear™ blade

*Maximum Belt Speed\*: 3.5 m/sec (700 fpm)*

*Pulley Diameter from 1250–900 mm (10"–36")*

*Applications: Fermentation Byproducts, Pre-processed Foods*



## **EZP1 Twist Tensioner Precleaner**

- Standard-duty, solid-blade design
- Compact torsion twist tensioner allows for measurable and verifiable tension
- Tensioner compatible to mount on either end of pole
- Do-it-yourself installation and minimal maintenance

*Maximum Belt Speed\*: 3.5 m/sec (700 fpm)*

*Pulley Diameter from 150–900 mm (10"–36")*

*Applications: Aggregate, Sand & Gravel, Cement, Wood Processing, Recycling*



## **EZP1 Precleaner with White ConShear™ Blade**

- Standard-duty, with 60 mm (2<sup>3</sup>/<sub>8</sub>") diameter pole
- Visual tension check
- Requires just 100 mm (4") of horizontal clearance
- Do-it-yourself installation and minimal maintenance
- White food-grade, chemical-resistant ConShear blade

*Maximum Belt Speed\*: 3.5 m/sec (700 fpm)*

*Pulley Diameter from 50–900 mm (10"–36")*

*Applications: Fermentation Byproducts, Pre-processed Foods*



## **MSP Standard Mine-Duty Precleaner**

- Standard Mine-Duty, with 73 mm (2<sup>7</sup>/<sub>8</sub>") diameter rugged pole design
- Do-it-yourself installation and easy maintenance
- Visual tension check
- Highly effective cleaning

*Maximum Belt Speed\*: 3.5 m/sec (700 fpm)*

*Pulley Diameter from 400–1050 mm (16"–42")*

*Applications: Aggregate, Sand & Gravel, Cement, Wood Processing, Recycling*



## **Stainless Steel MSP Standard Mine-Duty Precleaner**

- Stainless steel components for superior corrosion resistance
- Mine-duty, solid-blade design
- Do-it-yourself installation and easy maintenance
- Visual tension check

*Maximum Belt Speed\*: 3.5 m/sec (700 fpm)*

*Pulley Diameter from 400–1050 mm (16"–42")*

*Applications: Phosphate, Potash, Salt*

*\*Belt speeds can be higher in vulcanized applications.*

To learn more about Flexco precleaners, visit [www.flexco.com](http://www.flexco.com).





Optional PAT Tensioner



## MMP Medium Mine-Duty Precleaner

- Medium-duty mining precleaner with TuffShear™ blade
- Heavy-duty, 3-piece design pole with dual tensioners
- Visual tension check

Maximum Belt Speed\*: 5.0 m/sec (1000 fpm)

Pulley Diameter from 400–1200 mm (16"–48")

Applications: Underground Mining, Hard Rock Mining, Steel Mills, Iron Ore, Metal Mining, Aggregate, Coal Fired Power Plants, Load-out Facilities



## Stainless Steel MMP Medium-Duty Precleaner

- Stainless steel components for superior corrosion resistance
- Medium-duty mining precleaner
- Heavy-duty, 3-piece design, corrosion-resistant pole with dual tensioners
- Visual tension check

Maximum Belt Speed\*: 5.0 m/sec (1000 fpm)

Pulley Diameter from 400–1200 mm (16"–48")

Applications: Phosphate, Potash, Copper/Gold Mining, Salt, Load-out Facilities Near Salt Water



Optional PAT Tensioner



## MHP Heavy-Duty Precleaner

- Heavy-duty, solid blade precleaner
- Heavy 3-piece pole design with rugged, dual-spring tensioners
- Abrasion-resistant, XL solid polyurethane MegaShear™ blade

Maximum Belt Speed\*: 7.5 m/sec (1500 fpm)

Pulley Diameter from 500–2100 mm (20"–84")

Applications: Underground Mining, Hard Rock Mining, Metal Mining, Longwall Coal Mining, Steel Mills, Iron Ore



Optional PAT Tensioner



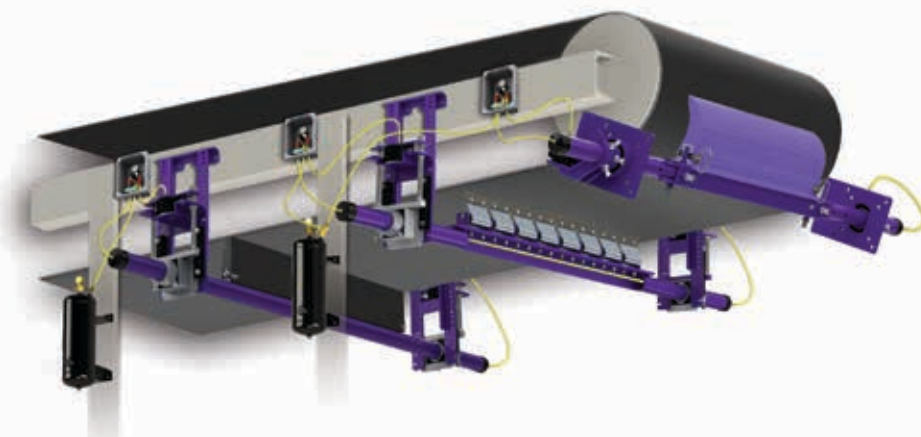
## MHCP Heavy-Duty Cartridge Precleaner

- One of the most rugged precleaners available
- Engineered for abusive conditions
- Telescoping, 3-piece pole that resists twisting/bowing/bending
- Quick-change SuperShear™ blade cartridge for fast, easy maintenance

Maximum Belt Speed\*: 7.5 m/sec (1500 fpm)

Pulley Diameter from 500–1200 mm (20"–48")

Applications: Underground Mining, Hard Rock Mining, Metal Mining, Longwall Coal Mining, Steel Mills, Iron Ore



## PAT Portable Air Tensioner

- PAT ensures constant tension for full blade life with little maintenance
- Works with Flexco mechanical fasteners
- Usable with air, nitrogen or water
- Offers single or dual tank (for two cleaners) when site air is not available
- Featured on Mineline®-approved cleaners like MMP, MHP, MHCP, MHS and MDWS

Cleaner Key:



WET



STICKY



DRY



HIGH TEMPERATURE



CORROSIVE





## HV2 Precleaner

- Tungsten carbide tip provides superior cleaning efficiency (vulcanized belts only)
- 6" (150mm) segmented blades work independently
- Adjustable cushions allow for enhanced pulley conformance
- Visual tension check

Maximum Belt Speed\*: 7.5 m/sec (1500 fpm)

Pulley Diameter from 250–1675 mm(10"–67")

Applications: Power Plants, Port Facilities, Hard Rock Mining, Iron Ore, Steel Mills



Optional HV Protected Tips



## H-Type® HV/HVP Precleaner

- Tungsten carbide tip provides superior cleaning efficiency (vulcanized belts only)
- Segmented blades work independently
- Visual tension check

Maximum Belt Speed\*: 7.5 m/sec (1500 fpm)

Pulley Diameter from 250–1575 mm(10"–63")

Applications: Power Plants, Port Facilities, Hard Rock Mining, Iron Ore, Steel Mills



## H-Type® High-Temp HV Precleaner

- Tungsten carbide tips provide superior cleaning efficiency (vulcanized belts only)
- Segmented blades work independently
- Visual tension check

Maximum Belt Speed\*: 5.0 m/sec (1000 fpm)

Pulley Diameter from 250–575 mm(10"–63")

Applications: Power Plants, Port Facilities, Iron Ore, Steel Mills



## H-Type® HXF2 Precleaner

- Suitable as a stand-alone cleaner in standard and medium duty applications
- Available with polyurethane

Maximum Belt Speed\*: 5.0 m/sec (1000 fpm)

Pulley Diameter from 250–325 mm(10"–53") (10" – 53")

Applications: Underground Mining, Hard Rock Mining, Metal Mining, Aggregate

Applications listed are intended to identify where each cleaner is commonly and most effectively utilized. Belt conditions, belt speeds, and pulley diameters should all be considered before making a final product selection. Consult Flexco to assess specific applications and recommendations.





# FLEXCO SECONDARY CLEANERS

## FEATURES & APPLICATIONS

All cleaners are also available in stainless steel.



### Y-Type Secondary Cleaner—Polyurethane

- Available in standard duty (belt widths 450-1200mm (18"-48") and heavy duty (belt widths 900-1800mm (36"-72"))
- Segmented tips easily serviced utilizing a removable cartridge
- Spring tensioned to deliver optimal cleaning performance and blade life
- Food grade/chemical resistant polyurethane option available
- Compatible with reversing belts

Maximum Belt Speed\*: SD 3 m/sec (600 fpm); HD 3.75 m/sec (750 fpm)

Applications: Aggregate, Sand & Gravel, Cement



### Y-Type Secondary Cleaner—Tungsten Carbide

- Available in standard duty (belt widths 450-1200mm (18"-48") and heavy duty (belt widths 900-1800mm (36"-72"))
- Segmented tungsten carbide blades compatible with mechanical fastener applications are easily serviced utilizing a removable cartridge
- Spring tensioned to deliver optimal cleaning performance and blade life
- Compatible with reversing belts

Maximum Belt Speed\*: SD 3 m/sec (600 fpm); HD 3.75 m/sec (750 fpm)

Applications: Aggregate, Sand & Gravel, Cement, Mining



### EZS2 Secondary Cleaner

- Segmented tungsten carbide blades
- Patented FormFlex™ cushions that maintain optimal belt contact
- Do-it-yourself installation
- Bolt-up tensioning system

Maximum Belt Speed\*: 3.5 m/sec (700 fpm)

Applications: Aggregate, Sand & Gravel, Cement



### High-Temp EZS2 Secondary Cleaner

- Temperature range to up to 205° C (400° F)
- Segmented tungsten carbide blades
- Patented FormFlex™ cushions maintain optimal belt contact
- Do-it-yourself installation
- Bolt-up tensioning system

Maximum Belt Speed\*: 3.5 m/sec (700 fpm)

Applications: Cement, Asphalt

To learn more about Flexco secondary cleaners, visit [www.flexco.com](http://www.flexco.com).



## P-Type® Secondary Cleaner

- Available with C-tips for mechanical fastener applications or V-tips for vulcanized applications
- Segmented, tungsten carbide blades
- Bolt-up tensioning system
- Limited space model option for telescoping, stacking, or portable conveyors

Maximum Belt Speed: C-Tip: 5.0 m/sec (1000 fpm)  
V-Tip: 6.0 m/sec (1200 fpm)

Applications: Aggregate, Sand & Gravel, Cement, Wood Processing, Recycling, Light Mining, Power Plants with Vulcanized Belts



## P-Type® Cartridge Secondary Cleaner

- Available with C-tips for mechanical fastener applications or V-tips for vulcanized applications
- Bolt-up tensioning system
- Service Advantage Cartridge feature allows for easy service and inspection

Maximum Belt Speed: C-Tip: 5.0 m/sec (1000 fpm)  
V-Tip: 6.0 m/sec (1200 fpm)

Applications: Aggregate, Sand & Gravel, Cement, Wood Processing, Recycling, Light Mining, Ideal for Power Plants with Vulcanized Belts



## R-Type® Reversing Secondary Cleaner

- Available with C-tips for mechanical fastener applications or V-tips for vulcanized applications
- Two-way cushions that accommodate reversing belts
- Do-it-yourself installation
- Bolt-up tensioning system
- Available with ATEX Certification

Maximum Belt Speed: C-Tip: 5.0 m/sec (1000 fpm)  
V-Tip: 6.0 m/sec (1200 fpm)

Applications: Aggregate, Sand & Gravel, Cement, Wood Processing, Recycling, Light Mining, Power Plants with Vulcanized Belts



## R-Type® Cartridge Secondary Cleaner

- Available with C-tips for mechanical fastener applications or V-tips for vulcanized applications
- Two-way cushions that accommodate reversing belts
- Bolt-up tensioning system
- Service Advantage Cartridge feature allows for easy service and inspection

Maximum Belt Speed: C-Tip: 5.0 m/sec (1000 fpm)  
V-Tip: 6.0 m/sec (1200 fpm)

Applications: Aggregate, Sand & Gravel, Cement, Wood Processing, Recycling, Light Mining, Ideal for Power Plants with Vulcanized Belts



## FMS Flexco Medium-Duty Secondary Cleaner

- Available with C-tips for mechanical fastener applications or V-tips for vulcanized applications
- Cleaning efficiency of segmented tungsten carbide blades
- Compact MST spring tensioning system

Maximum Belt Speed: C-Tip: 5.0 m/sec (1000 fpm)  
V-Tip: 6.0 m/sec (1200 fpm)

Applications: Underground Mining, Hard Rock Mining, Metal Mining, Aggregate, Load-out Facilities, Iron Ore, Steel Mills, Power Plants



Optional SAT2 Tensioner



## MHS Heavy-Duty and Reversing Secondary Cleaner

- Segmented blades with choices of tungsten carbide tips
- Patented PowerFlex™ cushions that maintain optimal belt contact
- Tensioners and cushion create 4 points of relief, making the cleaner fastener-friendly
- Two-way cushions available for reversing applications on shuttle conveyors, conveyors that roll back, or tripper and stacker applications
- Available with ATEX Certification

Maximum Belt Speed: C-Tip: 6.0 m/sec (1200 fpm)  
V-Tip: 7.5 m/sec (1500 fpm)

Applications: Underground Mining, Hard Rock Mining, Metal Mining, Aggregate, Load-out Facilities, Iron Ore, Steel Mills, Power Plants

Cleaner Key:







## Stainless Steel MHS Heavy-Duty Secondary Cleaner

- Stainless steel components for extra corrosion resistance
- Segmented blades with choices of tungsten carbide tips
- Patented PowerFlex™ cushions maintain optimal belt contact
- Tensioners and cushion create 4 points of relief, making the cleaner fastener-friendly

Maximum Belt Speed: C-Tip: 5.0 m/sec (1000 fpm)  
V-Tip: 6.0 m/sec (1200 fpm)

Applications: Salt, Copper/Gold Mining, Phosphate, Potash, Load-out Facilities



## MHS Secondary Cleaner with Service Advantage Cartridge™

- Segmented blades with choices of tungsten carbide tips
- Patented PowerFlex™ cushions maintain optimal belt contact
- Tensioners and cushion create 4 points of relief, making the cleaner fastener-friendly
- Service Advantage Cartridge feature allows for easy service and inspection

Maximum Belt Speed: C-Tip: 5.0 m/sec (1000 fpm)  
V-Tip: 6.0 m/sec (1200 fpm)

Applications: Underground Mining, Hard Rock Mining, Metal Mining, Aggregate, Load-out Facilities, Iron Ore, Steel Mills, Power Plants



## U-Type® Secondary Cleaner

- U-shaped blade and offset pole that intensify cleaning power
- Blade tips that scrape off stubborn carryback, while rubber backers "squeegee" wet material
- Best for cupped belts and belts with worn centers
- Choice of tungsten carbide, impact-resistant tungsten carbide, or polyurethane blade tips
- Works best in wet applications
- Blade replacement made easy with removable front plate

Maximum Belt Speed: C-Tip: 5.0 m/sec (1000 fpm)  
V-Tip: 6.0 m/sec (1200 fpm)

Applications: Cement, Coal Mining, Coal Prep Plants, Power Plants, Load-out Facilities



## Stainless Steel U-Type® Secondary Cleaner

- Stainless steel components for extra corrosion resistance
- U-shaped blade and offset pole that intensify cleaning power
- Blade tips that scrape off stubborn carryback, while rubber backers "squeegee" wet material
- Best for cupped belts and belts with worn centers
- Choice of tungsten carbide, impact-resistant tungsten carbide, or polyurethane blade tips
- Blade replacement made easy with removable front plate

Maximum Belt Speed: C-Tip: 5.0 m/sec (1000 fpm)  
V-Tip: 6.0 m/sec (1200 fpm)

Applications: Load-out Facilities, Power Plants

Applications listed are intended to identify where each cleaner is commonly and most effectively utilized. Belt conditions, belt speeds, and pulley diameters should all be considered before making a final product selection. Consult Flexco to assess specific applications and recommendations.

### Cleaner Key:

● WET

● STICKY

● DRY

● HIGH TEMPERATURE

● CORROSIVE

# FLEXCO SECONDARY CLEANERS *Continued*



## Chevron Secondary Cleaner

- For raised top, chevron, or grooved belts
- Hundreds of rubber fingers that flick off carryback
- Free-rotating design that works only when the belt runs
- Do-it-yourself installation and quick drum replacement

Maximum Belt Speed: 2.5 m/sec (500 fpm)

Applications: Wood Chipping, Sand



## Motorized Brush Cleaner

- Uniquely patterned bristles aid in reducing material buildup and clogging
- Adjustable tensioners allow easy brush-to-belt adjustment as the bristles wear
- Spins opposite the belt direction for optimal cleaning
- Do-it-yourself installation and quick drum replacement

Maximum Belt Speed: 3.5 m/sec (700 fpm)

Applications: Wood Chipping, Sand



Optional SAT Tensioner

## MDWS Dry Wipe Secondary Cleaner

- Removes excess water to ensure a dry return trip down the belt line
- Ideal for systems using a water spray pole
- Do-it-yourself installation and minimal maintenance

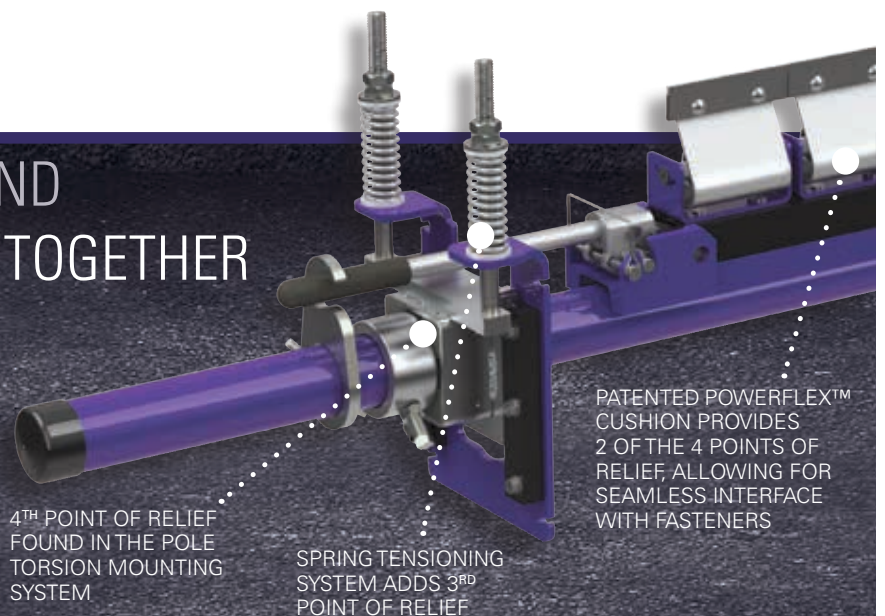
Maximum Belt Speed: 5.0 m/sec (1000 fpm)

Applications: Underground Mining

## FLEXCO CLEANERS AND FASTENERS: BETTER, TOGETHER

Many of our cleaning systems have special features that allow them to interface seamlessly with our mechanical belt fasteners.

Shown: MHS Secondary Cleaner with Service Advantage Cartridge



4<sup>TH</sup> POINT OF RELIEF FOUND IN THE POLE TORSION MOUNTING SYSTEM

SPRING TENSIONING SYSTEM ADDS 3<sup>RD</sup> POINT OF RELIEF

PATENTED POWERFLEX™ CUSHION PROVIDES 2 OF THE 4 POINTS OF RELIEF ALLOWING FOR SEAMLESS INTERFACE WITH FASTENERS

To learn more about Flexco secondary cleaners, visit [www.flexco.com](http://www.flexco.com).



## How to Select the Right Belt Plow

When choosing a plow to prevent fugitive material from finding its way into your tail pulley, you need to consider where you want to discharge any debris.

### To discharge material to a single side of the belt:

Choose the RDP1 Diagonal Plow.

### To discharge material to both sides of the belt:

Choose the V-Plow.

## FLEXCO PLOWS

FEATURES & APPLICATIONS

Flexco offers two advanced plows that prevent costly damage to tail pulleys and gravity take-ups, while cleaning the inside of the belt.



### RDP1 Diagonal Plow

- Discharges debris to one side of belt
- Unique angled blade that creates effective "spiral" action
- Fixed position eliminates bouncing and vibration problems
- Appropriate for use at any point along inside of return belt
- Simple and quick installation and blade replacement

Maximum belt speed: 3.5 m/sec (700 fpm)

Belt Widths: From 450–2100 mm (18"–84")



### V-Plow

- Simultaneously discharges debris to both sides of belt
- Angled blade design "spirals" away debris and water
- Easy to install and maintain
- Fits virtually any conveyor structure
- Turnbuckle at nose allows for fine-tuning at installation

Maximum belt speed: 5 m/sec (1000 fpm)

Belt Widths: From 450–2400 mm (18"–96")



**Unique angled blade (on both Diagonal and V-Plow models) quickly spirals material off the belt, preventing it from working its way under the blade and providing a superior and more efficient cleaning.**

To learn more about Flexco load-point solutions, visit [www.flexco.com](http://www.flexco.com).

# FLEXCO BELT CLEANER ACCESSORIES



## Mounting Plate Kit

incl. 2 plates, 400 x 800 mm (16" x 32")

- For use with Mounting Bars to mount cleaners on open head pulleys
- For use with MSP, MMP, MHP, MHCP



## Optional Mounting Bar Kit

incl. 8 bolts, nuts and washers

- For mounting precleaners on open head pulleys
- Weld on both sides of pulley and bolt on steel plates
- For use with MSP, MMP, MHP, MHCP



## Optional Top Angle Kit

- Used with both Standard and Long SST Mounting Bracket Kits (below left) for additional mounting options



## SST Mounting Bracket Kit

- For MHS or MDWS secondary cleaner installs requiring additional mounting versatility
- Long mounting bracket kit also available for installations that require extra length legs



## MST Mounting Bracket Kit

- For FMS secondary cleaner installs requiring additional mounting versatility



## YST Mounting Bracket Kit

- For Y-Type secondary cleaner installs requiring additional mounting versatility



## Inspection Door

- Lockable design
- Dust-tight seal
- Available in 304mm x 304mm, 304mm x 457mm, 457mm x 610mm, and 610mm x 610mm (12"x12", 12"x18", 18"x24" and 24"x24")
- Available with or without screen



## Pole Extender Kit

- Provides 30" (750mm) of extended pole length
- Includes 2 pole extenders



## Stabilizing Rollers

- For use in applications with belt cup or belt flap
- By preventing these issues secondary cleaner performance and blade/tip life is enhanced



## Water Spray Pole Kit

- Stainless steel pole with powder coated steel clamp brackets
- For use with secondary cleaners for an exceptionally clean belt
- Typical pressure setting is 276-414 kPa (40-60 psi)



## Spring Covers and Tensioner Locks

(for Precleaners and Secondaries)

- Spring Covers protect spring and threaded rod from contamination and material buildup
- Tensioner Lock prevents unauthorized cleaner retensioning

Cleaner Key:

● WET

● STICKY

● DRY

● HIGH TEMPERATURE

● CORROSIVE



# YOUR ISSUE: BELT MISTRACKING OUR SOLUTION: BELT TRAINERS

To select the right belt trainer, you need to consider whether:

- The belt is wandering to one or both sides
- The top or return side of the belt is affected
- The mistracking is happening consistently or occasionally
- The belt has a low, medium, or high running tension

Use the following chart to identify the best Flexco belt trainer for your needs.

Conveyor Criteria	Belt Positioner™	PT Smart™	PT Pro™ Return Side	PT Max™	PT Max™ Heavy Duty	PT Max™ Super Duty	PT Pro™ Return Side
Top side mistracking	No	No	No	Yes	Yes	Yes	No
Return side mistracking	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Reversing belts	Yes	No	Yes	No	No	No	Yes
Belt mistracking to one side	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent
Belt mistracking to both sides	Poor	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent
Inconsistent tracking problem	Good	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent
Belt is cupped (heavy)	Good	Good	Good	Excellent	Excellent	Excellent	Good
Belt has low running tension	Poor	Excellent	Good	Good	Good	Good	Good
Belt has medium running tension	Good	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent
Belt has high running tension	Good	Good	Good	Excellent	Excellent	Excellent	Good
Approx. "upstream" effect*	15 M (50')	6 M (20')	6 M (20')	6 M (20')	6 M (20')	6 M (20')	6 M (20')
Approx. "downstream" effect*	15 M (50')	36 – 45 M (120' – 150')	30 M (100')	45 – 61 M (150' – 200')	45 – 61 M (150' – 200')	45 – 61 M (150' – 200')	30 M (100')

\*Typical results; actual results may vary

## FLEXCO BELT TRAINERS

FEATURES & APPLICATIONS



### Belt Positioner™

- Simple solution for belts wandering to a single side
- Fixed, angled rollers "funnel" the belt onto the correct path
- Return-side installation only
- Easy to install and maintain

Maximum Belt Tension: Small, Medium and Large: 900 PIW  
Extra-Large: 1200 PIW

Belt Dimensions: From 450–2400 mm (18–96") wide

# FLEXCO BELT TRAINERS *Continued*



## **PT Smart™**

- Sensor rollers detect wander, then “pivot and tilt” belt into place
- Economical solution for medium-tension belts
- Effectively prevents belt from damaging structure
- Easy to install
- Specially designed to fit underground conveyors

Maximum Belt Tension: 1600 PIW

Belt Dimensions: For belt width + 75 mm (3”) roller and up to 25 mm (1”) thick



## **PT Pro™**

- Tapered rolls activate the “pivot and tilt” motion to track the belt
- Works on single direction or reversing belts
- Simple mounting brackets for easy installation, plus adjustment screw to fine-tune for optimal performance
- Ideal for belts with edge damage

Maximum Belt Tension: Standard Duty 1600 PIW  
Heavy Duty 1200–2400 PIW

Belt Dimensions: Standard Duty 450–1800mm(18”–72”)  
Heavy Duty 1200–2400mm (48”–96”)



## **PT Max™ Return Side**

- Sensor rollers detect wander, then “pivot and tilt” belt into place
- Ideal solution for cupped and high-tension belts
- Performs in wet and dry conditions
- Return-side installation only

Maximum Belt Tension: 3000 PIW

Belt Dimensions: 600–1500 mm (24”–60”) wide  
Up to 19 mm (3/4”) thick

## **Heavy Duty PT Max™ Return Side**

- Ideal for high tension belts
- Sensor rollers detect wander, then “pivot and tilt” belt into place
- Performs in wet and dry conditions
- Return-side installation only

Maximum Belt Tension: 6000 PIW

Belt Dimensions: 1200–2100 mm (48”–84”) wide  
19–25 mm (3/4”–1”) thick

## **Super Duty PT Max™ Return Side**

- For highest tension applications
- Sensor rollers detect wander, then “pivot and tilt” belt into place
- Performs in wet and dry conditions
- Return-side installation only

Maximum Belt Tension: 10,000 PIW

Belt Dimensions: 1800–3000 mm (72”–120”) wide  
25 mm (1”) thick and higher



## **PT Max™ Top Side**

- Sensor rollers detect wander, then “pivot and tilt” belt into place
- Ideal solution for cupped and high-tension belts
- Performs in wet and dry conditions
- Top-side installation only

Maximum Belt Tension: 3000 PIW

Belt Dimensions: 600–1500 mm (24”–60”) wide  
Up to 19 mm (3/4”) thick

## **Heavy Duty PT Max™ Top Side**

- Ideal for high tension belts
- Sensor rollers detect wander, then “pivot and tilt” belt into place
- Performs in wet and dry conditions
- Top-side installation only

Maximum Belt Tension: 6000 PIW

Belt Dimensions: 1200–2100 mm (48”–84”) wide  
19–25 mm (3/4”–1”) thick

## **Super Duty PT Max™ Top Side**

- For highest tension applications
- Sensor rollers detect wander, then “pivot and tilt” belt into place
- Performs in wet and dry conditions
- Top-side installation only

Maximum Belt Tension: 10,000 PIW

Belt Dimensions: 1800–3000 mm (72”–120”) wide  
25 mm (1”) thick and higher

To learn more about Flexco belt training systems, visit [www.flexco.com](http://www.flexco.com).



# YOUR ISSUE: LOAD-POINT SPILLAGE OUR SOLUTION: IMPACT BEDS, SLIDER BEDS, SKIRTING SYSTEMS, PLOWS & MORE

## *Set Up an Appropriate Transition Distance*

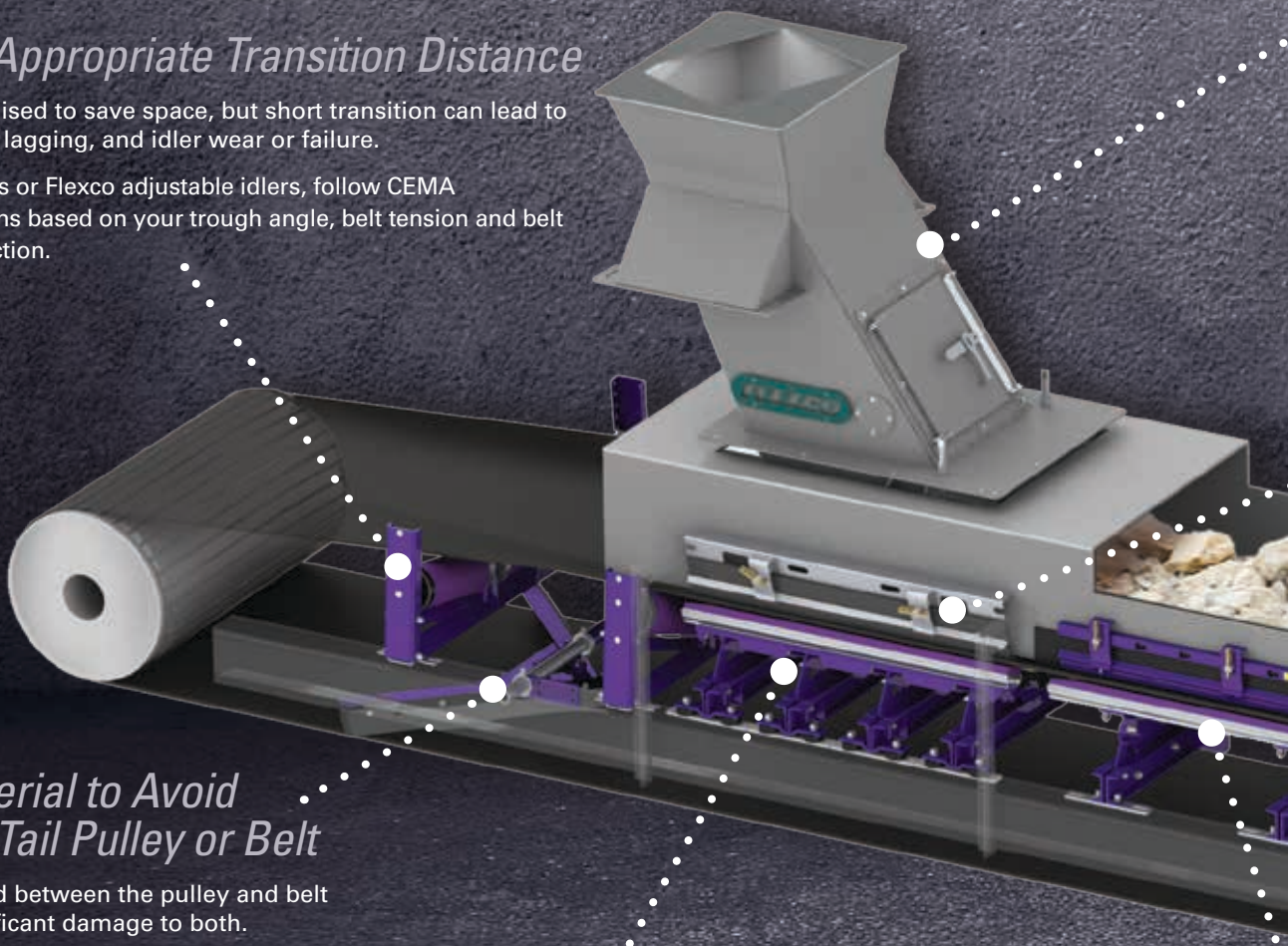
- Often compromised to save space, but short transition can lead to premature belt, lagging, and idler wear or failure.
- Using your idlers or Flexco adjustable idlers, follow CEMA recommendations based on your trough angle, belt tension and belt carcass construction.

## *Divert Material to Avoid Damaging Tail Pulley or Belt*

- Material trapped between the pulley and belt can cause significant damage to both.
- Use a plow before the tail pulley to remove material from the belt:  
Diagonal Plow for one-side discharge  
V-Plow for two-side discharge

## *Protect Belt in Impact Area*

- Just like the belt, impact beds see every ounce of every ton of product. Careful consideration should be made to account for the worst-case impact your system may ever see.
- Find your drop height and material lump weight to select the proper bed. Never pick a bed with a lower impact rating.
- Flexco offers beds for numerous impact ratings:  
Up to 25 kg-m (200 ft-lbs): EZSB-I, EZIB-L, DRX-200  
25 to 100 kg-m (200 to 750 ft-lbs): EZIB-M, DRX-750  
100 to 200 kg-m (750 to 1500 ft-lbs): DRX-1500  
200 to 400 kg-m (1500 - 3000 ft-lbs): DRX-3000







When it comes to load zones, our impact beds deliver the highest level of material containment and belt protection. They've been specially designed to control acceleration, deaden impact energy, reduce damaging vibrations, and extend belt life.

## Ultimate Performance – Flexco Transfer Chute Solutions

We have over 25 years of experience in designing and implementing superior transfer-point solutions. We offer:

- Tasman Warajay Technology™ — the original “controlled flow” solution
- Greater throughput with virtually no plugging
- Custom engineering to meet your needs
- Advanced diversion capabilities

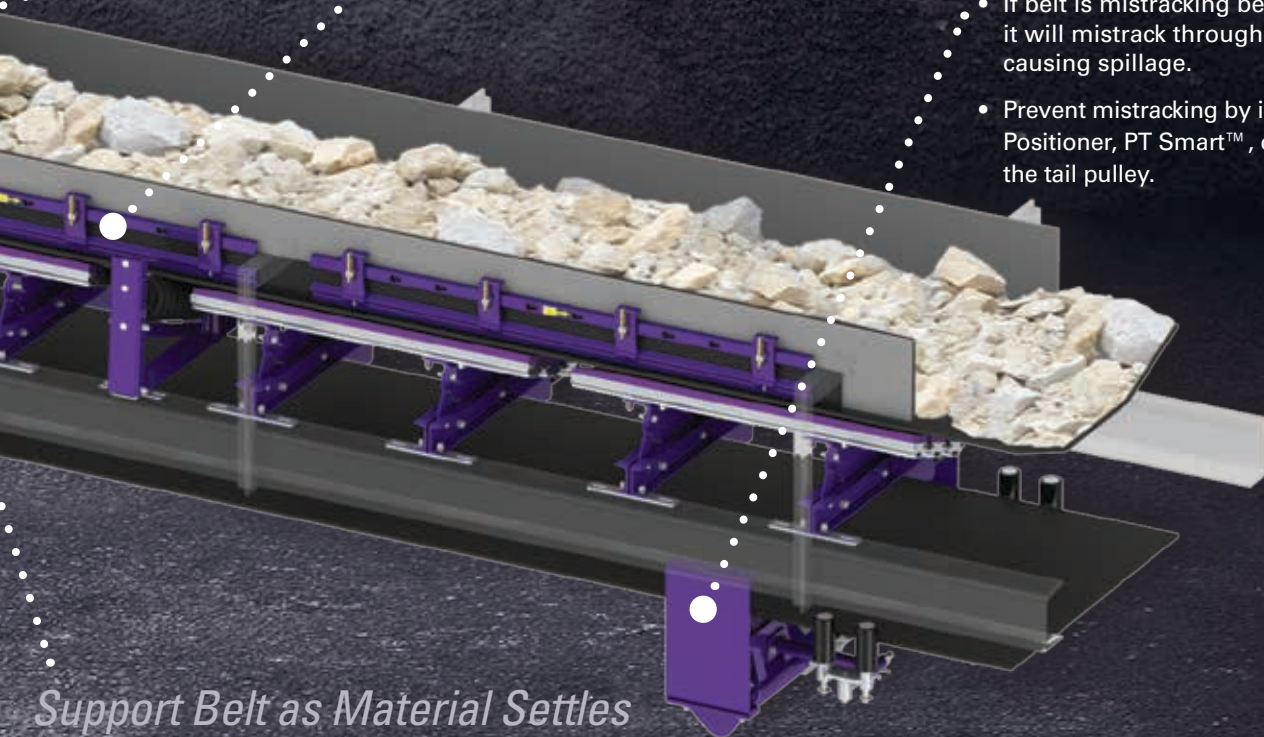


### Seal the Load Zone

- Clamps and skirting provide the final—and very important—assurance against spillage:
- Clamps should be durable yet easy to use when skirting needs adjustment or replacement.

### Track Belt in Load-Point

- If belt is mistracking before the load zone it will mistrack through the load zone, causing spillage.
- Prevent mistracking by installing a Belt Positioner, PT Smart™, or PT Max™ before the tail pulley.



### Support Belt as Material Settles

- Most conveyors feature an extended area where material settles after the impact area.
- Idlers often used but sealing with idlers is difficult due to belt sag. Impact beds can be used to help with sealing but are expensive and cause belt drag.
- EZSB-C provides the best of both: idlers in center to reduce drag, and UHMW bars on trough to provide constant sealing.



## How to Select the Right Impact Bed

### Step 1:

#### Calculate Your Impact Energy

Identify the weight of your largest lump size and multiply this number by your drop height. The result, expressed in lb-ft, will be your estimated impact energy.

#### Material Reference Table

Material	kg/m <sup>3</sup>
Coke	657
Fertilizer	961
Bauxite, crushed	1281
Potash	1281
Coal, Bituminous, Solid	1346
Coal, Anthracite, Solid	1506
Slag, Solid	2114
Chromium Ore	2162
Halite (Salt), Solid	2323
Phosphorus	2339
Stone (Common, Generic)	2515
Limestone, Solid	2611
Shale, Solid	2675
Granite, Solid	2691
Gypsum, Solid	2787
Trap Rock, Solid	2883
Dolomite, Solid	2899
Malachite (Copper Ore)	3860
Platinum Ore	4293
Hematite (Iron Ore)	5158

### Step 2:

#### Match the Result to the Bed Rating

No Impact — EZSB-C

Up to 25 kg-m (200 lb-ft.) — DRX200, EZSB-I, EZIB-L

25 to 100 kg-m (200 to 750 lb-ft.) — DRX750, EZIB-M

100 to 200 kg-m (750 to 1500 lb-ft.) — DRX1500

200 to 400 kg-m (1500 to 3000 lb-ft.) — DRX3000

#### Sample Calculation

##### Gather data for your Impact Energy Calculation:

**Q:** What size material are you running?

**A:** I'm running 203 mm (8") minus limestone.

**Q:** Is that the largest piece you've seen or could a larger piece get through that 203 mm (8") crusher setting?

**A:** Yes, that's the crusher setting; the largest rock I've seen is 203mm x 406mm x 406mm (8"x16"x16").

##### Lump Weight (W)

Limestone Material Density = 2611 kg/m<sup>3</sup> (163 lb/ft<sup>3</sup>)

Volume = 200/1000 x 400/1000 x 400/1000 = 0.032 m<sup>3</sup>

(8/12 x 16/12 x 16/12 = 1.185 ft<sup>3</sup>)

W = 2611 x 0.032 = 83.5 kg (163 x 1.185 = 193 lb)

**Q:** What's the fall height from the top of the feeding conveyor to the receiving belt?

**A:** There's a 2m drop from the feeding conveyor to a rock box, then another 2m drop to the receiving belt.

##### Drop Height (H)

H = 2 m + 2 m = 4 m (H = 5 ft + 4 ft = 9 ft)

#### Impact Energy Calculation:

##### Lump Weight (W) x Drop Height (H) = Impact Energy

83.5 kg x 4 m = 334 kg-m (193 lb x 9 ft = 1737 lb-ft)

This impact scenario would require a DRX 3000.

## FLEXCO IMPACT BEDS

### FEATURES & APPLICATIONS



#### Flexco Slider Bed (EZSB-C)

- Uses Flexco CoreTech™ idlers in center section
- Features adjustable trough frames for use on 20°, 35° or 45°
- Recommended for non-impact sealing areas
- Available with short lead time

Bed Rating: No impact

Maximum Belt Speed: 5.0 m/sec (1000 fpm)

Applications: Sealing of extended load zone



#### Flexco Slider Impact Bed (EZSB-I)

- Uses Flexco CoreTech impact idlers in center section
- Features adjustable trough frames for use on 20°, 35° or 45°
- For light-impact applications
- Recommended for -100 to -150 mm (-4" to -6") materials
- Available with short lead time

Bed Rating: Up to 25 kg-m (200 lb-ft)

Maximum Belt Speed: 5.0 m/sec (1000 fpm)

Applications: Sand and Gravel



### **Flexco Standard-Duty Impact Bed (EZIB-L)**

- Features adjustable trough frames for use on 20°, 35° or 45°
- Recommended for light-impact applications
- Recommended for -100 to -150mm (-4" to -6") materials
- Available with short lead time

*Bed Rating: Up to 25kg-m (200 lb-ft)*

*Maximum Belt Speed: 5.0 m/sec (1000 fpm)*

*Applications: Sand and Gravel*



### **Flexco Medium-Duty Impact Bed (EZIB-M)**

- Features adjustable trough frames for use on 20°, 35° or 45°
- For medium-impact applications
- Recommended for -203mm to -254mm (-8" to -10") materials
- Available with short lead time

*Bed Rating: 25 to 100kg-m (200 to 750 lb-ft)*

*Maximum Belt Speed: 5.0 m/sec (1000 fpm)*

*Applications: Hard Rock Mining, Limestone Quarrying*

### **DRX200 Impact Bed**

- Exclusive Velocity Reduction Technology™ that deadens rebound forces for reduced spillage and material degradation
- Recommended for 100–150 mm (-4" to -6") materials
- Slide-Out Service™ for easy maintenance

*Bed Rating: Up to 25kg-m (200 lb-ft)*

*Maximum Belt Speed: 5.0 m/sec (1000 fpm)*

*Applications: Sand and Gravel*



### **DRX750 Impact Bed**

- Exclusive Velocity Reduction Technology™ that deadens rebound forces for reduced spillage and material degradation
- For medium-impact applications
- Recommended for 200–250 mm (-8" to -10") materials
- Provides a unique second level of impact relief

*Bed Rating: 25 to 100kg-m (200 to 750 lb-ft)*

*Maximum Belt Speed: 5.0 m/sec (1000 fpm)*

*Applications: Hard Rock Mining, Limestone Quarrying*



### **DRX1500 Impact Bed**

- Exclusive Velocity Reduction Technology™ that deadens rebound forces for reduced spillage and material degradation
- For high-impact applications
- Recommended for -305mm (-12") materials
- Isolation Mounts ensure a second level of impact force reduction

*Bed Rating: 100 to 200kg-m (750 to 1500 lb-ft)*

*Maximum Belt Speed: 5.0 m/sec (1000 fpm)*

*Applications: Coal-Fired Power Plants, Coal Prep Plants, Load-out Facilities*



*Applications listed are intended to identify where each impact bed is commonly and most effectively utilized. Material size, lump weight and drop height should all be considered before making a final product selection. Consult Flexco to assess specific applications and recommendations.*

To learn more about Flexco load-point solutions, visit [www.flexco.com](http://www.flexco.com).



## **DRX3000 Impact Bed**

- Exclusive Velocity Reduction Technology™ that deadens rebound forces for reduced spillage and material degradation
- For extreme-impact applications requiring the highest energy absorption
- Impact Energy Absorbers disperse an immense amount of impact energy
- Stationary skirt support bar system helps ensure a positive seal with the skirt rubber

*Bed Rating: 200 to 400kg-m (1500 to 3000 lb-ft)*

*Maximum Belt Speed: 5.0 m/sec (1000 fpm)*

*Applications: Any operation that combines large material size and extreme height*



## **Adjustable Idler Frame**

- Uses Flexco CoreTech™ idlers
- For use around load zone to lift belt off beds
- Features adjustable trough frames in 5° increments

*Idler Rating: CoreTech roll - No impact  
CoreTech Impact roll - 25kg-m (200 ft-lb)*

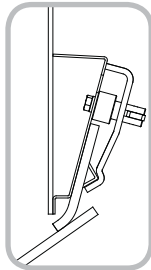
*Applications: For use between every two Flexco beds, transitions*

*Applications listed are intended to identify where each impact bed is commonly and most effectively utilized. Material size, lump weight and drop height should all be considered before making a final product selection. Consult Flexco to assess specific applications and recommendations.*



# FLEXCO SKIRTING SYSTEMS

Specially designed to create an effective seal at load points without damaging the top cover of your belt, our skirting systems are a smart way to improve throughput.

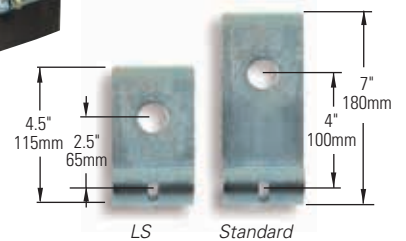


## Flex-Seal™ Skirting System

- Dynamic containment unit that fully seals the loading zone
- Sturdy, corrosion-resistant components that deliver long service life
- Easy to install and maintain

Module Sizes: 1200 mm (4')

Skirting Sizes: For skirt rubber 150 mm (6") wide and from 8–19 mm (5/16"–3/4") thick

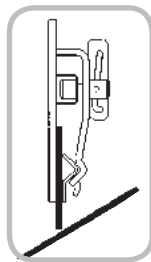


## RMC1 Skirt Clamps

- Simple installation, no-hassle maintenance
- Versatile design that can be installed on vertical or perpendicular skirt boards
- Anti-vibration clamp pin
- Interlocking clamp plates and 1200 mm (4') clamp bar
- Limited Space (LS) option available

Module Sizes: 1200 mm (4')

Skirting Sizes: For a range of skirt rubber heights; for thicknesses from 8–19 mm (5/16"–3/4") thick



## Flex-Lok™ Skirt Clamps

- Heavy-duty applications
- Strong restraining bar that is held in place by clamp plates to allow easy adjustment of skirt rubber
- Anti-vibration clamp pin can be unlocked with a rubber hammer
- Easy to install and maintain
- Mini Flex-Lok™ option available—overall height of 40mm (5/2")

Module Sizes: 1800 mm (6')

Skirting Sizes: For skirt rubber from 8–25 mm (5/16"–1") thick



Bolt-on PAL Pak

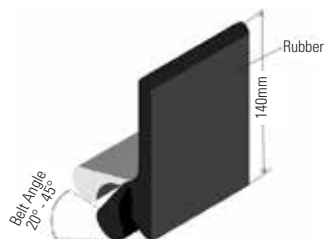


Weld-on PAL Pak

## PAL Paks

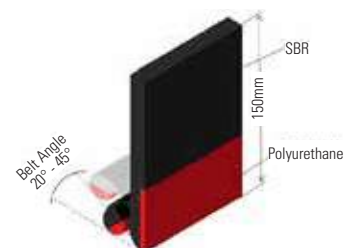
- Safe, easy-to-install skirt clamps
- Clamp pins bolt or weld directly to skirt board
- Bolt-on version provides no-weld solution to eliminate sparking risks
- Limited Space (LS) option available
- Clamp plates are 180mm/7" high (LS version 115mm/4½" high)

Skirting Sizes: For a range of skirt rubber heights; for thicknesses from 8–19 mm (5/16"–3/4") thick



## LRS 15-R Skirt Rubber

- Rubber 65 – 70 Shore
- Static Coefficient of Friction is 1.52 (S=0.039)\*
- Kinetic Coefficient of Friction is 1.50 (S=0.039)\*
- Available in rolls with 10 m or 20 m length



## LRS 15-PU Skirt Rubber

- SBR 70 Shore
- PU 90 Shore
- Antistatic (10<sup>9</sup>–10<sup>10</sup> Ω/cm<sup>2</sup>)
- Static Coefficient of Friction is 1.52 (S=0.039)\*
- Kinetic Coefficient of Friction is 1.50 (S=0.039)\*
- Available in rolls with 10 m or 20 m length



# YOUR ISSUE: SLIPPAGE OUR SOLUTION: PULLEY LAGGING

## How to Select the Right Lagging Product

To select the right pulley lagging, be sure to consider the environmental conditions around the pulley:

- Belt condition, i.e., wet or dry
- The service required for bonded lagging versus weld-on
- The expected wear life of the lagging

Use the following chart to identify the best Flexco lagging for your needs.

Criteria	Flex-Lag® Rubber			Flex-Lag® Ceramic			Flex-Lag® Weld-On™	
	Light Duty	Plain	Diamond	Diamond Pattern	Medium Ceramic	Full Ceramic	Rubber Diamond	Full Ceramic
Total Thickness*	6 mm (1/4")	10–25 mm (3/8"–1")	10–25 mm (3/8"–1")	12 mm (1/2")	15 mm (5/8")	12 mm (1/2")	14 mm (9/16")	15 mm (5/8")
Belt Width*	Any Width	Any Width	Any Width	Any Width	450–2100 mm (18"–84")	450–2100 mm (18"–84")	450–1800 mm (18"–72")	450–1800 mm (18"–72")
Minimum Pulley Diameter	50 mm (2")	300 mm (12")	300 mm (12")	300 mm (12")	300 mm (12")	300 mm (12")	400 mm (16")	400 mm (16")
Dry Friction	Very Good	Excellent	Very Good	Very Good	Excellent	Excellent	Very Good	Excellent
Wet Friction	Average	Average	Good	Very Good	Excellent	Excellent	Good	Excellent
Wet/Muddy Friction	—	Average	Average	Good	Very Good	Very Good	Average	Very Good
Wear Life	Good	Good	Good	Very Good	Excellent	Best	Good	Best
Ease of Installation	Good	Good	Good	Good	Good	Good	Best	Best
Drainage Grooves	No	Yes						
FRAS (Fire Resistant Anti-Static)	No	Available						
Rubber Compound	SBR							
Hardness (Shore A)	68 +/- 3							
Ceramic Compound	—	—	—	Al <sub>2</sub> O <sub>3</sub>	Al <sub>2</sub> O <sub>3</sub>	Al <sub>2</sub> O <sub>3</sub>	—	Al <sub>2</sub> O <sub>3</sub>
Ceramic Coverage	—	—	—	13%	39%	80%	—	74%
Operating Temperature	-15° – 85° C (5° – 185° F)							

\*Additional thicknesses and widths available as special orders. For weld-on lagging, thickness includes the backing plate.

Criteria		Flex-Lag® Rubber			Flex-Lag® Ceramic			Flex-Lag® Weld-On™	
		Light Duty	Plain	Diamond	Diamond Pattern	Medium Ceramic	Full Ceramic	Rubber Diamond	Full Ceramic
Pulley Diameter	<500 mm (<20")	OK	10 mm 3/8"	10 mm 3/8"	12 mm 1/2"	15 mm 5/8"	12 mm 1/2"	OK	OK
	500–800 mm (20"–32")	Non-Drive Only	10 mm–12 mm 3/8"–1/2"	10 mm–12 mm 3/8"–1/2"	12 mm 1/2"	15 mm 5/8"	12 mm 1/2"	OK	OK
	800–1200 mm (32"–48")	—	12 mm–20 mm 1/2"–3/4"	12 mm–20 mm 1/2"–3/4"	12 mm–15 mm 1/2"–5/8"	15 mm 5/8"	2 mm–15 mm 1/2"–5/8"	OK	OK
	>1200 mm (>48")	—	15 mm–25 mm 5/8"–1"	15 mm–25 mm 5/8"–1"	15 mm–25 mm 5/8"–1"	15 mm–25 mm 5/8"–1"	15 mm–25 mm 5/8"–1"	OK	OK
Fabric Belts	Low (<500 PIW)	OK	10 mm–12 mm 3/8"–1/2"	10 mm–12 mm 3/8"–1/2"	12 mm 1/2"	15 mm 5/8"	12 mm 1/2"	OK	OK
	Medium (500–1000 PIW)	Non-Drive Only	12 mm–15 mm 1/2"–5/8"	12 mm–15 mm 1/2"–5/8"	12 mm 1/2"	15 mm 5/8"	12 mm 1/2"	OK	OK
	High (1000–2000 PIW)	—	15 mm–20 mm 5/8"–3/4"	15 mm–20 mm 5/8"–3/4"	15 mm–25 mm 5/8"–1"	15 mm–25 mm 5/8"–1"	15 mm–25 mm 5/8"–1"	—	—
Steel Cord Belts	Medium (ST500–ST3150)	—	12 mm–20 mm 1/2"–3/4"	12 mm–20 mm 1/2"–3/4"	12 mm–20 mm 1/2"–3/4"	15 mm–20 mm 5/8"–3/4"	12 mm–20 mm 1/2"–3/4"	—	—
	High (ST3500–ST5400)	—	20 mm–30 mm 3/4"–1-1/4"	20 mm–30 mm 3/4"–1-1/4"	15 mm–30 mm 5/8"–1-1/4"	15 mm–30 mm 5/8"–1-1/4"	15 mm–30 mm 5/8"–1-1/4"	—	—

Red items available as specials.

# FLEXCO PULLEY LAGGING



## Light-Duty Rubber Lagging

- Specially designed for pulleys with diameters as small as 50mm (2").
- Moisture is channeled between small raised buttons that support and grip the belt and deliver superior traction.
- Available in SBR and White Nitrile

Belt Width: Any Width



## Plain-Pattern Rubber Lagging

- Helps prevent belt slippage in dry environments.
- Provides larger surface contact area relative to other patterned lagging.
- Horizontal grooves channel water and debris while providing a better dynamic interaction with the belt compared to sheet lagging.

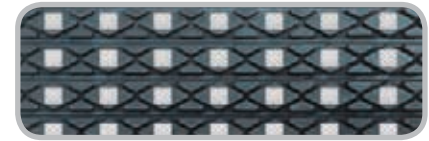
Belt Width: Any Width



## Diamond-Pattern Rubber Lagging

- Diamond pattern features a bidirectional design for superior water-shedding characteristics.
- Horizontal grooves provide a second method to disperse water and debris off the lagging and prevent hydroplaning.
- Performs well in both dry and wet applications.

Belt Width: Any Width



## Diamond-Pattern Ceramic Lagging (13% tile coverage)

- Large ceramic tile is molded into the diamond section, providing an increased coefficient of friction vs. Diamond-Pattern Rubber.
- Also features a bidirectional design for superior water-shedding characteristics.
- Uses the advantages of a ceramic product at a more affordable cost in light or medium duty applications.

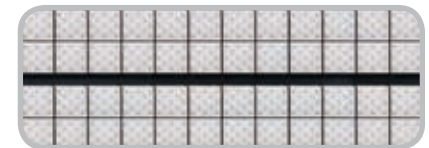
Belt Width: Any Width



## Medium Ceramic Lagging (39% tile coverage)

- Constructed from individual ceramic tiles molded into a high-durometer rubber for excellent abrasion resistance.
- Excellent performance in dry or wet applications and very good performance in muddy applications.
- Molded ceramic buttons grip the belt's underside for positive traction.
- Excellent friction for mid-range tension belts.

Belt Width: from 450–2100 mm (18"–84")



## Full Ceramic Lagging (80% tile coverage)

- Constructed from hundreds of individual ceramic tiles molded into a durable rubber backing with a higher coverage than Medium Ceramic for best-in-class abrasion resistance.
- Most consistent performance in dry, wet or muddy applications.
- Molded ceramic buttons grip the belt's underside for positive traction.
- Best for high-tension belts.

Belt Width: from 450–2100 mm (18"–84")



## Weld-On Rubber Lagging

- Weld-On design allows for quick, in-situ installation.
- Gear-tooth layout protects cleaners on pulley from experiencing "chatter" and premature wear.
- Diamond-Pattern features a bidirectional design for superior water-shedding characteristics.
- Performs well in both dry and wet applications.

Minimum Pulley Diameter: 16" (400 mm)

Belt Width: from 18"–72" (450–1800 mm)



## Weld-On Ceramic Lagging (74% tile coverage)

- Weld-On design allows for quick, in-situ installation.
- Gear-tooth layout protects cleaners on pulley from experiencing "chatter" and premature wear.
- Constructed from hundreds of individual ceramic tiles molded into a durable rubber backing.
- Most consistent performance in dry, wet or muddy applications.
- Molded ceramic buttons grip the belt's underside for positive traction.

Minimum Pulley Diameter: 16" (400 mm)

Belt Width: from 18"–72" (450–1800 mm)

For proper quantities by pulley size, use the lagging calculator at [www.flexco.com](http://www.flexco.com).





Visit our website or contact your local distributor to learn more.

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