

The ASGCO logo features the company name in a bold, black, sans-serif font. Above the text is a thick red horizontal bar. Below the text is a red oval containing the tagline 'Complete Conveyor Solutions' in white, with small circular icons on either side.

**ASGCO**<sup>®</sup>

Complete Conveyor Solutions

EST. 1971

The title 'PRODUCT CATALOG' is written in large, white, bold, sans-serif capital letters, centered over a blue-tinted photograph of a large industrial conveyor system.

**PRODUCT CATALOG**

PRODUCTS AND SERVICES THAT LEAD TO SOLUTIONS.

**Need Solutions...to improve efficiency, safety and productivity? ask... ASGCO<sup>®</sup>**  
www.asgco.com | 800.344.4000 | info@asgco.com

The ASGCO logo is repeated in the bottom right corner, featuring the company name in bold black font, a red bar above it, and a red oval below it containing the tagline 'Complete Conveyor Solutions' in white with circular icons.

**ASGCO**<sup>®</sup>  
Complete Conveyor Solutions



# ABOUT US

## PRODUCTS AND SERVICE THAT LEAD TO SOLUTIONS

At ASGCO®, our core motivation is to solve problems. We love a challenge, and thrive under pressure. We don't just provide the highest quality products and service; we deliver solutions.

Providing solutions for your conveyor issues is at our core. It's what drives everyone at ASGCO®, and the job is never done until our customer is satisfied.....**IT'S OUR GUARANTEE!**



**MAXIMIZING EFFICIENCY**

### A HERITAGE OF INNOVATION

Since our founding in 1971 by Alfred S. Gibbs and his son Todd, ASGCO® has pioneered some of the most effective products in use for improving bulk material handling. We believe in taking care of the customer with great quality products and exceptional service. This has been a successful and standard policy at ASGCO® for many years and will continue in the future.



**INCREASING PRODUCTIVITY**

### FOCUSED ON SOLUTIONS

At ASGCO® we continue to strive to make the handling of bulk materials cleaner, safer, and more productive. No matter what the basic assignment, we always seek out ways to increase production and to reduce operating costs. ASGCO® uses innovative products and engineered solutions to solve problems happening now and to prevent problems from happening in the future.



**IMPROVING SAFETY**

### JUST ASK ASGCO!

What may seem like a problem to our customers is just a chance for us to put every resource we have in motion. And no matter what the basic assignment, we always seek out ways to increase production and to reduce operating costs. Our team is always ready. All you need to do is ask ASGCO®!

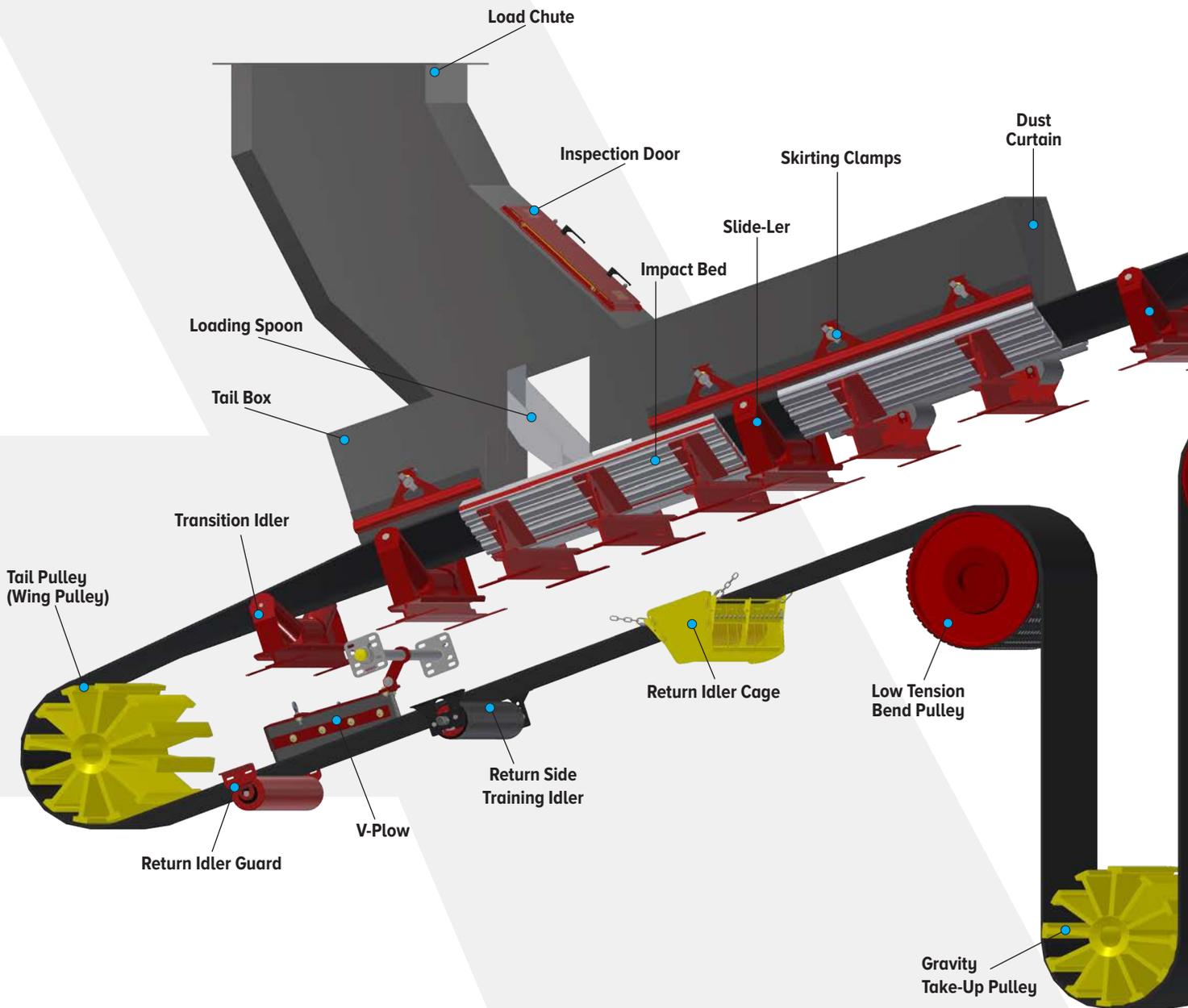
### OUR PROMISE...

*Applies to every client, every time.  
Always think and work in terms of solutions that are best for the customer in the long term.  
Develop and sell products that satisfy the practical working needs of our customers.*

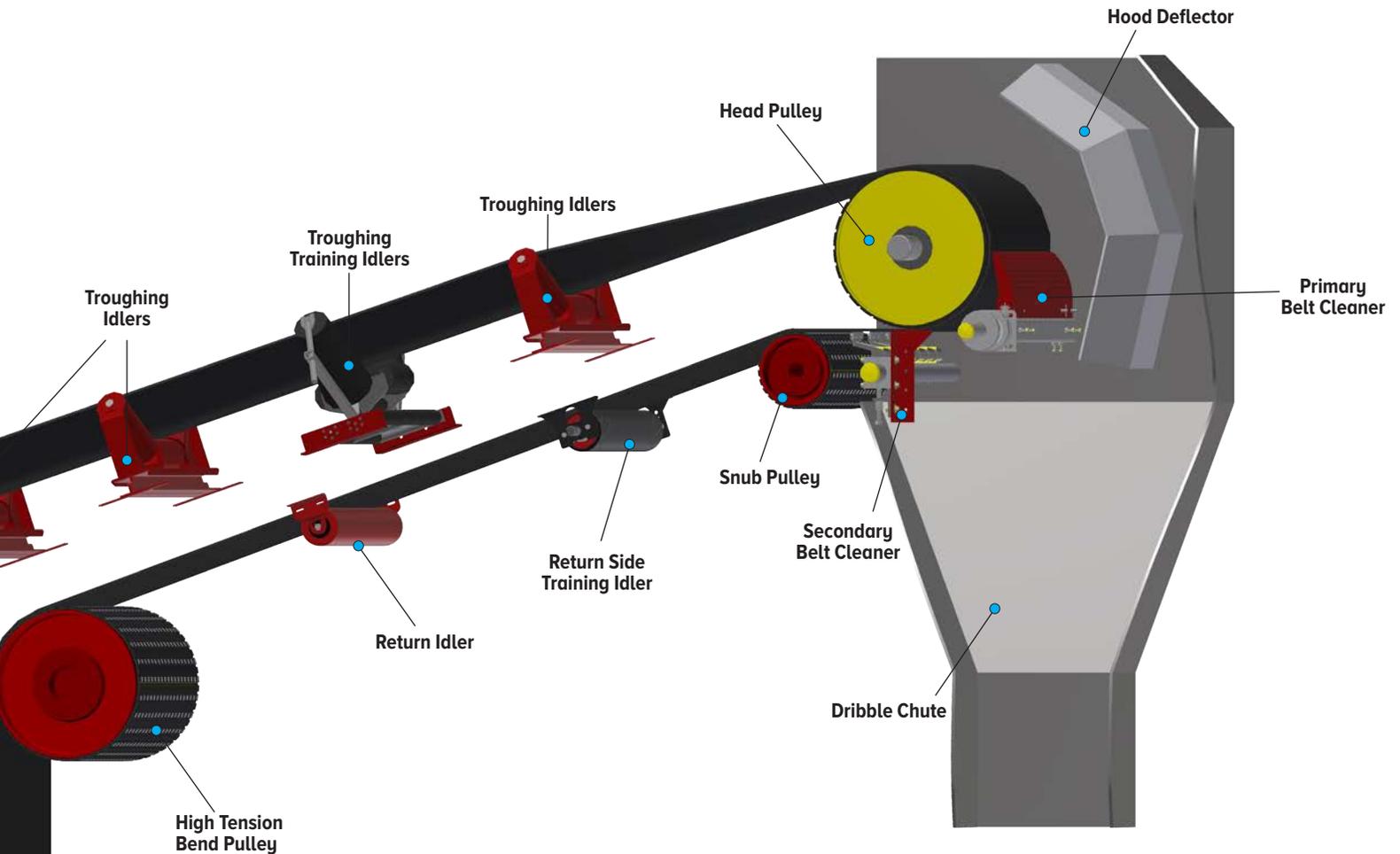
**“Today, ASGCO® “Complete Conveyor Solutions” is recognized as the worldwide leader in bulk conveyor material handling systems.”**

**EFFICIENT, SAFE AND PRODUCTIVE**  
COMPLETE CONVEYOR SOLUTIONS

<b>CONVEYOR DIAGRAM</b> .....	1	<b>TRANSFER POINT DESIGN &amp; FABRICATION</b> .....	27	<b>MECHANICAL SPLICING &amp; TOOLS</b> .....	49
<b>IMPORTANCE OF BELT CLEANERS</b> .....	3	Point Cloud Laser Scanning .....	28	Grizzly™ Screw-Splice.....	49
<b>PRIMARY BELT CLEANERS</b>		3-DEM Analysis and Design .....	29	ASGCO® Conveyor Belt Skiver .....	49
Blade / Tensioner Charts .....	6	3-DEM Transfer Point Design .....	29	Magnum® Rubber Cutter.....	49
Mini-Skalper® Belt Cleaner .....	7	Transfer Chute Fabrication.....	29	<b>ASGCO Conveyor Training School (ACT™)</b>	
Pit Skalper™ Belt Cleaner.....	7	<b>SKIRTING &amp; DUST CONTROL</b> .....	31	ACT™ - Conveyor 101.....	51
Skalper™ III Belt Cleaner .....	7	Clamp-Mount® Skirt Sealing Systems .....	32	ACT™ - Apprenticeship .....	51
Skalper® Belt Cleaner .....	8	Clamp-Mount® MDX.....	32	Splice Training School.....	51
Super-Skalper® Belt Cleaner.....	8	Tri-Seal™, Multi-Seal™, SX3, Dura-Seal™ (ORG), B&R Dura Seal™, Dura-Tuff™ .....	32	Lunch & Learn .....	51
Super-Skalper® HD Belt Cleaner.....	8	External Wear Liner / Skirtboard System .....	33	Webinars.....	51
Skalper® MDX Belt Cleaner .....	9	Dust Curtains.....	33	<b>SERVICE &amp; SUPPORT</b> .....	53
Skalper® XHD Belt Cleaner .....	9	Chute Tail Box .....	33	Laser Alignment.....	54
Excalibur® .....	9	E-Z Mount® .....	33	Point Cloud 3D Laser Scanning .....	54
<b>SECONDARY BELT CLEANERS</b>		<b>CONVEYOR SAFETY</b> .....	35	Installation & Field Services.....	54
Blade / Tensioner Charts .....	10	Safe-Guard® Return Idler Guard .....	36	Maintenance Services .....	54
TORO™ Belt Cleaner .....	11	Safe-Guard® HD Idler Guard.....	36		
Razor-Back® Belt Cleaner .....	11	Safe-Guard® V-Return Idler Guard .....	36		
Razor-Back MDX™ Belt Cleaner .....	11	Safe-Guard® Return Idler Cage.....	36		
BC-2™ Belt Cleaner .....	12	Safe-Guard® Flat Guard .....	36		
U-Scrape Belt Cleaner.....	12	Safe-Guard® Chute Inspection Door.....	37		
Dry Wipe™ .....	12	Safe-Guard® Sure Grip™ Belt Clamps .....	37		
Wash Box Belt Cleaning System .....	13	Safe-Guard® Return Roll Changer.....	37		
Bronco™ Brush Belt Cleaner.....	13	<b>WEAR LINERS</b> .....	39		
Chevron™ Disk Belt Cleaner.....	13	Aarmorite® 700 .....	40		
V-Plow XD™, Hinged V-Plow, Diagonal Plow.....	14	Skirtboard Wear Liners (Dura-Tuff™ Urethane, Steel, Rubber & Ceramic).....	40		
Vibrating Dribble Chute.....	14	X-Wear™ Mine Duty .....	40		
Hold Down Roll .....	14	X-Wear™ Urethane Magnetic Patches & Liners.....	41		
<b>TRACKING &amp; SPECIALTY IDLERS</b> .....	16	X-Wear™ Ceramic.....	41		
Tru-Trainer® Flat Return .....	17	Nitronic SX™ .....	41		
Tru-Trainer® Dual Return .....	17	<b>PULLEY LAGGING</b> .....	43		
Tru-Trainer® Dual V-Return .....	17	Vul-Con® Pulley Lagging Tool Kit .....	44		
Tru-Trainer® Tapered Troughing Idler .....	18	Rubber Cement Lagging Adhesive .....	44		
Slide-ler™ .....	18	Arrowhead® Ceramic Pulley Lagging.....	45		
Slide-Ler™ (One-Sided) .....	18	Semi-Ceramic Pulley Lagging .....	45		
Dura-Sleeve™ Idlers .....	19	Arrowhead® Drive & Smooth Rubber Pulley Lagging.....	45		
Steep Angel Conveyor Accessories .....	19	<b>VULCANIZING PRESSES</b> .....	47		
<b>LOAD ZONE SUPPORT</b> .....	21	Vul-Con® Sectional Press.....	48		
Slide-N-Roll™ Bed .....	23	Vul-Con® EZ Press .....	48		
Roller Cassette™ Bed.....	23	Control Box .....	48		
3 Roll Slide-N-Roll™ Bed .....	23				
Impact Cradle Bed™ .....	24				
Quarry Duty Impact Bed .....	24				
Pro-Zone™ .....	25				
Enclosed Skirting System .....	25				



# “FROM THE HEAD PULLEY TO THE TAIL PULLEY AND EVERYTHING IN BETWEEN.”



**“AT ASGCO® WE CONTINUE TO STRIVE TO MAKE THE HANDLING OF BULK MATERIALS CLEANER, SAFER, AND MORE PRODUCTIVE”**

Our conveyor company is focused on developing cost-effective and technologically advanced products, specifically designed for optimum conveyor performance.



# BETTER DESIGNED. LONGER LASTING. MORE EFFICIENT.

## The Importance of Belt Cleaners

At ASGCO® we recognize that conveyors are the product lifelines to any plant. It is important that all conveyor systems run efficiently in moving your products from one production unit to the next without failure or any unscheduled downtime.

### Cleaning Systems Approach

- Cleaners work more efficiently in a system
- A system has multiple cleaners of any brand or type.
- Belt life is better with multiple lightly loaded cleaners, rather than one overloaded cleaner
- Adding water to the system will improve performance up to 75%

### Selecting the Proper Belt Cleaner

- Space Available
- Vulcanized or mechanical laced belt
- Diameter of the head pulley
- Material and temperature of product being conveyed
- Belt speed
- Location available for proper installation
- Location of dribble chute, if any

## Primary / Secondary Belt Cleaners

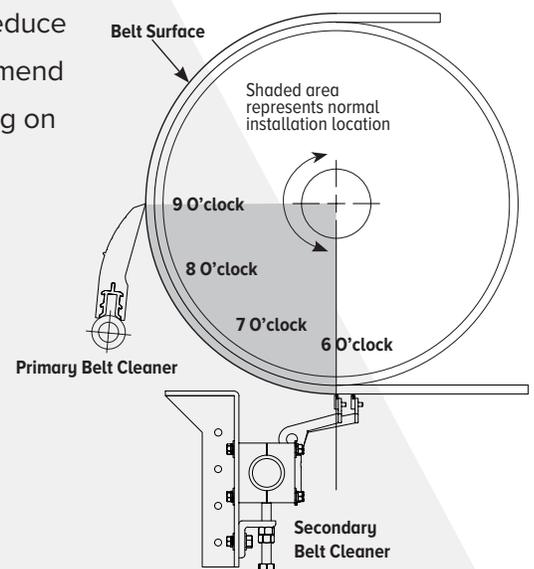
At ASGCO® our line of pre-cleaners come with the ability to match the blade to the material path to minimize the blade wear and reduce frequent retensioning and the need for replacement. We recommend multiple belt cleaners to be installed to provide effective cleaning on a conveyor system.

### Primary or Pre-Cleaners

Installed on the face of the head pulley at a positive angle. It should be mounted directly below the trajectory flow of the material being discharged from the belt.

### Secondary Cleaners

Installed after the belt leaves the head (discharge) pulley and/or anywhere on the return side of the belt to effectively remove the remainder of the material that has passed by the pre-cleaner. *ASGCO®'s BC-2 Secondary Belt Cleaner shown, can be mounted at 6 O'Clock.*



## High Performance Blade Options

ASGCO® is the leader in the development of high-performance urethane for specialized belt cleaner / belt scraper applications. Our urethane compound blades exceed most other competitors' blades in tensile strength and, most importantly, DIN Abrasion, the metric to test the wear characteristics of urethane compounds in the industry. All our blades are backed up with our "Total Satisfaction Guarantee".

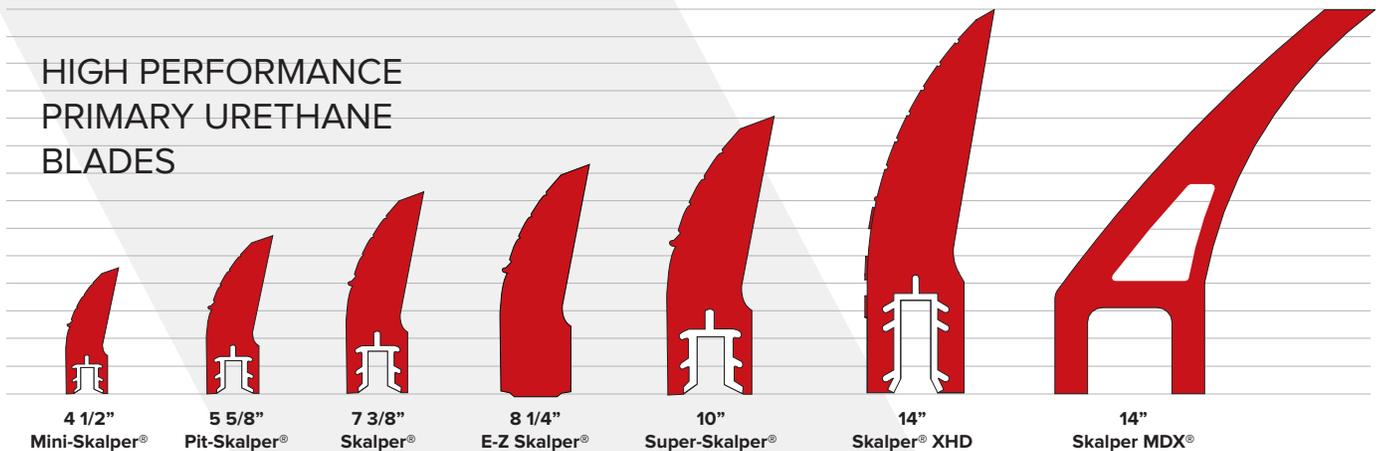
### Urethane Blades

- Easy on the belt
- Works well with mechanical fasteners
- Economical
- For high temperature, chemical and abrasion resistance to handle any application

### Tungsten Carbide

- Quick and easy blade installation and replacement
- Superior service life
- Self-adjusting blades ensure constant blade-to-belt contact
- C-Tips/Blades for mechanical splices
- V-Tip/Blades for vulcanized belts

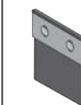
## HIGH PERFORMANCE PRIMARY URETHANE BLADES



### Primary Urethane Blades

Skalper® Blade Materials							
<b>Blade Type</b>	Skalper®IV	Skalper®III	Skalper®II	Skalper®HT	Skalper®UHT	Skalper®XC	Skalper®AR
<b>Material / Description</b>	Urethane / Abrasion Resistant	Urethane / General Use	Urethane / Extra Abrasion Rest.	Urethane / High Temp	Urethane / Ultra High Temp	Urethane with Ceramic Tips	Urethane / Acid Resistant
<b>Temperature Range</b>	-20-180°F -28 to 82°C	-20-180°F -28 to 82°C	-20-180°F -28 to 82°C	-20-225°F -28 to 107°C	-20-300°F -28 to 148°C	-40-225°F -40 to 107°C	-40-225°F -40 to 107°C
<b>Use w/Mech. Fasteners</b>	NO	YES	NO	YES	NO	YES	NO

### Secondary Blades

Blade Materials											
<b>Blade Type</b>	TORO U-Tip	TORO F-Tip	TORO C-Tip	F-Tip	C-Tip	V-Tip	U-Tip	XC-Tip	MDX F-Tip	MDX C-Tip	MDX V-Tip
<b>Material</b>	Urethane	AR 400	Tungsten Carbide	AR 400	Tungsten Carbide	Tungsten Carbide	Urethane	Ceramic	AR 400	Tungsten Carbide	Tungsten Carbide
<b>Temperature Range</b>	-20-180°F -28 to 82°C	-20-180°F -28 to 82°C	-20-180°F -28 to 82°C	-20-400°F -28 to 204°C	-20-400°F -28 to 204°C	-20-400°F -28 to 204°C	-20-180°F -28 to 82°C	20-400°F -28 to 204°C	20-400°F -28 to 204°C	20-400°F -28 to 204°C	20-400°F -28 to 204°C
<b>Use w/Mech. Fasteners</b>	YES	YES	YES	YES	YES	NO	YES	NO	YES	YES	NO

## Our Guideline for Effective Belt Cleaners Are:

- Design for optimum clean with the least amount of pressure
- Position the blade out of the main flow of the material
- If possible, install the belt cleaners in the main chute or an area that will be easily cleaned and maintained
- Primary blades should be no more than the width of the material being conveyed
- Engineered and designed to handle “worst case” conditions
- Designed for ease of maintenance
  - Quick and simple replacement blade change
  - Tensioners maintain tension throughout the life of the blade
- Inspection/access doors are critical to safely inspect and maintain belt cleaning systems

## Classification of Applications

The Conveyor Equipment Manufacturers’ Association (CEMA) publishes a standard guide, titled “Classification of Applications for Bulk Material Conveyor Belt Cleaning” for the ranking of conveyor belt cleaners. The publication provides performance-based guidelines for specifying belt cleaners by establishing a specific formula for determining the level of difficulty in a given application. For end users, the standard is an objective means of determining a cleaner’s suitability for the plant’s material and operating conditions, allowing them to specify a cleaner most likely to meet their needs.

### CEMA Ranking and Class System

The classification is built on a points system based on five key criteria in selecting the appropriate cleaner or cleaning system:

1. **belt width**
2. **belt speed**
3. **belt splice type**
4. **material abrasiveness**
5. **material adhesion/moisture content**

Each of these criteria score points; points increase based on the impact it would have on the required cleaner. Wider belt widths, faster belt speeds, introduction of mechanical splices, increase in material abrasiveness and increasing the moisture content of the material all add to the point totals when scoring an application.

The results of scoring the application created five classes:

Total Score	Cleaner Rating
≤6	Class 1
7-10	Class 2
11-15	Class 3
16-23	Class 4
≥24	Class 5

In accordance with this classification, you will find class ratings for ASGCO’s belt cleaners throughout this guide as another resource to assist you in choosing the correct cleaning system for your application.



# PRIMARY BELT CLEANERS

Primary belt cleaners are installed at the 9 o'clock position on the face of the head pulley, referred to as the primary position. It should be mounted below the trajectory flow of the material being discharged from the belt. These are the most common type of belt cleaner.

Pre-Cleaner	Mini-Skalper®	Skalper®	E-Z Skalper®	Super-Skalper®	Skalper XHD	Skalper MDX®
<b>Belt Width</b>	18"-48" 450-1200 mm	18"-96" 450-2400 mm	18"-96" 450-2400 mm	36"-96" 900-2400 mm	36"-96" 900-2400 mm	36"-96" 900-2400 mm
<b>Belt Speed</b>	< 500 fpm 2.5 m/sec.	< 1000 fpm 5.0 m/sec.	< 1000 fpm 5.0 m/sec.	< 1200 fpm 6.0 m/sec.	< 1200 fpm 6.0 m/sec.	< 1200 fpm 6.0 m/sec.
<b>Head Pulley Diameter</b>	6-22" 150-550 mm	16"-36" 400-900 mm	16"-36" 400-900 mm	20" + 400 mm +	20" + 400 mm +	24" + 600 mm +
<b>Primary Tensioners</b>						
<b>Force-1™</b>	YES	YES	YES	NO	NO	NO
<b>E-Z Torque®</b>	YES	YES	YES	YES	NO	NO
<b>Air-Shoc™ (Primary)</b>	NA	NA	NA	YES	YES	YES
<b>Spring-Shoc™ (Primary)</b>	NA	NA	NA	NA	YES	YES
<b>Belt Conditions</b>						
<b>Ok on reversible belts?</b>	YES	YES	NO	YES	YES	YES
<b>Blade Materials</b>						
<b>Skalper® IV</b>	YES	YES	YES	YES	YES	YES
<b>Skalper® III</b>	YES	YES	N/A	NO	NO	NO
<b>Skalper® II</b>	YES	YES	YES	YES	YES	YES
<b>Skalper® HT</b>	YES	YES	YES	YES	YES	YES
<b>Skalper® UHT</b>	YES	YES	YES	YES	YES	YES
<b>Skalper® XC (Ceramic)</b>	N/A	N/A	N/A	YES	YES	YES
<b>Skalper® AR</b>	YES	YES	YES	YES	YES	YES



Skalper®



Super Skalper®



Skalper® MDX



Skalper® III

## Skalper® Blades

Skalper® Blade Materials							
Blade Type	Skalper® IV	Skalper® III	Skalper® II	Skalper® HT	Skalper® UHT	Skalper® XC	Skalper® AR
<b>Durometer</b>	82	82	95	82	95	82	95
<b>Description</b>	Abrasion Resistant	General Use	Extra Abrasion Resistant	High Temp	Ultra High Temp	Ceramic	Acid Resistant
<b>Belt Speed</b>	< 1000 fpm < 5 m/sec	< 700 fpm < 3.5 m/sec	< 1200 fpm < 6 m/sec	< 1000 fpm < 6 m/sec	< 1200 fpm < 6 m/sec	< 1400 fpm < 7 m/sec	< 1400 fpm
<b>Temperature Range</b>	-20-180°F -28 to 82°C	-20-180°F -28 to 82°C	-20-180°F -28 to 82°C	-20-225°F -28 to 107°C	-20-300°F -28 to 148°C	-40-225°F -40 to 107°C	-40-225°F -40 to 107°C
<b>Use w/Mech. Fasteners</b>	YES	YES	NO	YES	NO	NO	NO

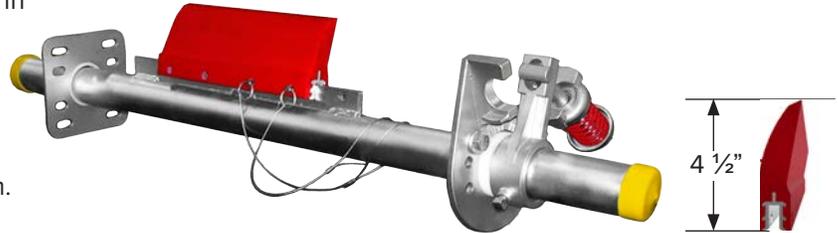
## Primary Tensioners

E-Z Torque	Spring Shoc™	Air-Shoc™	Force-1™	E-Z Torque® Extension Bracket	Boss Block	Mounting Plate
						
<ul style="list-style-type: none"> <li>All 304 stainless steel construction</li> <li>Lifetime Warranty</li> <li>Stainless steel torsion spring will not take a set</li> </ul>	<ul style="list-style-type: none"> <li>Zinc plated mild steel construction</li> <li>Lifetime Warranty</li> <li>Rubber and UHMW impact bushing</li> </ul>	<ul style="list-style-type: none"> <li>Enclosed air system with auto-motive quality shocks maintain constant blade to belt contact for continuous cleaning pressure.</li> </ul>	<ul style="list-style-type: none"> <li>All 304 stainless steel construction</li> <li>Lifetime Warranty</li> <li>Compact size</li> </ul>	<ul style="list-style-type: none"> <li>E-Z Torque tension side extension bracket provides additional clearance for ease of tensioning</li> <li>Made from zinc plated mild steel</li> </ul>	<ul style="list-style-type: none"> <li>W1" X L8 with (4) 5/8-11 tapped holes</li> <li>Weld on both sides of pulley and bolt on steel plate</li> </ul>	<ul style="list-style-type: none"> <li>H15" X L30" with (4) 5/8-11 holes</li> <li>For use with Boss Block to mount precleaners on open head pulleys</li> </ul>

## Mini-Skalper® Belt Cleaner

The unique Mini-Skalper® conveyor belt pre-cleaner is designed for small diameter pulleys where space and size is a factor. This belt cleaner is ideal in situations where the head pulley is less than 16" (400 mm) in diameter or tight locations.

- **Mini-Skalper** - (patented) compact one piece blade maintains an effective cleaning edge throughout the life of the blade.
- **Force-1™** - Tensioning system provides constant tension.
- **E-Z Torque** - Tensioning system is also available.
- **Blade-Wear Indicator** - allows you to monitor blade wear easily without having to shut the system down for inspection.

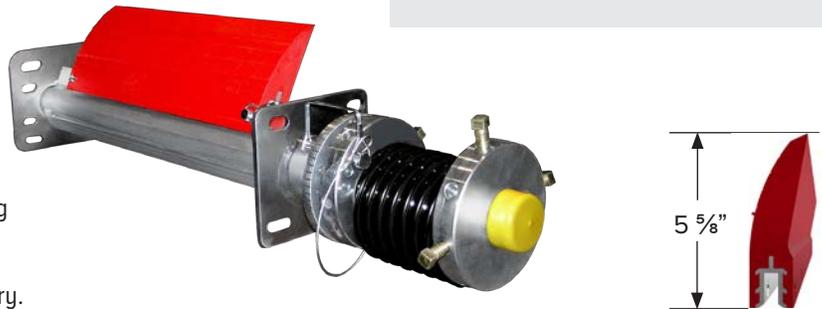


Maximum Belt Speed – 500 fpm (2.5 m/sec)  
 Pulley Diameter – 6"-22" (150-550 mm)  
 Applications – Aggregate, Sand & Gravel, Redi-Mix and Asphalt, Cement, Wood Processing Recycling  
**CEMA Class 2**

## Pit-Skalper® Belt Cleaner

ASGCO Pit-Skalper® conveyor belt pre-cleaner is highly effective in challenging service conditions to remove carry-back from the conveyor system.

- **Pit-Skalper Blade design** - (patented) maintains an effective cleaning edge throughout the life of the blade
- **Zinc Plated** - blade mounting tube and bracket assemblies offer the highest standard in corrosion resistance in a variety of applications.
- **E-Z Torque Tensioner** - is a patented tensioner featuring stainless steel spring, allows the blades to self adjust throughout the entire life of the blade and is the most robust and accurate belt cleaner tensioner in the industry.



Maximum Belt Speed – 600 fpm (3.0 m/sec)  
 Pulley Diameter – 10" - 20" (250 - 500 mm)  
 Applications – Aggregate, Ready Mix, Asphalt, Recycling, Sand and Gravel  
**CEMA Class 3**

## Skalper III Belt Cleaner

The Skalper III® conveyor belt pre-cleaner features the Skalper® blade design and an effectively simple and accurate Force-1™ tensioner with an economical price tag. The urethane composites used in the Skalper III blade are designed for the sand and aggregate industries.

- **One Piece Blade** - maintains an effective cleaning edge through out the life of the blade.
- **Force-1™** - Tensioning system is also available.
- **Low Maintenance** - Quick Blade Change out and Minimal Maintenance



Maximum Belt Speed – 700 fpm (3.5 m/sec)  
 Pulley Diameter – 12"-36" (300-900 mm)  
 Applications – Aggregate, Sand & Gravel, Redi-Mix and Asphalt, Cement, Wood Processing Recycling  
**CEMA Class 3**

## PRIMARY BELT CLEANERS

### Skalper® Belt Cleaner

Our newly enhanced Skalper® series of conveyor belt pre-cleaners have been installed and have solved carry-back problems all over the world. The simple and highly effective Skalper® belt cleaner removes carry-back from the conveyor system.

- **Skalper®** – (patented) one piece blade maintains an effective cleaning edge throughout the life of the blade
- **E-Z Torque®** – (patented) torsion style tensioning system provides a constant consistent tension throughout the life of the blade
- **Available** – with Force-1™ Tensioner



### Super-Skalper® HD Belt Cleaner

The Super-Skalper® HD conveyor belt pre-cleaner can tackle the toughest carry-back applications. The Super-Skalper® blade provides carry-back removal for high-speed belts, large head pulleys and large sizes and volumes of material, typically found in above and below ground mining.

- **Durability** – the large one-piece over-sized mounting tube is designed to stand up to toughest conditions.
- **E-Z Torque® HD Tensioner** – (lifetime warranty) patented made of all 304 stainless steel mounting plates, collars and springs allows the blades to self adjust throughout the entire life of the blade and is the most robust and accurate belt cleaner tensioner in the industry.
- **Optional Ceramic (XC) beaded blade** – available for high speed high tonnage conveyor systems.



### Super-Skalper® Belt Cleaner

The Super-Skalper® conveyor belt pre-cleaner can tackle the toughest bulk material handling applications. The massive blade provides carry-back removal for high-speed belts, large head pulleys and large sizes and volumes of material, typically found in below and above ground mining.

- **One-Time Tensioning** – the patented E-Z Torque® tensioner maintains constant tension throughout the life of the blade.
- **Blade-Wear Indicator** – allows you to monitor blade wear easily without having to shut the system down for inspection.
- **Torque Spring** – provides a greater degree of tensioning per inch of blade, verses compression springs which require more tensioning adjustment for the life of the blade.

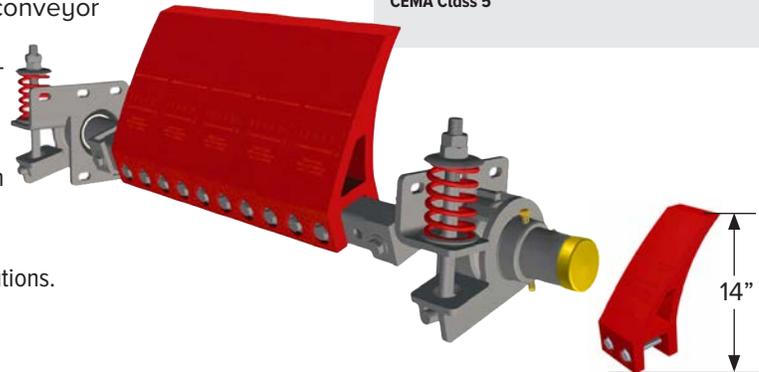


## PRIMARY BELT CLEANERS

### Skalper MDX<sup>®</sup> Belt Cleaner

The Skalper MDX<sup>®</sup> conveyor belt pre-cleaner is designed for high speed and high tonnage conveyor systems in above ground and underground mining. The heavy-duty urethane blade mounts against the head pulley for efficient conveyor belt cleaning, and our unique torque cam action lever adjusts itself to remove high volumes of carry-back while minimizing blade wear and wear from mechanical fasteners. Guaranteed mine tough!

- **Impact absorbing Torque-Cam** – action mounting system adjusts itself when large impact forces from mechanical fasteners or large lumps of carry-back hit the cleaner.
- **Engineered** – for the most abusive conditions and applications.
- **Installed** – as individual blade or as a cartridge
- **Available** – with Spring Shoc<sup>™</sup> or Air-Shoc<sup>™</sup>

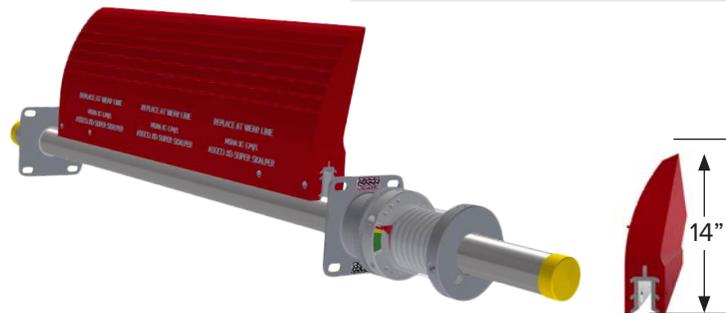


Maximum Belt Speed – 1200 fpm (6.0 m/sec)  
 Pulley Diameter – 20" + (600 mm +)  
 Applications – Underground Mining, Hard Rock Mining, Oil Sands Mining, Metals (copper/gold) Mining, Steel Mills, Iron Ore, Bulk Shipping Terminals  
**CEMA Class 5**

### Skalper<sup>®</sup> XHD Belt Cleaner

The Skalper XHD conveyor belt pre-cleaner can tackle the toughest carry-back applications. The Super-Skalper<sup>®</sup> blade provides carry-back removal for high-speed belts, large head pulleys and large sizes and volumes of material, typically found in above and below ground mining.

- **Three Piece Mounting Tube** – with bolted connections for ease of installation
- **Shorter Profile** – for tight installations
- **Increased Tension Life**
- **No exposed moving parts**

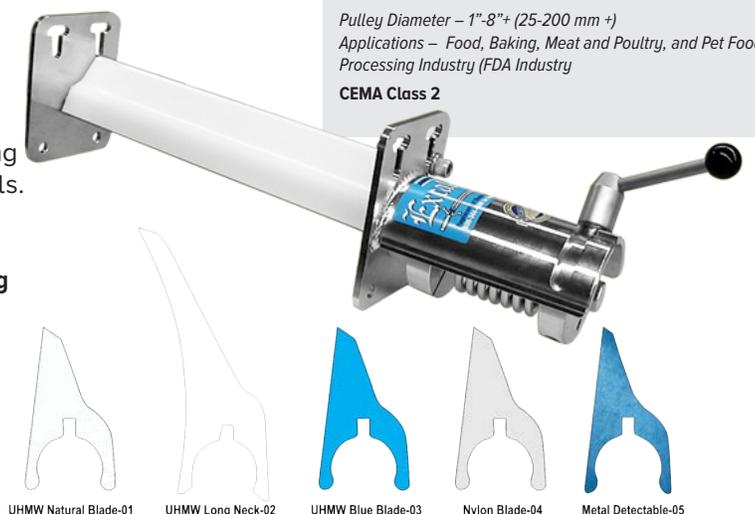


Maximum Belt Speed – 1200 fpm (6.0 m/sec)  
 Pulley Diameter – 24" + (600 mm +)  
 Applications – Underground Mining, Hard Rock Mining, Oil Sands Mining, Metals (copper/gold) Mining, Steel Mills, Iron Ore, Bulk Shipping Terminals  
**CEMA Class 5**

### Excalibur<sup>®</sup> Food Grade Conveyor Belt Cleaner

Excalibur<sup>®</sup> is particularly suited for light duty thermo-plastic belts with widths from several inches to 10'. Excalibur is designed and configured to meet the most stringent sanitary requirements of the food manufacturing industry and uses USFDA and USDA approved materials.

- **Sanitary and safe lightweight**
- **Works on flexible modular plastic table top conveyor belting**
- **Features a unique blade, holder and tensioning mechanism**
- **Snap-on/off conveyor belt scraper blade**
- **FDA/USDA compliant materials**
- **Primary & Secondary Belt Cleaners now available**



Pulley Diameter – 1"-8"+ (25-200 mm +)  
 Applications – Food, Baking, Meat and Poultry, and Pet Food Processing Industry (FDA Industry)  
**CEMA Class 2**

UHMW Natural Blade-01    UHMW Long Neck-02    UHMW Blue Blade-03    Nylon Blade-04    Metal Detectable-05

## SECONDARY BELT CLEANERS

Secondary belt cleaners are installed after the point where the belt leaves the head (discharge) pulley and or anywhere on the return side of the belt where it can be cleaned and maintained effectively.

Secondary Cleaners	TORO™	Razor-Back®	Razor-Back MDX®	Chevron™	BC-2™
<b>Belt Width</b>	18"-96" 450-1200 mm	18"-96" 450-2400 mm	18"-96" 450-2400 mm	18"-96" 450-2400 mm	18"-72" 450-1800 mm
<b>Belt Speed</b>	< 1000 fpm 5 m/sec.	< 1000 fpm 5 m/sec.	< 1200 fpm 6 m/sec.	< 500 fpm 2.5 m/sec.	< 800 fpm 4 m/sec.
Secondary Tensioners					
<b>Bolt-Up™</b>	YES	YES	N/A	N/A	YES
<b>Spring-Shoc™</b>	YES	YES	N/A	N/A	N/A
<b>Bolt-Up™ MDX</b>	NO	NO	YES	N/A	N/A
<b>Air-Shoc™ MDX</b>	NO	NO	YES	N/A	N/A
<b>Spring-Shoc™ MDX</b>	N/A	N/A	YES	N/A	N/A
Belt Conditions					
<b>Ok on reversible belts?</b>	YES	NO	NO	YES	NO
Blade Materials					
<b>TORO™ U-Tips</b>	YES	N/A	N/A	N/A	N/A
<b>TORO™ F-Tips</b>	YES	N/A	N/A	N/A	N/A
<b>TORO™ C-Tips</b>	YES	N/A	N/A	N/A	N/A
<b>F-Tips</b>	NA	YES	N/A	N/A	N/A
<b>C-Tips</b>	NA	YES	N/A	N/A	YES
<b>V-Tips</b>	N/A	YES	N/A	N/A	YES
<b>U-Tips</b>	N/A	YES	YES	N/A	N/A
<b>MDX F-Tips</b>	N/A	YES	YES	N/A	N/A
<b>MDX C-Tips</b>	N/A	YES	YES	N/A	N/A
<b>MDX V-Tips</b>	N/A	YES	YES	N/A	N/A



Razor-Back® w/ V-Tips

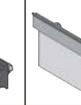
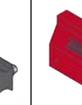
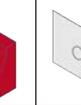
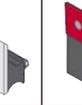
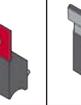
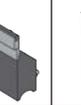


TORO®

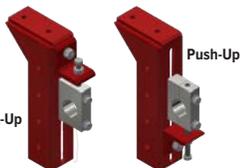


Chevron™

### Secondary Blades

Blade Materials											
Blade Type	TORO U-Tip	TORO F-Tip	TORO C-Tip	F-Tip	C-Tip	V-Tip	U-Tip	XC-Tip	MDX F-Tip	MDX C-Tip	MDX V-Tip
<b>Belt Speed</b>	< 1000 fpm < 5 m/sec	< 1000 fpm < 3.5 m/sec	< 1000 fpm < 6 m/sec	< 1000 fpm < 5 m/sec	< 1400 fpm < 7 m/sec	< 1200 fpm < 6 m/sec	< 1200 fpm < 6 m/sec	< 1200 fpm < 6 m/sec			
<b>Temperature Range</b>	-20-180°F -28 to 82°C	-20-180°F -28 to 82°C	-20-180°F -28 to 82°C	-20-400°F -28 to 204°C	-20-400°F -28 to 204°C	-20-400°F -28 to 204°C	-20-180°F -28 to 82°C	20-400°F -28 to 204°C	20-400°F -28 to 204°C	20-400°F -28 to 204°C	20-400°F -28 to 204°C
<b>Use w/Mech. Fasteners</b>	YES	YES	YES	YES	YES	NO	YES	NO	YES	YES	NO

### Secondary Tensioners

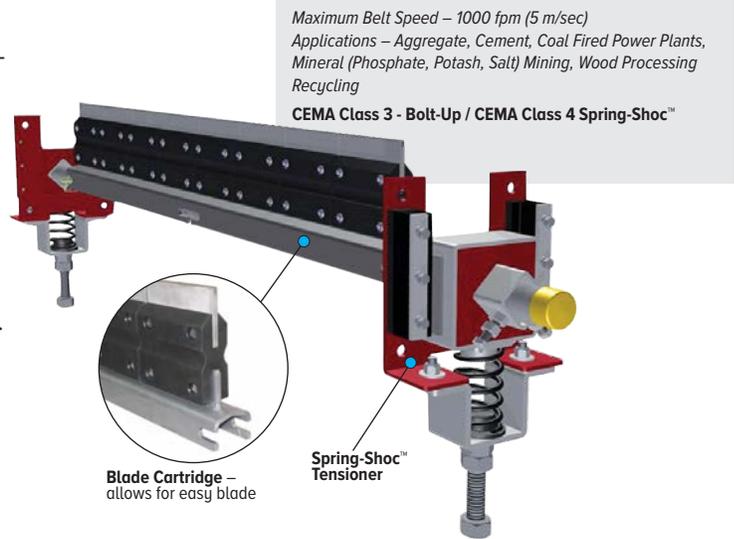
Bolt-Up™ / Bolt-Up MDX™	Spring-Shoc™ MDX	Duo-Spring™	Air-Shoc™ MDX	Secondary Mounting Bracket
 <p><b>Pull-Up</b></p> <ul style="list-style-type: none"> <li>• Powder coated steel bracket</li> <li>• 304 stainless steel of adj. blocks</li> <li>• Lifetime Warranty</li> <li>• Visual tension check</li> <li>• Push-up or Pull-up tension options</li> </ul>	 <ul style="list-style-type: none"> <li>• Zinc Plated Steel HD construction</li> <li>• Lifetime Warranty</li> <li>• UHMW slide bushings</li> <li>• Push-up or Pull-up tension options</li> </ul>	 <ul style="list-style-type: none"> <li>• All 304 Stainless Steel</li> <li>• Lifetime Warranty</li> <li>• Push-up or Pull-up tension options</li> </ul>	 <ul style="list-style-type: none"> <li>• Zinc plated steel HD</li> <li>• Lifetime Warranty</li> <li>• UHMW slide bushings</li> </ul>	 <ul style="list-style-type: none"> <li>• Powder coated mild steel</li> <li>• Available in Stainless Steel upon request</li> </ul>

# SECONDARY BELT CLEANERS

## TORO™ Belt Cleaner

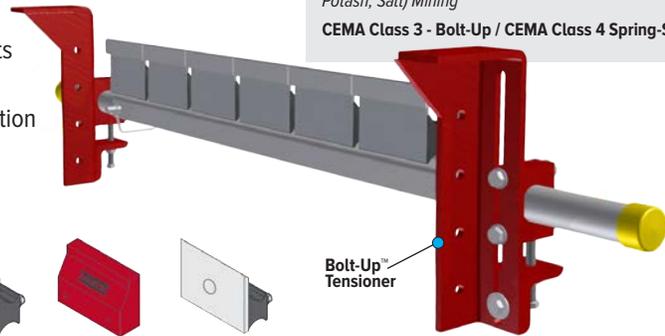
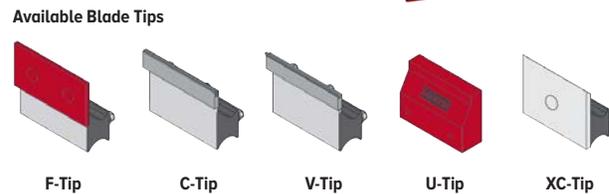
Toro™ secondary belt cleaner is an effective flexible secondary belt cleaner that is also suitable for reversing conveyor belts. The cartridge blade system allows for easy blade change-outs and available with 3 different blade styles and 2 different tensioners depending on the application.

- **Designed for Reversing Conveyors** – such as shuttles or conveyors that roll back, trippers, due to its unique two-way rubber cushions.
- **Slide-Out Service Cartridge** – allows for easy service and inspection.



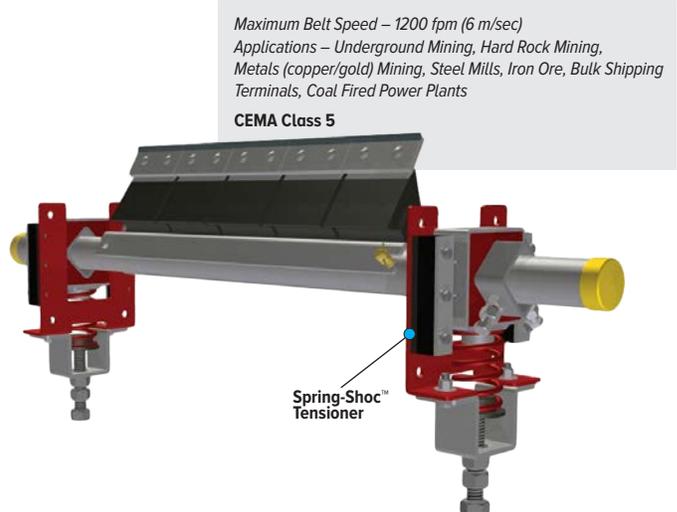
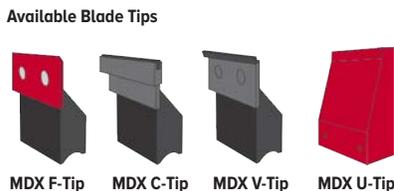
## Razor-Back Belt Cleaner

- **Impact absorbing, self-tensioning cushions** – allow each blade to flex individually and allow a more constant effective tension against the conveyor belt.
- **Available** – with replaceable V-Tips for vulcanized conveyor belts or C-Tips or F-Tips for conveyor belts with mechanical fasteners.
- **Slide-out service cartridge** – allows for easy service and inspection
- **Available** – with optional water spray



## Razor-Back® MDX Belt Cleaner

- **Force-Flex** – (patent pending) impact absorbing rubber and spring-loaded tensioning cushions maintain a constant effective force between the belt cleaner and the conveyor belt.
- **Available** – with replaceable MDX V-Tips for vulcanized conveyor belts or MDX C-Tips for conveyor belts with mechanical fasteners.
- **Slide-out** – service cartridge allows for easy service and inspection.

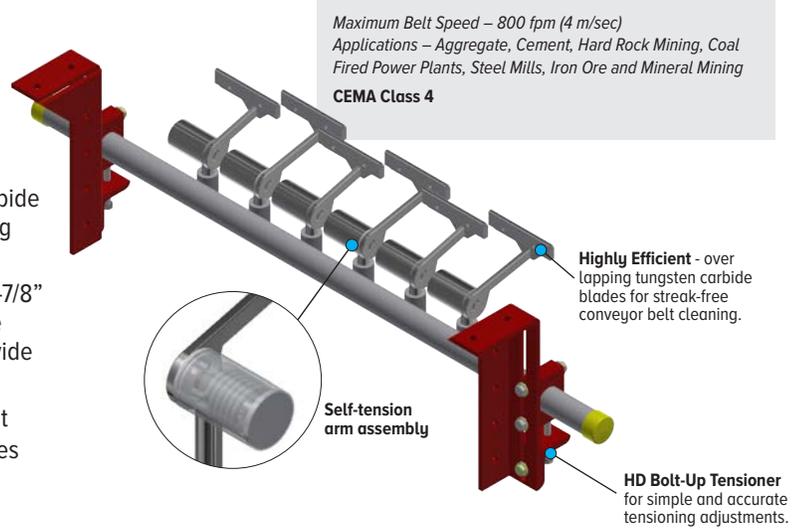


## SECONDARY BELT CLEANERS

### BC-2™ Belt Cleaner

The patented BC-2™ secondary belt cleaner gives you the best possible cleaning efficiency. Each arm is pre-tensioned with a stainless steel torsion spring for constant tension and ease of installation.

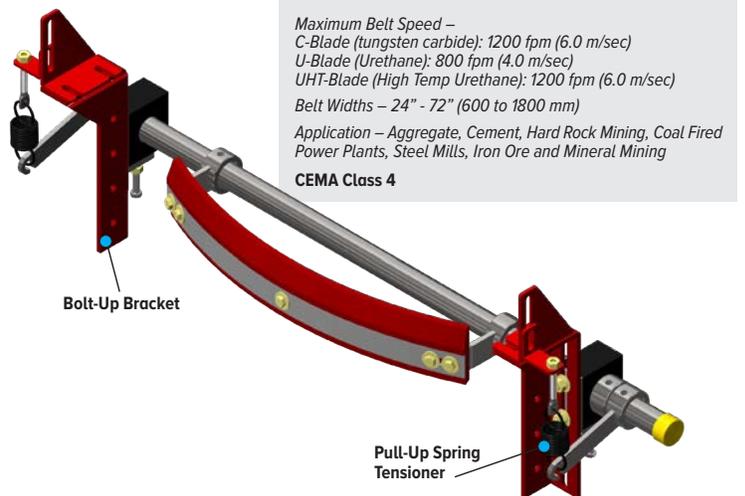
- **High Belt Cleaning Efficiency** – The overlapping tungsten carbide blades and the constant tension provided by the patent pending stainless steel spring self-tensioning arm assembly.
- **Made for Mining and Tough Applications** – Our heavy duty 2-7/8" corrosion resistant zinc coated (USA made) steel mounting tube and stainless steel spring self-tensioning arms and blades provide constant cleaning without the rust of chipped powder coating.
- **Flexible Configuration** – Engineered to be installed in different configurations and also gives you the option to locate the blades directly on the bottom of the head pulley.
- **Available in HD** – 50% more tension per arm and increased cleaner reach.



### U-Scrape™

The U-Scrape™ Secondary Belt Cleaners, unique “U” shaped design conforms to the return side of the belt and the blade maintains maximum pressure in the center of the belt where the majority of the carryback material builds up.

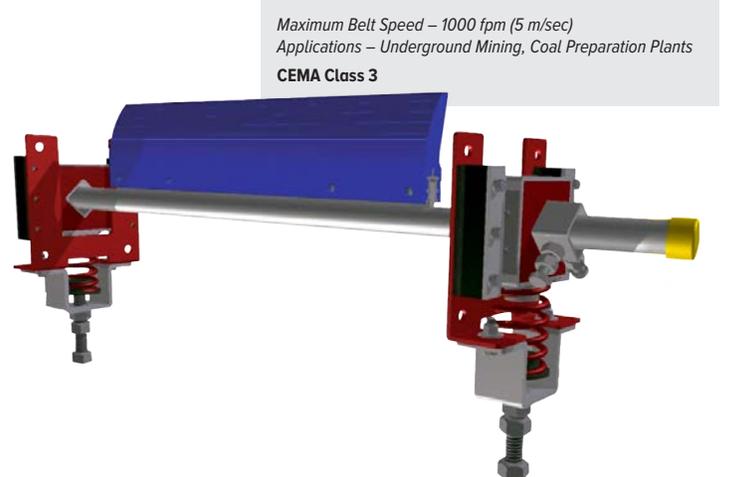
- **Urethane and Tungsten** – carbide blades are available.
- **Pull-up Spring Tensioner** – is a simple and effective tensioner that maintains uniform blade pressure across the width of belt and allows for visual tension inspection of the amount of required tension per belt width.
- **Blade Replacement** – is made easy with the U-Type’s removable plate. Simply release the blade tension, remove the bolts on the back of the blade frame, insert the new blade and reinsert the bolts. Replacing of the blade can be done in minutes.



### Dry Wipe™

The ASGCO® Dry Wipe™ Belt Cleaner is designed to be the final cleaner in a cleaning system on the conveyor belt. When there is still water remaining on the belt after the primary and secondary cleaners have done their job, this can cause a mess along the belt line. The squeegee effect of the Dry Wipe Cleaning system can wipe the belt dry.

- **Removes Excess Water** – to ensure a dry carry side of the belt down the belt line.
- **Excellent Performance** – of our patented Dry Wipe™ Blade design maintains an effective cleaning edge throughout the life of the blade.
- **Works well** – with both mechanical and vulcanized splices.



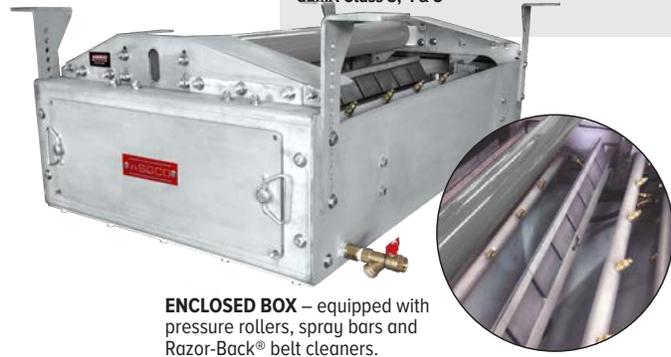
## Wash Box Belt Cleaning System

The ASGCO® Wash Box™ is installed as a secondary belt cleaner and is designed to work on the return side of the conveyor belt. Each steel enclosed box is equipped with a combination of pressure rollers, spray bars and Razor-Back® belt cleaners. It can also be customized to meet your exact needs.

- **Fully enclosed system** – that contains the wash waste fluid and carry-back.
- **Removable service doors** – allow the system to be easily inspected and service.
- **Custom Wash Box** – can be made at customers' request.

Maximum Belt Speed – 1000 fpm (5 m/sec)  
Applications – Coal Fired Power Plants, Bulk Shipping Terminals, Coal Preparation Plants, Underground Mining, Hard Rock Mining, Steel Mills, Iron Ore, Mineral (Phosphate, Potash, Salt) Mining

CEMA Class 3, 4 & 5



**ENCLOSED BOX** – equipped with pressure rollers, spray bars and Razor-Back® belt cleaners.

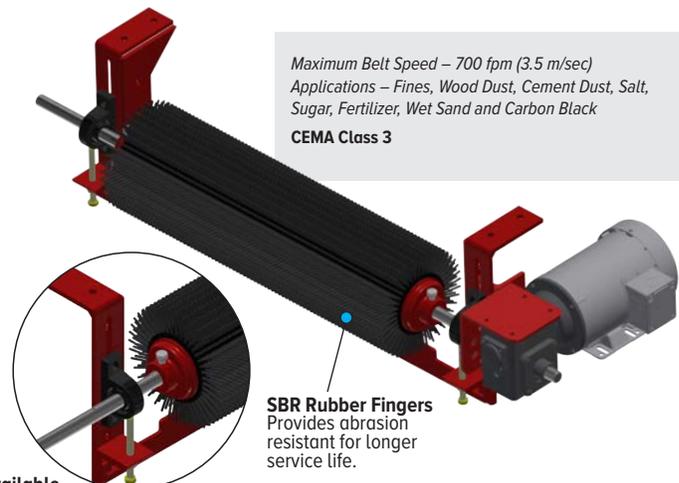
## Bronco™ Brush Belt Cleaner

The powered Bronco™ Brush secondary conveyor belt cleaner uses the speed and force of the belt rolling over hundreds of SBR finger tips, to provide effective cleaning on material that clings to smooth or cleated belts.

- **Excellent Elastic SBR Rubber Fingertips** – efficiently remove any materials that adhere to the belt surface, reducing serious material accumulation and residue build up on the return rollers.
- **Fast and Easy** – installation, adjustment, maintenance and blade change-out.
- **Sweeping Action** – unique rotary fingers remove the carry-back and are designed to work only when the conveyor belt is running.
- **Motor Volts** – 220/480v

Maximum Belt Speed – 700 fpm (3.5 m/sec)  
Applications – Fines, Wood Dust, Cement Dust, Salt, Sugar, Fertilizer, Wet Sand and Carbon Black

CEMA Class 3



**SBR Rubber Fingers**  
Provides abrasion resistant for longer service life.

Available without a motor

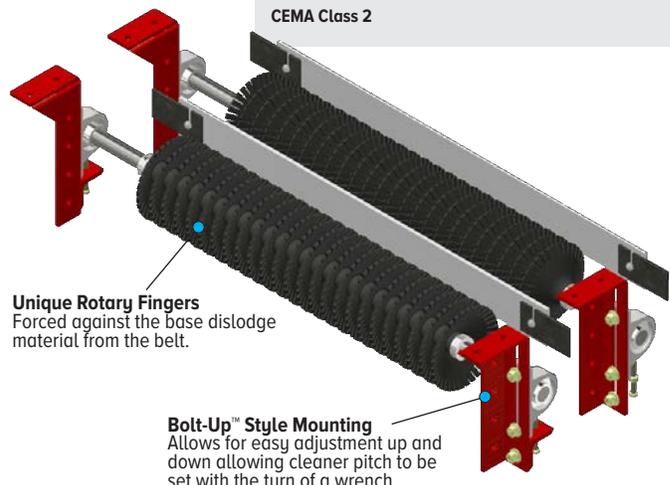
## Chevron™ Disk Belt Cleaner

The Chevron™ Disk Belt Cleaner uses the speed and force of the belt rolling over our patented rubber disks. The unique rotary fingers are forced against the base of the chevrons to dislodge material from the belt.

- **Bolt-Up Style Mounting** – allows for easy adjustment up and down allowing cleaner pitch to be set with the turn of a wrench.
- **Patented** – concave shaped rubber discs perform a sweeping action to clean chevron, raised top or grooved conveyor belts.
- **Easily serviced** – no motors, air nozzles or other problematic equipment to maintain.

Maximum Belt Speed – 500 fpm (2.5 m/sec)  
Applications – Wood Processing, Mineral (Phosphate, Potash, Salt) Mining, Recycling

CEMA Class 2



**Unique Rotary Fingers**  
Forced against the base dislodge material from the belt.

**Bolt-Up™ Style Mounting**  
Allows for easy adjustment up and down allowing cleaner pitch to be set with the turn of a wrench



**Chevron™ Rubber Notched Disc**

## SECONDARY BELT CLEANERS

### V-Plow XD™, Hinged V-Plow™ & Diagonal Plow™ Belt Cleaners

All “V” and Diagonal Plows are designed to remove material and clean the inside of the conveyor belt which protects and reduces the risk of puncture damage.

- **V-Plow XD™** – patent pending design for tough mine duty applications that can be flipped to maximize results. Reduces build-up on the tail and take-up pulleys. Available in urethane or rubber.
- **Hinged V-Plow™** – patent pending design for low, tight clearance applications. Allows you to change the amount of angle the plow can have from 30°, 45°, or 60° angle. Available in urethane or rubber.
- **Diagonal Plow™** – designed to discharge material from one side of the conveyor belt. Available in urethane or rubber.

Maximum Belt Speed – 1000 fpm (5 m/sec)  
Applications – Coal Fired Power Plants, Hard Rock Mining, Underground Mining, Coal Preparation Plants, Steel Mills, Iron Ore, Aggregate, Metals (copper/gold) Mining, Mineral (Phosphate, Potash, Salt) Mining, Bulk Shipping Terminals  
CEMA Class 3



### Vibrating Dribble Chute

The ASGCO® Vibrating Dribble Chute combines a vibrator with a unique isolation mount and a low-friction UHMW chute liner to prevent buildup in dribble chutes.

- **Vibrating liner** keeps material moving and keep material accumulations from clogging chute and burying cleaners.
- **Low friction UHMW Lining** – promotes material flow without accumulation. Each liner is 1/2” thick by belt width and 36” in length.
- **Custom Liners** – can be made at customers’ request.

Maximum Belt Speed – Coal fired power plants, underground mining, coal preparation plants, aggregate metals (copper/gold) mining, mineral (phosphate, potash, salt) mining.

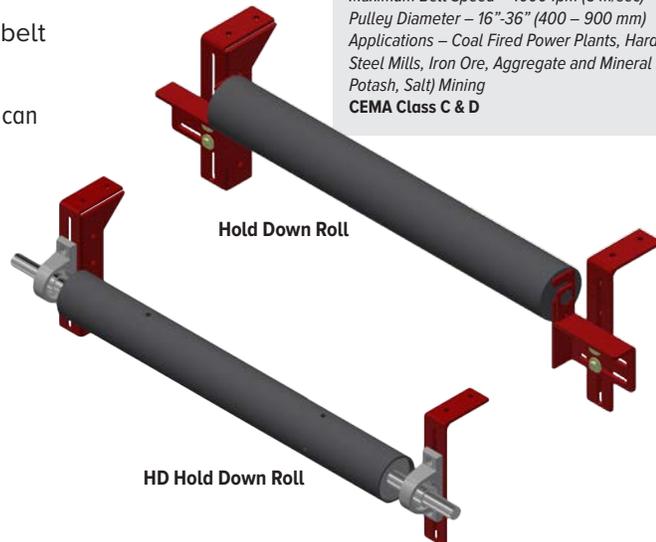


### Hold Down Roll

The ASGCO® Hold Down Roll holds the belt flat so the belt cleaner can maximize its cleaning performance.

- **Designed to hold the belt flat and stable**, so cleaner blades can make optimal belt contact.
- **Heavy Duty Construction** with adjustable mounting brackets
- **Standard Duty Hold Down Roll** uses a CEMA C & D 5” roll
- **Heavy Duty Hold Down Roll** uses a live shaft with 1 1/2” shaft ends and a 5” diameter can with pillow block bearings.

Maximum Belt Speed – 1000 fpm (5 m/sec)  
Pulley Diameter – 16”-36” (400 – 900 mm)  
Applications – Coal Fired Power Plants, Hard Rock Mining, Steel Mills, Iron Ore, Aggregate and Mineral (Phosphate, Potash, Salt) Mining  
CEMA Class C & D





# YOUR ISSUE: BELT MISTRACKING

## OUR SOLUTION: BELT TRAINERS

### RELIABLE AND RE-ACTIVE BELT TRACKING IDLERS

Idlers are an important component in any conveyor system as they are used to support the conveyor belt and the load carried on the belt. There are a significant number of idlers on a conveyor and if the incorrect idlers are selected, the subsequent problem manifests itself along the entire conveyor length!

#### 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

#### Selection Criteria for Deciding between Standard, Heavy Duty, XHD, EXHD Taper Trough

Standard Criteria	Standard Taper	Heavy Duty Taper	XHD Taper	EXHD Taper
Type of Belt	Rubber	Rubber / Steel Cord	Rubber / Steel Cord	Rubber / Steel Cord
Belt Width (mm)	450 to 1200	900 to 1500	1650 to 1800	1500 to 2800
Belt Width (in)	18" to 48"	36" to 60"	66" to 72"	60" to 110"
Belt Speed (m/s)	0-600 fpm 0-3 m/sec.	400-800 fpm 2-4 m/sec.	400-800 fpm 2-4 m/sec.	800-1200 4-6 m/sec.
Wing Roller Selection	Rubber	Rubber / Poly	Rubber / Poly	Rubber Rings / Poly

#### Selection Criteria for Deciding between Flat Return OR Dual Return\*

Standard Criteria	Flat Return Heavy Duty	Dual Return
Type of Belt	Fabric	Steel Cord Belt
Belt Width	54" to 60"	48" to 84"
Belt Speed	195 to 800 FPM	More than 800 FPM
Belt Thickness	Less Than 1 Inch	More Than 1 Inch
Belt Weight / m <sup>2</sup>	Less Than 50 LBS	More Than 50 LBS
Severity of mistracking	Belt does not mistrack too badly	Belt mistracks badly

\*The Flat Return Table, only applies to belt widths of 54" to 60". Choose Dual Return design if you answer YES to any 2 points in the Dual Return Column.

#### Selection Criteria for Deciding between a Dual Return OR Heavy Duty Dual Return.\*

Standard Criteria	Dual Return - Standard (Roller bearing + Rubber)	Dual Return - Heavy Duty (Thrust bearings + Polyurethane)
Type of Belt	Steel Cord Belt / Fabric	Steel Cord Belt
Belt Width	1350 – 1800 (54"-72")	1100 – 3300 (42"-130")
Belt Speed	Less than 800 FPM	More than 800 FPM
Belt Thickness	Less Than 20 mm(1")	20 mm +(1")
Belt Weight / m <sup>2</sup>	Less Than 23 Kg (50lb)	More Than 23 Kg (50lb)

\*Choose Dual Return Heavy Duty design, if you answer YES to any 2 points in the Dual Return - Heavy Duty Column.

\*Choose Dual Return Heavy Duty design if the environment is very corrosive/extreme or if there will be heavy side thrust on the tracker.

## Tru-Trainer® Flat Return Idlers

The Tru-Trainer® series of training idlers are a patented design that offers the most reliable and re-active training idlers available today. Its stainless steel internal pivot that is perpendicular to the plane of the belt and its rubber covered shell and tapered ends helps actuate the trainer immediately as the belt moves off center. It is always reacting to keep the belt centered.

- **Continuous Alignment** – by always tracking the belt to the center of the conveyor, it reduces edge damage, spillage and improves overall conveyor performance.
- **Heavy-Duty Design** – of our trainer uses 3 7/16" bearings, 1 3/4" shaft, and an abrasive resistant hot-vulcanized rubber cover. Urethane covers are also available.
- **Reactionary** – in both wet and dry conditions as seen in below ground and above ground mining all over the world.
- **Excellent for Reversing Belt Applications.**



Tru-Trainer® Flat Return Urethane Idler

## Tru-Trainer® Dual Return Idlers

The Tru-Trainer® Dual Return was developed to accommodate the excessive forces encountered with wide belts and heavy loads. An external central pivot mechanism was designed, obviating the need for a single, large drum, and enabling a concentric and balanced rotation to be achieved.

- **Two Separate Tapered Rolls** – are mounted into the pivot mechanism and can be individually replaced as wear occurs.
- **Accommodates Excessive Force** – encountered with wide belts and heavy loads.
- **Available in low profile design for restricted applications.**

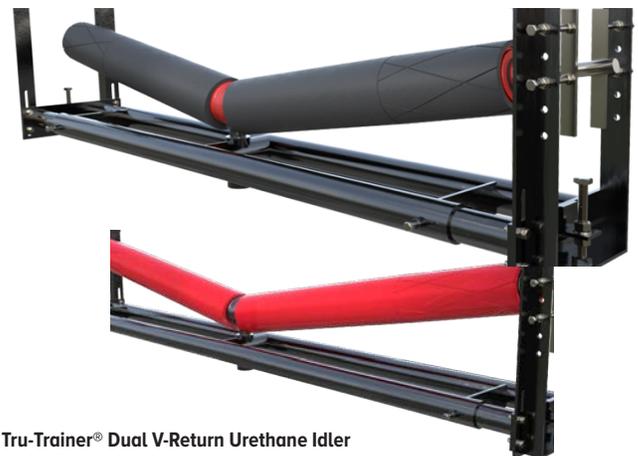


Tru-Trainer® Dual Return Urethane Idler

## Tru-Trainer® Dual V-Return Idler

The Tru-Trainer® Dual V-Return was developed to accommodate the excessive forces encountered with V-Return idler conveyors, systems and structures.

- **Two Separate Tapered Rolls** – are mounted into the pivot mechanism and can be individually replaced as wear occurs.
- **Designed for High Speed/PIW Conveyors** – to operate and last in severe conditions, wet and dry, and aggressive mining conditions.
- **Accommodates Excessive Force** – encountered with wide belts and heavy loads.
- **Enhanced Sealing/Bearing System** – needle thrust and tapered roller bearings and enhanced sealing system for the most aggressive mining conditions.



Tru-Trainer® Dual V-Return Urethane Idler

## TRACKING & SPECIALTY IDLERS

### Tru-Trainer® Tapered Troughing Idler

The patented ASGCO® Tru-Trainer® Tapered Trougher Idler offers the ultimate in tracking performance on the load-carrying side of the conveyor and is the result of over 10 years of design and innovation. This design is highly responsive and quick to activate on both loaded and unloaded conveyors.

- **Exceptional Performance** – The combination of the tapers and unique center pivot, provide fast, reactive and continual tracking in all conditions.
- **Individual rollers for easy replacement** – Both the taper wing and center roller can be individually replaced as wear occurs.
- **Versatile Installation** – Minimum tension is required on the center rolls, which can be easily adjusted with the supplied mounting brackets.

Tru-Trainer® Tapered Troughing Idler - Rubber



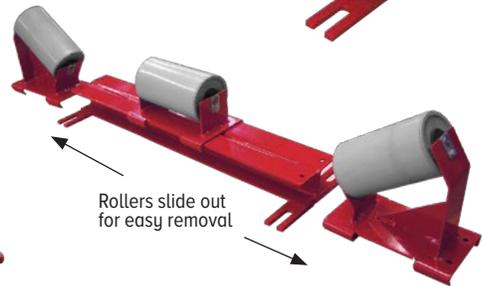
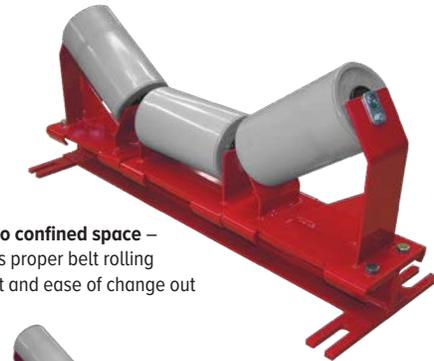
Tru-Trainer® Tapered Troughing Idler - Urethane

### Slide-Ler™

ASGCO® Slide-Ler™ is a modular designed product that allows you to remove the wing and center roll hangers for easy replacement of your idler rolls. It can also be designed to hold any manufacturer roll in the industry. The Slide-Ler™ minimizes down time and can be accessed from both sides of the conveyor system.

- **Perfect for Confined Spaces** – due to the frames only take-up 8" (200 mm) of width when using 6" (150 mm) rollers.
- **Improves Safety** – and maintenance by allowing rollers to be easily removed without having to remove any of the belt idler frames.
- **Meets all CEMA Standards** – and available in any belt width, troughing angle or idler.

**Fits into confined space** – ensures proper belt rolling support and ease of change out



Rollers slide out for easy removal



Left Wing Roll



Center Roll



Right Wing Roll

### Slide-Ler™ (One-Sided)

ASGCO® Slide-Ler™ (One-Sided) is a patented product designed to be maintained from one side of the conveyor system. This is ideal for systems with access on one side only, where a conveyor is located against the wall or high in the air with a catwalk on one side. You can replace the rolls with minimal downtime and eliminate the need for man lifts or having to work in a confined space.



Left Wing and Center Roll Connected

Right Wing Roll



All 3 rolls slide in or out from one side of the conveyor. The left wing and center roll are connected.

## Dura-Sleeve™ Idlers

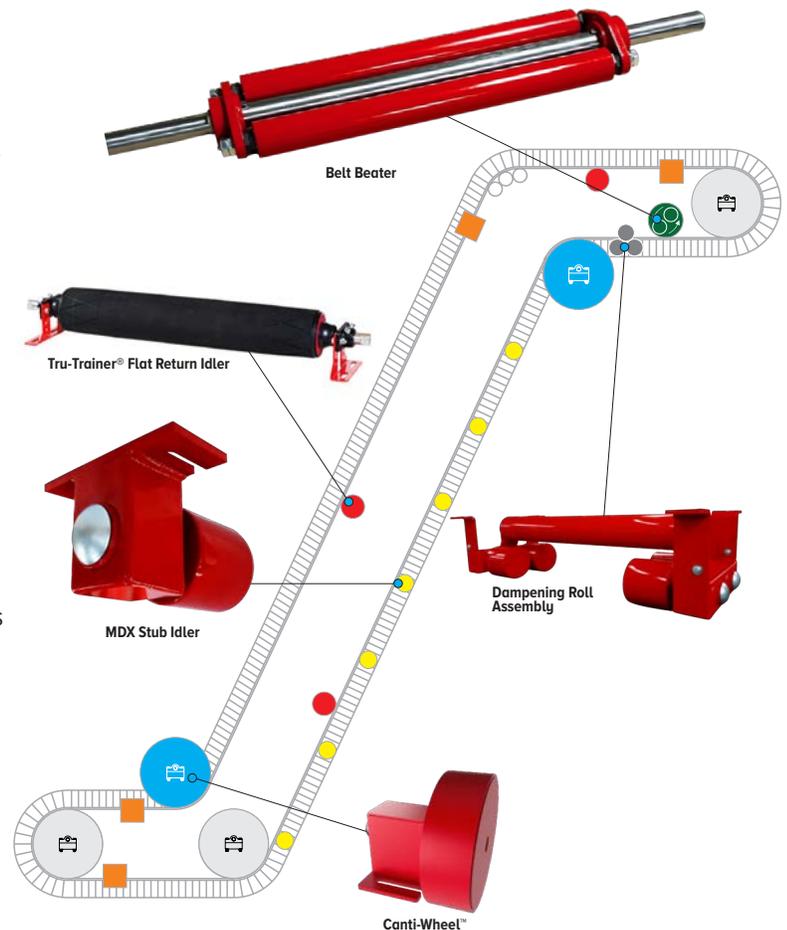
Dura-Sleeve™ Urethane Return Disc Idlers are used on abrasive mining conditions such as iron ore, coke, copper/gold ores, underground coal mining and other hard rock mining conditions where traditional rubber disc and steel idlers don't last. These tapered roller bearing idlers have a long wear life in abrasive, wet or sticky environments.

- **Patented Design** – of our idler sleeve clamping system utilizes you to replace worn out rubber or other urethane disc return idlers.
- **Abrasion Resistant Urethane** – compounds provide wear ability that exceeds 5 times the wear life of standard rubber disc return idlers.
- **Meets all CEMA Standards** – and available in any belt width and inside and outside roller diameter.
- **Available in CEMA D, E and F**
- **3 Year Guarantee** – ASGCO® offers the longest warranty on any Dura-Sleeve™ Idler.



## Steep Angle Accessories

- **MDX Stub Idler** – custom designed, provides increased sidewall conveyor belt life and is designed for heavy load support. Available in a “drop” or “rise” design to fit all conveyor frame/belt combinations.
- **Canti-Wheel** – combine the bearings, shafts and wheels in one assembly. This design is a cost effective solution to deflecting the belt at the bend points and offers an OSHA friendly arrangement which eliminates the cross shaft, and is easier to guard.
- **Belt Beater** – work on the return or “clean” side of flexible sidewall or conventional troughed belts. It consists of a set of heavy wall rollers, rotating about a main shaft at approximately 600 RPM.
- **Dampening Roll Assembly** – reduces the pulsations in the belt, mounted just behind the beat beater that consists of 2 pairs of dual stub idlers that are matched to the belt recess, and a flat idler that “sandwich” the belt.
- **Tru-Trainer™** – designed for high speed, aggressive belts operates in all conditions, wet and dry. The Tru-Trainer™ idler has an internal central pivot that is perpendicular to the plane of the belt. The ends of the roller are tapered slightly so that the edges of the belt create a slight drag on the roller.



# YOUR ISSUE: MISTRACKING AND SPILLAGE

## OUR SOLUTION: IMPACT BEDS, SKIRTING SYSTEM, PLOWES AND MORE

### **Belt Sealing**

- Minimize fugitive material, including dust, with quality skirting and wear liner products.
- Engineered to minimize fugitive dust and fine particulates from escaping the belt.

### **Dust Containment**

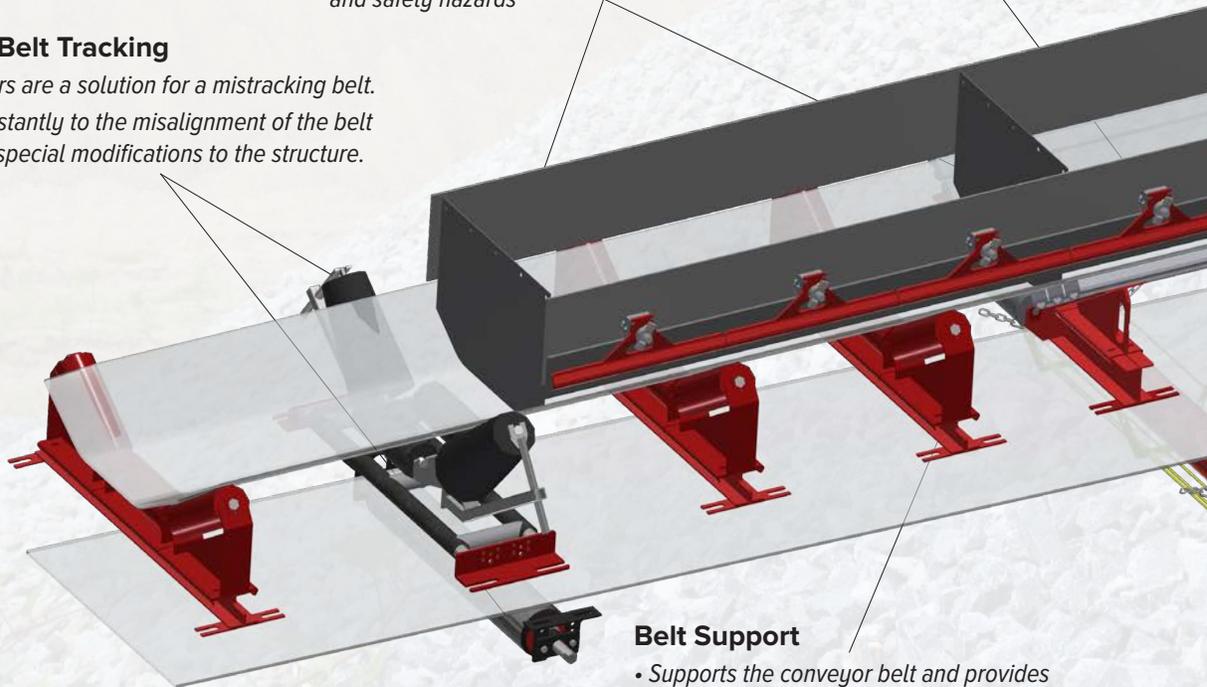
Seal the dust inside the conveyor equipment so it can't become airborne and create health and safety hazards

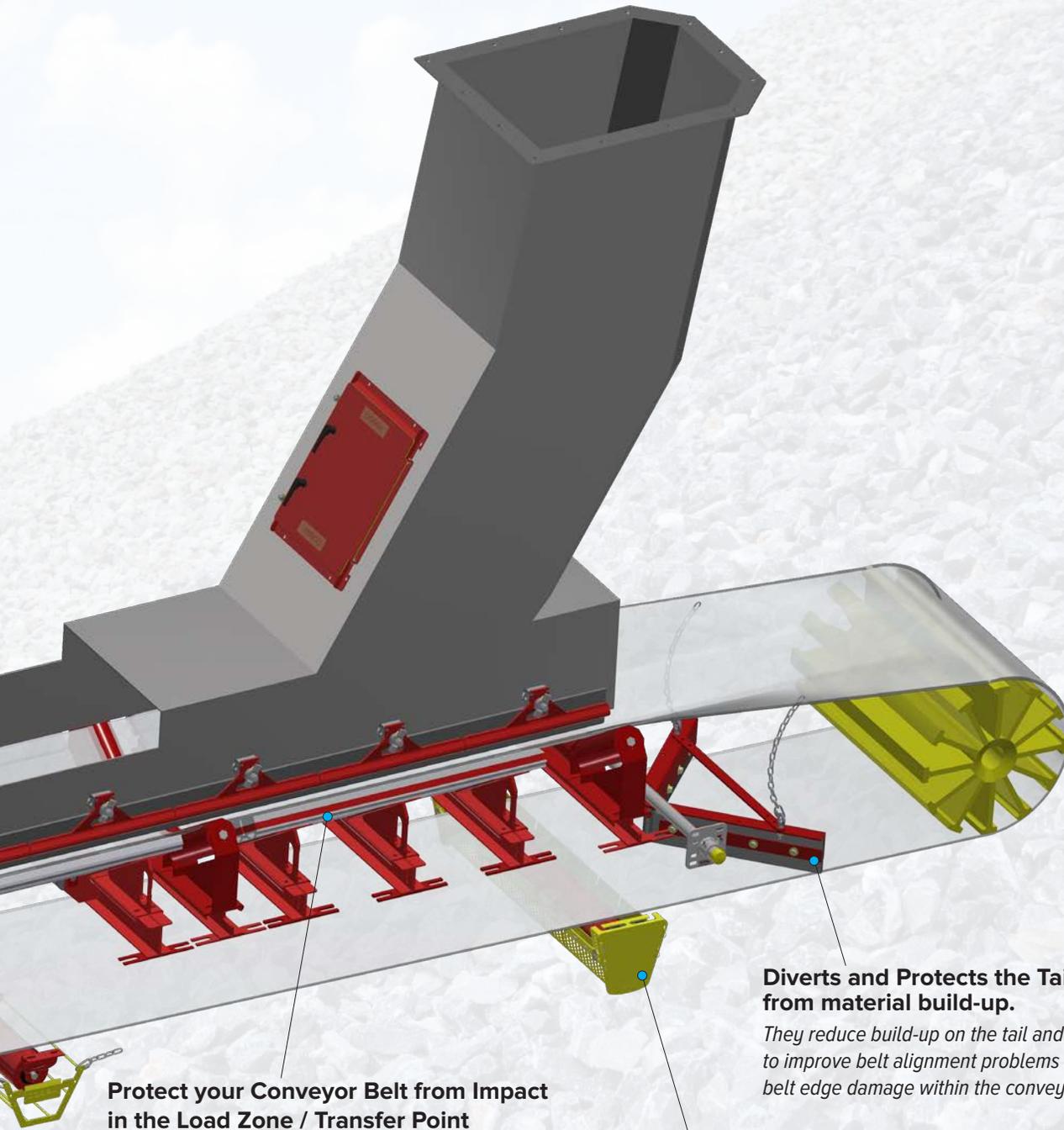
### **Conveyor Belt Tracking**

- Training idlers are a solution for a mistracking belt.
- Responds instantly to the misalignment of the belt and without special modifications to the structure.

### **Belt Support**

- Supports the conveyor belt and provides a trough to contain the material conveyed.
- Supports the belt as material settles and prevents belt drag.





**Protect your Conveyor Belt from Impact in the Load Zone / Transfer Point**

- Impact beds protect your conveyor belt and helps eliminate spillage.
- Protect equipment by absorbing the force of falling material at the transfer point

**Diverts and Protects the Tail Pulley from material build-up.**

*They reduce build-up on the tail and take-up pulleys to improve belt alignment problems and thus reduce belt edge damage within the conveyor system.*

**Safe-Guards / Prevent injuries**

- Return idler guards/cages catches the return idler or material if it falls.
- Prevents injuries from pinch points

# ELIMINATE SPILLAGE AND PROVIDE EFFECTIVE LOAD SUPPORT

## Reducing costly maintenance and down-time costs!

ASGCO®'s Impact Beds are manufactured and designed to absorb the impact of large material and support the entire belt in the load zones. ASGCO® applies advanced engineering technologies and years of experience to enhance your material flow. Let one of our experts cover everything you will need to complete your next conveyor installation job—including explanation of the different ASGCO® conveyor impact beds, initial site analysis, design development, engineering, installation, and post-installation services and maintenance.

ASGCO®'s Impact Beds are available in custom and low profile designs to fit your specific operation requirements!

### Advantages

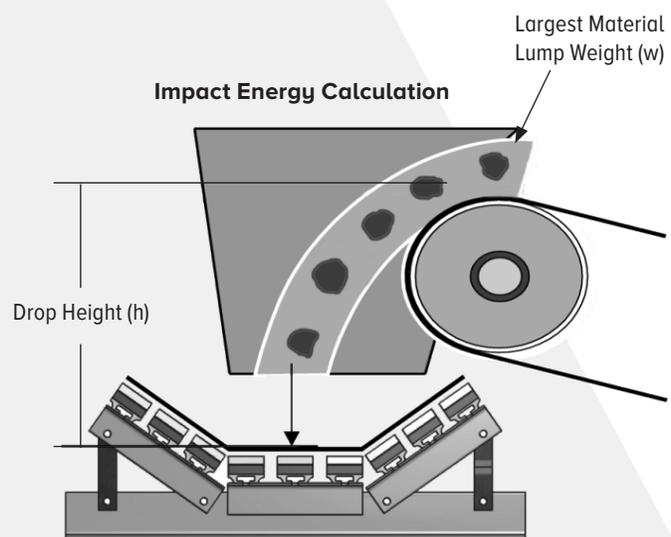
- Robust and Impact resistant
- Extended life of skirting
- Reduced maintenance costs
- Reduces belt perforation and damage
- Can contribute to increased tonnage on a belt
- Overall safer work environments

### Impact Energy Calculation

How to spec the correct impact bed for your conveyor transfer point.

### Impact Energy

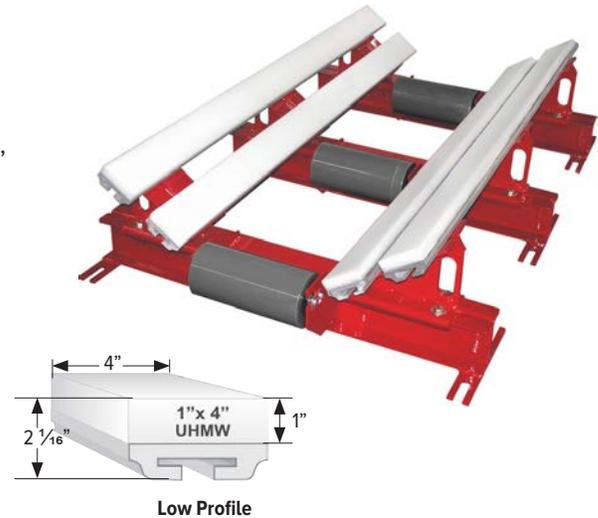
Lump Weight (w) \_\_\_\_\_  
Drop Height (h) x \_\_\_\_\_  
Total = lb-ft \_\_\_\_\_



## Slide-N-Roll™ Beds

Slide-N-Roll™ Beds provide for an effective load support while helping to eliminate dust and spillage in the conveyor load zone. By replacing the side troughing idlers with low friction UHMW bars, this reduces the belt friction and eliminates the gaps in between the idlers to provide an effective sealing surface for the skirting.

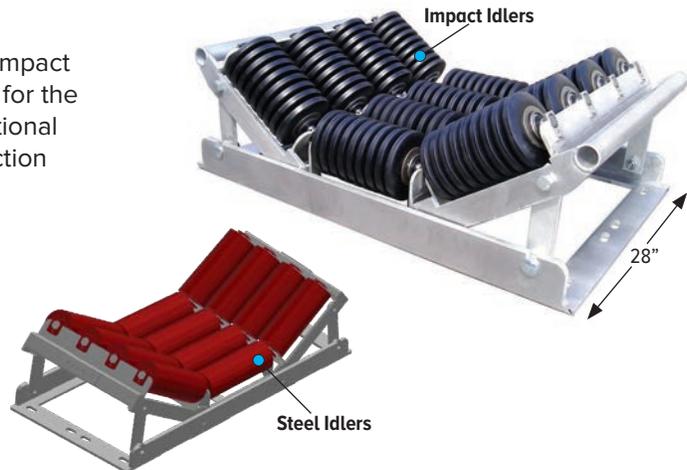
- **Increase Belt Life** – by removing the gaps, scalloping and pinch points between the belt and the skirt liners that can cut and gouge the belt.
- **Seals the Transfer Point** – by supporting the belt edge on a flat surface that allows the skirting to work more effectively for an effective seal.
- **Robust Designed** – steel frames and 1" (25 mm) thick UHMW slider bars provide excellent wear life.
- **Engineered and Designed** – beds can be made into 4' (1200 mm), 5' (1500 mm), 6' (1800 mm) or 10' (3000 mm) lengths.



## Roller Cassette

Roller Cassettes incorporate the advantages of slider and impact bars for sealing, while maintaining constant rolling support for the conveyor belt in the load zone. This system provides additional rolling support as well as being able to eliminate the deflection between the belt and standard impact or troughing idlers.

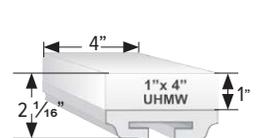
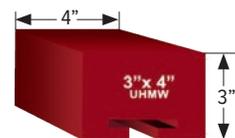
- **Load Supported** – by having up to 4 sets of troughing idlers (12 rolls) in an area that you would normally only have 2 (6 rolls).
- **Custom Designed** – to suit your particular application.
- **Available** – Impact, Steel, or Ceramic rollers and Stainless, Galvanized or Steel frames.
- **Meets All CEMA Standards** – and available in any belt width, or troughing angle.



## 3 Roll Slide-N-Roll™ Beds

ASGCO®'s patented 3-Roll Slide-N-Roll™ is the ultimate in loading zone spillage control for wide, hi-speed and high tonnage belts as seen in below ground, above ground mining and port facilities. Our patented design encompasses a three-roller idler with low-friction UHMW bars, creating a dust free high-speed transfer point.

- **Specifically Designed** – for wide, hi-speed (over 700 fpm), and high tonnage conveyor systems.
- **Reduces Dust** – by maintaining a flat area in the load zone for the skirting to maintain an effective seal against the belt.
- **Robust Design** – for the toughest applications in the material handling industry.
- **Custom Built** – beds can be made into 4' (1200 mm), 5' (1500 mm), 6' (1800 mm) or into our 10' (3000 m) standard length bed with 5 frames.



# LOAD ZONE SUPPORT

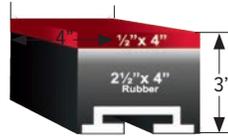
## Impact Cradle Bed™

ASGCO®'s patented Impact Beds are designed and engineered to provide protection for your conveyor belt and system from impact damage caused by the impact of large heavy material falling onto the system.

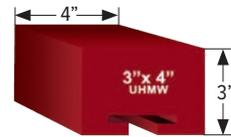
- **Improved Impact Beds** – no pinch point or idler junction area utilizing our 17.5° bars for 35° idler systems; 10° degree bars for 20° idler systems and 22.5° degree bars for 45° idler systems.
- **Absorbs Impact** – with heavy duty steel designed frameworks and our impact bars that are manufactured with our absorbent 40 durometer rubber.
- **Designed** – cradles can be manufactured in 2' (600 mm), 4' (1200 mm) or 5' (1500 mm) long, depending upon the size of your material impact area.
- **Available** – standard duty (1,000 ft/lbs), mine duty (1,5000 ft/lbs), mine duty HD (3,000 ft/lbs) of impact.
- **Impact Bars** – are available in Standard, HD and Premium in 2', 4' or 5' length.



Premium Impact



Standard Impact



Standard Impact

## Quarry Duty Impact Bed

ASGCO®'s Quarry Duty Impact Beds are designed to offer an efficient and safe means of protecting the conveyor belt and helping to eliminate spillage/dust in the load zone. The robust design provides the rugged durability needed for quarries and today's demanding applications.

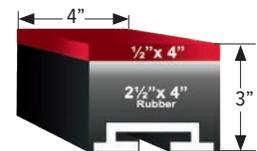
- **Protects the Conveyor Belt** – The robust design for aggregate and quarry operations is able to take the impact of falling materials while maintaining an effective seal of the skirtboards.
- **Efficient and Safe** – Safe and easy installation and service of the impact beds is a priority in any operation.
- **Affordable Options** – Available in both Light Duty (up to 250 lb.-ft.) and Standard Duty (between 250- 750 lb.-ft.) in either 4' or 5' long beds.
- **UHMW Impact Bar** – long-wearing, ideal for sealing load zone. Cushioned with rubber to absorb impact.
- **Wing Sections** – can be lowered for install and service.



Standard Duty  
750 lbs/ft (QSD)



Available in Light Duty  
250 lb/ft (QLD)



Standard Impact

## Pro-Zone™

Pro-Zone™ is a patented, modular, dust-free conveyor belt load-zone system that optimizes the sealing for air/dust tightness of the receiving conveyor belt. This “skirt-less” fully self-contained system is comprised of our Slide-N-Roll™ beds with our removable “slide-out” designed UHMW and steel side supports and easily removable center rolls. Side guards, internal splash sealing system, dust curtains and angled hoods (aluminum or steel) completely enclose the entire system.

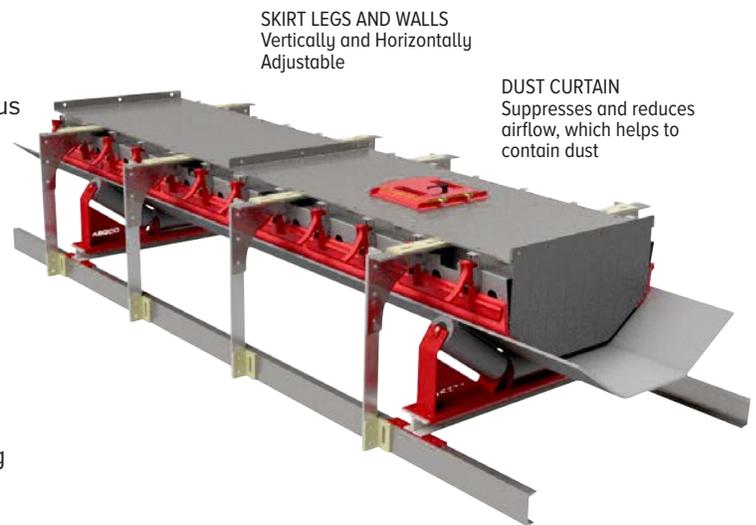
- **Increased Productivity** – and longer conveyor belt life because the completely sealed load zone helps eliminate material turbulence and conveyor belt cover abrasion.
- **Modular Design** – can be installed in any combination of 4’ (1200 mm) or 5’ (1500 mm) lengths to completely cover load zone area. Quickly removable dust hoods, slide-out side sections, and removable center rolls aid in the installation and maintenance of the system.



## ENCLOSED SKIRTING SYSTEM

ASGCO®’s Enclosed Skirt Board Sealing System is a highly effective method of containing material and dust through the conveyor loading points or load zone area. Enclosed Conveyor skirt board systems can be customized with various types of internal skirt board liners, internal dust curtains, external skirting clamps, and dust sealing compound, depending on the application.

- **Sealing Options** – ASGCO provides a range of internal liners, external skirt clamps, rubber and polyurethane sealing options depending on the application.
- **Easy Installation** – Our skirt legs can be mounted anywhere along your conveyor structure and are vertically adjustable with our horizontally adjustable skirt walls.
- **Customized** – We custom design each Enclosed Skirt Board Sealing System to ensure the highest degree of customer satisfaction.
- **Easy Maintenance** – Internal liners and external skirting are vertically adjustable and easily replaceable.

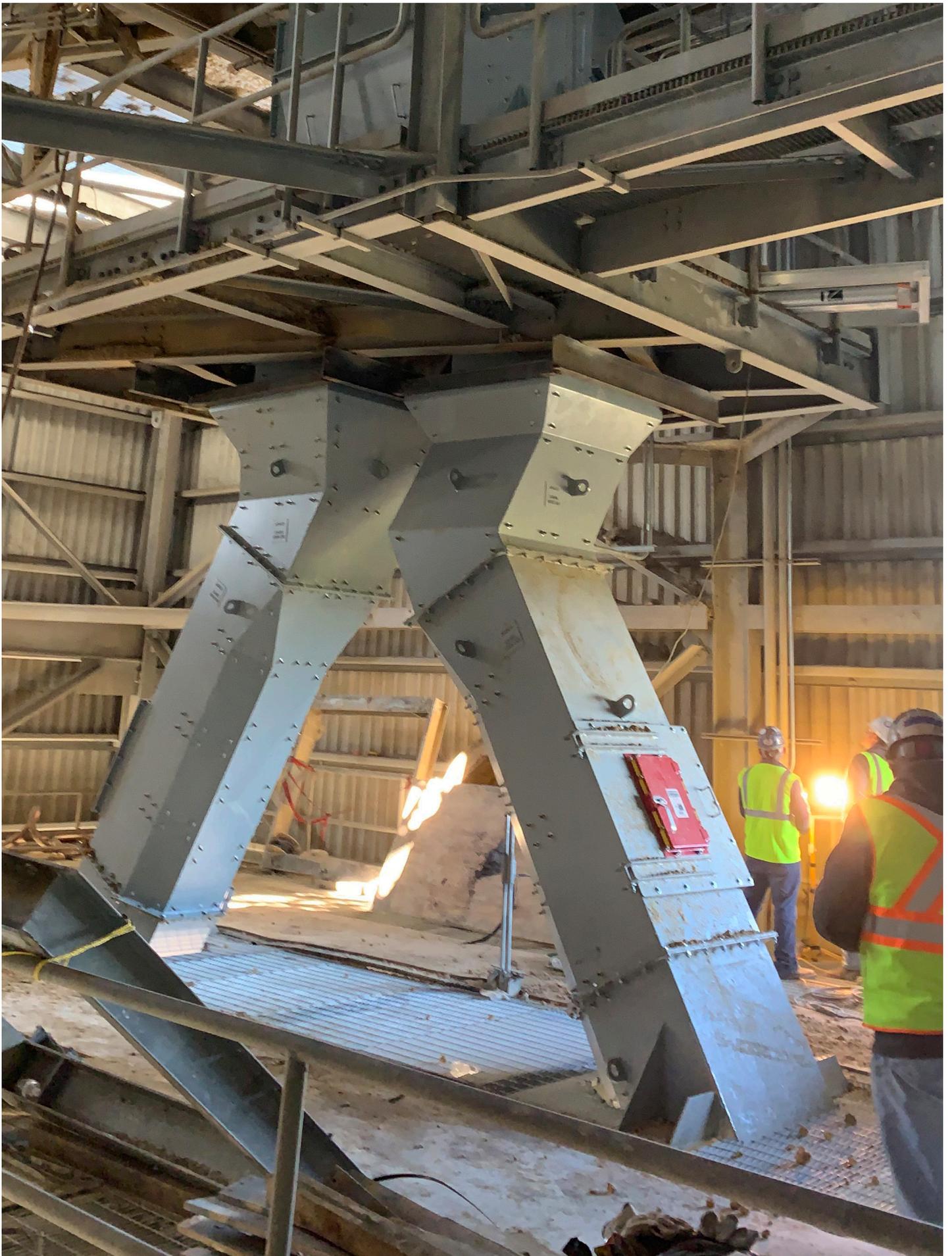


## LIFT BED – DIVERTER PLOW

The Lift Bed – Diverter Plow™ is a pneumatically operated impact bed that lifts the conveyor belt from full trough to zero (0°) into a stationary diagonal plow. The urethane diagonal plow, which includes two Spring-Shoc™ tensioners, enables the lift bed to apply the proper tension and not pinch or damage the belt. This increases production and allows the belt to experience a limited amount of stress, eliminating the opportunity for premature wear and stretching.

- **Simple to Use** – can be automated by either the push of a button or set-up on a timer or PLC system.
- **Spring-Shoc™ Tensioners** – with impact absorbing rubber cushions ensure maximum tension is applied to clean all material from the belt.
- **Excellent Performance** – allows users to fully clean and divert materials at designated locations.





# WANT TO IMPROVE YOUR CONVEYOR PRODUCTIVITY... **ASK ASGCO**

## **Conveyor transfer points designed to provide a clean, safe and productive system.**

The performance of conveyor transfer points is crucial to the productivity of conveyor systems in the bulk solids industry. Transfer point design, fabrication, and installations utilizing ASGCO® 3-D Point Cloud Scanning and 3-DEM (Discrete Element Method) assist in streamlining material flow from the point where material leaves the head pulley until it comes in contact with the receiving conveyor belt resulting in a more controlled flow. ASGCO® Conveyor Transfer Points will help eliminate common problems such as off-center loading, material spillage, chute wear, and dust generation and will improve the efficiency and productivity of your conveying system.

**From initial surveys, engineering design, fabrication, and onsite installation ASGCO®'s goal is to find solutions to:**

- Increase Production Capabilities
- Optimize Belt Life & Components
- Ensure Proper Belt Tracking
- Minimize Material Spillage
- Minimize Chute and Belt Impact
- Reduce Need for Dust Control
- Prevent Plugging

## TRANSFER POINT DESIGN & FABRICATION

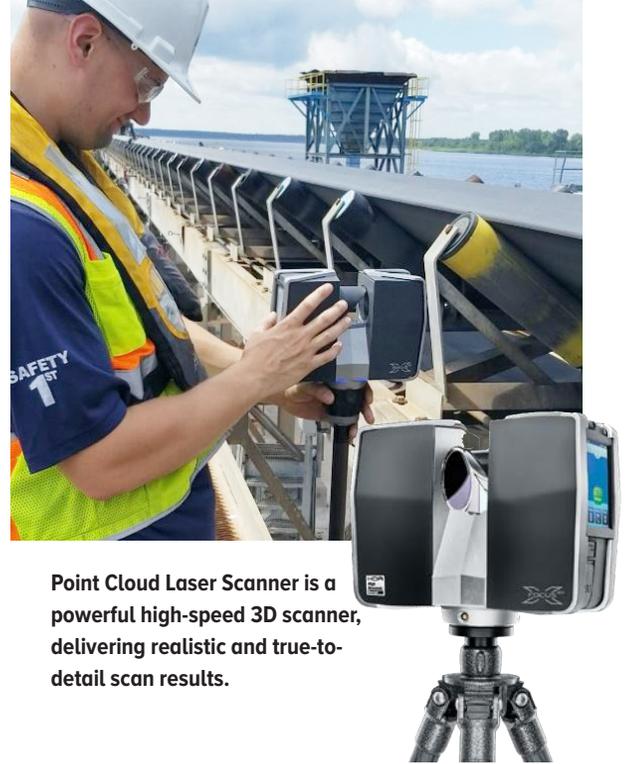
### Point Cloud Laser Scanning

ASGCO® Point Cloud Laser Scanner delivers extraordinary color overlays for scanned point clouds. This improves the visualization of important details on site. Our system can capture over 1 million points per second and can scan through 360° horizontally and vertically.

Once the chute and conveyor are modeled the image is overlaid into the cloud point scan to ensure there are no interferences and that all modeled equipment fits properly.

The increased camera resolution of our 3D scanner delivers extraordinary color overlays for scanned point clouds. This improves the visualization of important details on site.

- **Distance accuracy up to  $\pm 2$  mm**
- **Range from 0.6 m up to 130 m**
- **Noise reduction of 50%**
- **Safe and fast** as-built data capturing with superior color detail
- **Reliable life-like visualization** – even under extreme lighting conditions
- **Reduced complexity by integrated scanning** – and imaging work flow for all kinds of measurements even in challenging environments



Point Cloud Laser Scanner is a powerful high-speed 3D scanner, delivering realistic and true-to-detail scan results.

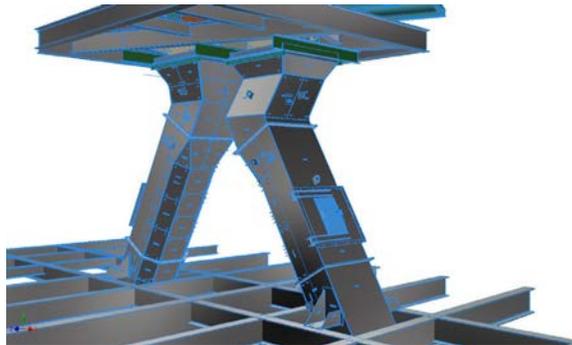
### Ensure Accuracy

ASGCO® technician thoroughly inspect the failing system and propose a redesign of the existing transfer chute using our 3-DEM Transfer Point Stimulation software and advanced Flo-Control chute fabrication. With our Point Cloud Laser Scanning technology we can create realistic models using pinpoint accuracy to locate any obstructions. Once the chute and conveyor are modeled the image is overlaid into the cloud point scan to ensure there are no interferences and that all modeled equipment fits properly.

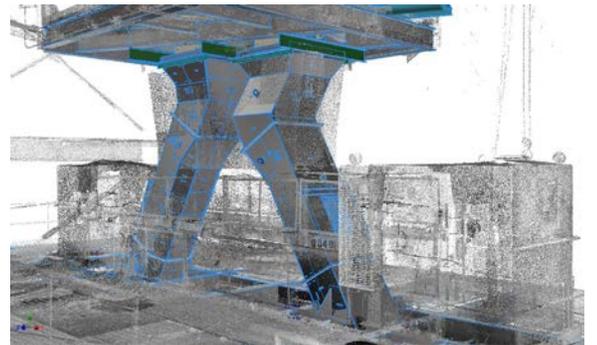


#### HD Resolution

The increased camera resolution of our 3D Scanner delivers extraordinary color overlays for scanned point clouds. This improves the visualization of important details on site.



Engineered 3D model drawing

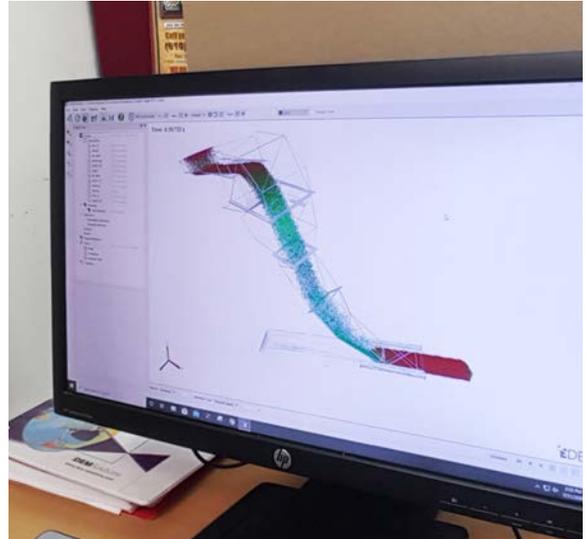


Rotating laser touches its surrounding to determine the coordinates and space.

## 3-DEM Analysis and Design

Transfer point design, fabrication, and installations utilizing ASGCO®'s 3-DEM (Discrete Element Methods) chute analysis program is a revolutionary way to handle granular and particulate material by streamlining the process from the point where material leaves the head pulley until it is deposited onto the receiving conveyor for a more deliberate control of the material as it flows from one conveyor to another. 3-DEM Transfer Point Design controls the dust by keeping the column of material together so that air does not become entrapped in the material flow, then forced back out of the flow carrying dust, when the material is loaded on the receiving belt.

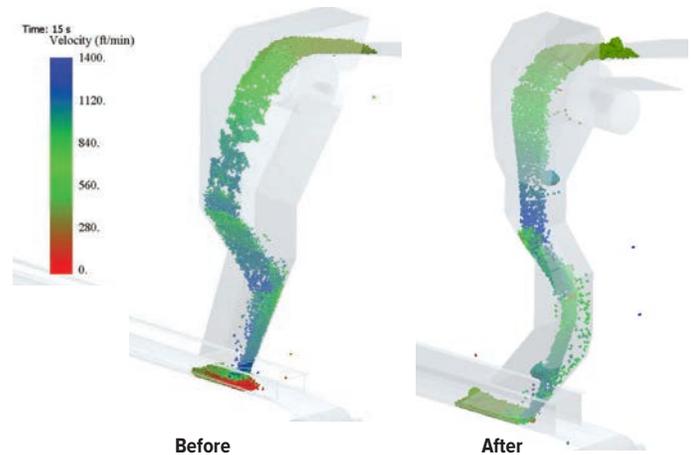
These techniques are easily applied to both existing and new installations, resulting in significant cost improvements and system efficiencies.



## 3-DEM Transfer Point Design

ASGCO®'s 3-DEM Complete Transfer Point Design and Fabrication, is a revolutionary way to handle granular and particulate material handling problems through computer simulation and 3-D CAD. Combined with our conveyor and material handling knowledge and engineering capabilities we are able to make transfer point problems a thing of the past.

- **Increase Production Capabilities**
- **Optimize Life on Conveyor Belt and Components**
- **Minimize Material Spillage**
- **Reduce the Need for Dust Control and Suppression**



## Transfer Chute Fabrication

A team of certified service technicians, working with our engineering staff, create, fabricate, and install all of the components. The new chute and spoon design allows for the material to load directly onto the center of the receiving belt, flowing in the direction of belt travel. Airborne dust and spillage is virtually eliminated with the new chute and spoon.

All our fabricating is performed in-house by our experienced staff, which allows us to control the quality of the final product, while meeting required delivery dates for the equipment. We consistently deliver the highest quality products to exact specifications on time, and on budget.





# EASY MAINTENANCE. REPLACEMENT. ADJUSTABILITY.

## **Stops spillage and dust.**

ASGCO®'s Skirt Sealing liners are designed to do one thing, and to do it well. They provide a highly reliable, positive seal in the conveyor load zone. Our conveyor skirtboard system further applies leading dust-and spillage-control technologies as standard features to help keep your operation clean, safe, and productive. ASGCO®'s skirtboards are available in standard sizes and lengths based on the width and speed of your conveyor belt.

## **Advantages**

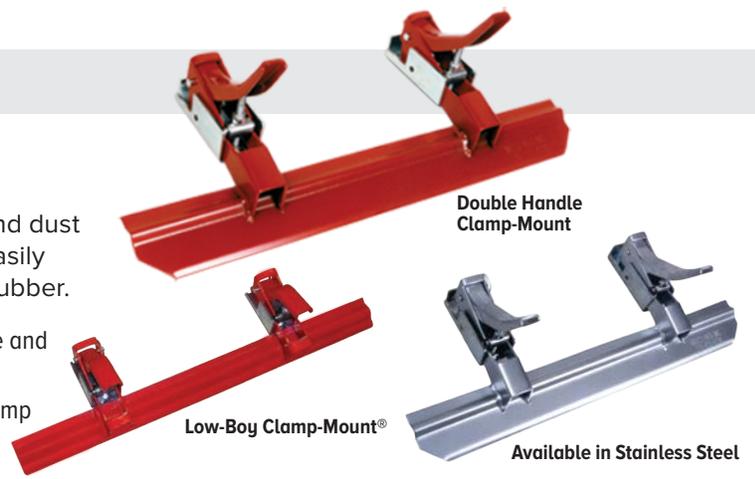
- Modular
- Easy to install and maintain
- Extended service life
- Quality Product
- Flexibility in Design
- On-time delivery

## SKIRTING & DUST CONTROL

### Clamp-Mount®

Our Clamp-Mount® skirting clamps help eliminate spillage and dust in the conveyor transfer point. The Clamp-Mount® installs easily and allows for one person to replace or reposition the skirt rubber.

- **Increase Conveyor Performance** – by helping to eliminate spillage and dust in the loading zone.
- **Rugged Construction** – 9” (225 mm) high by 24” (600 mm) long clamp provide effective locking ability for any type of skirting material.



### Clamp-Mount MDX™

Our Clamp-Mount MDX™ skirting clamps helps eliminate spillage and dust in the conveyor transfer point. The Clamp Mount MDX™ installs easily and allows for one person to replace or reposition skirt rubber.

- **Increase Conveyor Performance** – by helping to eliminate spillage and dust in the loading zone.
- **Mine Duty Construction** – 18” or 24” heavy duty clamp system with keeper, fabricated from 3/8” thick steel.
- **Versatile** – Can be used with any of ASGCO® sealing compounds.



## Skirt Sealing Options

### Tri-Seal™ Skirting

- **Triple Sealing** – action uses 3 deterrents to stop fines and dust from escaping the load zone.
- **Works Great** – on conveyors where dust is a problem, in below ground and above ground mining, pulp and paper.

### Multi-Seal™ Skirting

- **Multiple Sealing** – action is adjustable, and can be reversed for the full life of the skirting material.
- **Works Great** – where you need flexibility and dust is a problem.

### SX3™ Skirting

- **Three points of contact** – action uses uniquely designed 55 durometer EPDM to stop fines and dust from escaping the load zone.
- **Works Great** – on conveyors where dust and fines are an issue, in below ground and above ground mining, pulp and paper and gypsum.

### Dura-Seal™ (ORG) Skirting

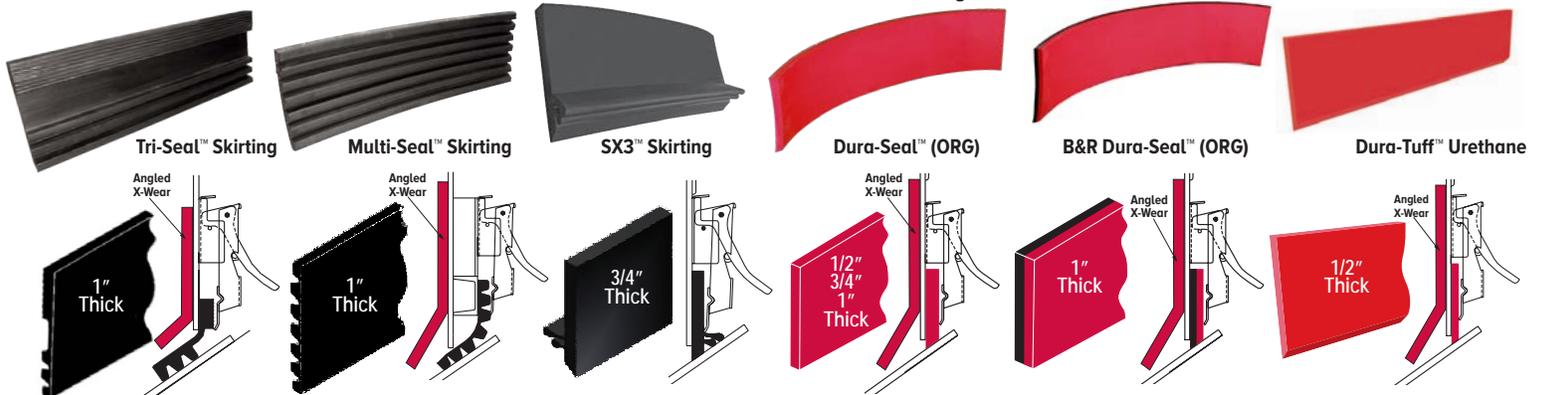
- **Abrasive and Cut Resistant** – the toughest and most cut resistant 45-durometer-rubber material available anywhere.
- **Works Great** – in abrasive and impact area conditions where cut and gouge is a problem, as seen in hard rock mining.

### B & R Dura-Seal™ (ORG 45) Skirting

- **Dura-Seal™ (ORG 45)** – compound for optimum sealing and minimum wear on the belt.
- **Dura-Seal™ (60)** – is the best wear and impact resistance.

### Dura-Tuff™ Urethane

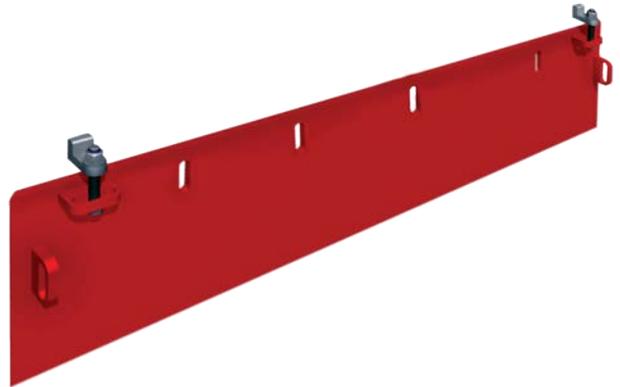
- **Abrasive and Cut Resistant** – toughest and most cut resistant 62 durometer polyurethane material available anywhere.
- **Works Great** - in abrasive and impact area conditions where cut and gouge is a problem, as seen in hard rock and iron ore mining.



## External Wear Liner/Skirtboard System

The External Wear Liners can be accessible from the outside of the conveyor transfer point means never having to enter the internal (confined space) skirtboard to service internal liners again!

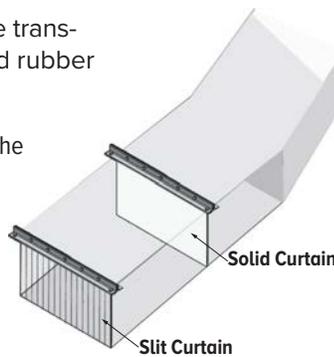
- **External Wear Liners** – Mild Steel, AR 400 Steel or Stainless Steel available in 4ft and 6ft lengths.
- **Skirting Options** – Clamp-Mount® or Clamp-Mount MDX® skirting clamps can also be installed on the external skirtboard.
- **Internal Liner Options** – Added protection is available in Armorite, X-Wear™ Ceramic or X-Wear™ AR 400 (straight or angled) can be welded to the inside of the external skirtboard / wear liner system.



## Dust Curtains

Dust Curtains help in the reduction of dust throughout the transfer point. These curtains outlast and outperform standard rubber curtains due to the ISO materials used by ASGCO®.

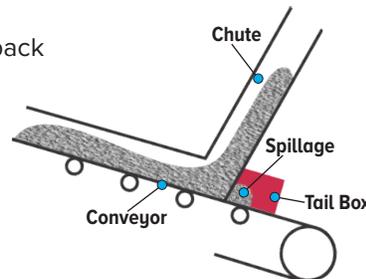
- **Allows Dust to Settle** – slows the air velocity down, allowing the airborne dust and particles to fall to the belt.
- **ISO 340 Anti-Static** – materials are used in the PVC and 2 ply fabricate constructed curtains.
- **Simple Adjustment** – and installation allows the curtains to conform to the angle of repose of the material on the belt, normally 1" above the material.



## Chute Tail Box

Chute Tail Box is designed to form an effective seal at the back of the loading zone to prevent material rollback to the tail section of the conveyor.

- **Prevents Material Rollback** – by forming a sealing area for the material to collect and then travel up the conveyor.
- **Avoids Material Build-Up** – at the tail end of the conveyor.
- **Simplifies Cleanup** – by being able to return material to the belt through our inspection door mounted at the top of the box.



## E-Z Mount®

E-Z Mount® dust sealing and containment skirting system provides an effective and economical solution to prevent dust and material from escaping the load zone.

- **Abrasion Resistant** – 60 durometer rubber compound is used to apply minimal pressure to the belts surface to create a great seal.
- **Solid Framework** – using solid galvanized steel mounting rails that get welded to the side of the chute provides the framework to snap the E-Z Mount® into place.





# SAFETY IS KEY PROTECT WORKERS AND ENSURE A SAFE WORK PLACE.

## **Complete Conveyor Safety**

ASGCO® offers a wide range safety equipment designed to prevent injuries from pinch points and contact with hazardous moving machine parts. Our Conveyor Safety equipment provides solutions for carry-back, spillage and dust control in load zone transfer points. Reduced carry-back and housekeeping are important to the safety, working conditions and reliability at any mine site. Our goal is to solve conveyor problems, always aware of OSHA/MSHA regulations in order to create a safer and well maintained work environment. Ensuring safety in the workplace has always been a priority at ASGCO® it is essential to protect workers from job-related injuries due to pinch points, abrasions and falling material.

# CONVEYOR SAFETY

## Safe-Guard® Return Idler Guard

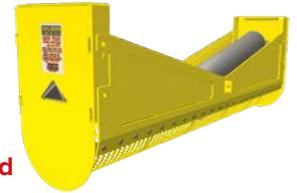
Safe-Guard® Conveyor Idler Guards prevent injuries from pinch points and will catch the return idler or other material if it should fall.

- **Complies** – with MSHA Title 30 mechanical equipment guards.
- **Universal Mounting Brackets** – can be used with CEMA B, C, D and E (and F) idlers up to 7" in diameter with either 1½" to 6" drop brackets.
- **Durable UHMW Slotted Cage** – helps prevent material buildup and is easy to clean out.

*Fits over CEMA E & F  
Return Idler Brackets*



For easy access remove the stainless steel pins to drop open the side of the cage for maintenance.



## Safe-Guard® Heavy Duty Idler Guard

- UV resistant, made from steel, will not corrode or wear from abrasion.
- Mounting brackets and end plates made from powder coated A-36 steel.
- Cage provides complete pinch point protection and catches the roll if it breaks away from the brackets.

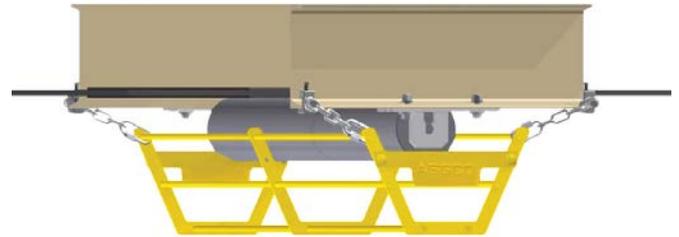
## Safe-Guard® V-Return Idler Guard

- Heavy-duty steel construction
- UV resistant, made from UHMW, will not corrode, or wear from abrasion.
- Stainless steel pins gives easy access for maintenance.
- Mounting brackets and end plates made from powder coated A-36 steel.

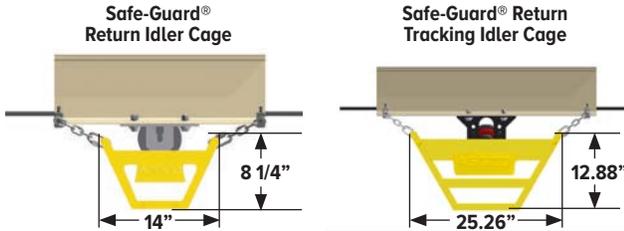
## Safe-Guard® Return Idler Cage

Safe-Guard® Return Idler Cage was designed to catch the return roller applications from falling, preventing injuries to workers and to equipment.

- **Complies with MSHA Title 30.**
- **Meets OSHA Requirements 1910.219** – for mechanical power transmission apparatus and 56.14107 for moving machine parts.
- **Available in various sizes** – fits most belt conveyors, 4"-7" diameter idlers.



Also Available Safe-Guard®  
Return Tracking Idler Cage



## Safe-Guard® Modular Conveyor Flat Guard

Safe-Guard® Modular Conveyor Flat Guard is a modular, powder coated, all steel guard that is typically mounted to the conveyor to guard against moving equipment and protect your workers from injury. They are pre-engineered panels that install easily and prevent workers from unauthorized access and keep workers from getting too close to moving parts and equipment.

### Quick and Modular Set-Up

- Various standard and custom sizes available.
- Drop pin / wedge clamps holds the guard securely.
- Shipped with mounting kit for quick assembly.

### Effective

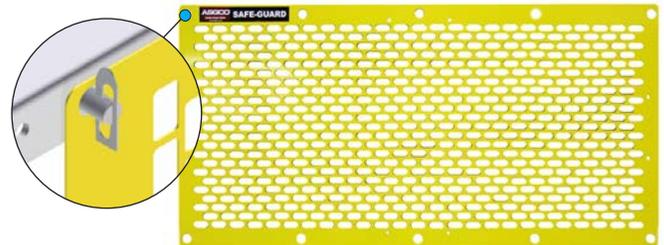
- Safety yellow powder coated steel for high visibility.
- Keeps workers away from moving parts and pinch points on the conveyor.

### Regulation

The installation of safety-oriented products can help create a safer plant that is easier to service and maintain.

### Compliant

Meets MSHA, OSHA, and Canadian Safety Standards.



Wedge Clamp -  
Side View Open

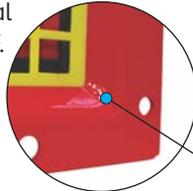


Wedge Clamp -  
Closed with optional  
Heavy Duty Zip Tie

**Safe-Guard® Chute Inspection Door**

Safe-Guard® Chute Inspection and Access Doors are a necessary part of any material handling system. Add an inspection door to your existing head chute for access to cleaners, for chute clean-out, and blade change-outs.

- **Safety** – Inspection screen guard standards on every door for the ability to safely inspect equipment while it is running
- **Low Profile Steel Construction** – with EPDM dust seal that can withstand temperatures from -40° F to 200° F.
- **Quick and Easy Installation**
- **Custom Size Available**



45° flange on the interior of the door sheds fines that accumulate



Safe-Guard® Standard Door  
12 Gauge .1046



Safe-Guard® Heavy Duty Door open with Safety Screen Guard  
11 Gauge .1196

**Safe-Grip™ Belt Clamps**

The patented Safe-Grip™ conveyor belt clamps offers exceptional belt clamping for all types of conveyor belt maintenance and the only conveyor belt clamps that provide a POSITIVE even pressure across the entire width of the conveyor belt.

**Available in Two (2) Versions:**

**BC3:** (3 Tons) designed for use in light to medium duty applications, including aggregates, sand and gravel, recycling, pulp and paper, lumber processing, and warehousing and distribution centers.

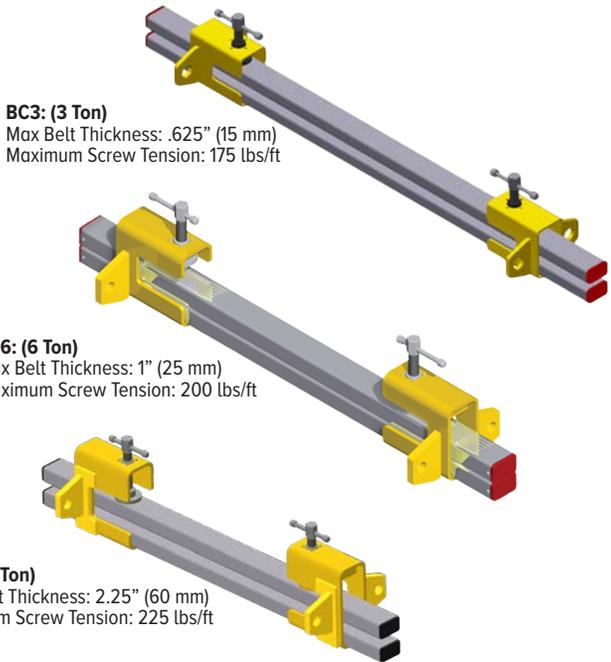
- Max Belt Thickness: .625" (15 mm)

**BC6:** (6 Tons) for medium duty coal and coal fired power plants; copper and gold mining; iron ore and steel mills; bulk shipping terminals; aggregate and cement and mineral mining; pulp and paper mills.

- Max Belt Thickness: 1" (25 mm)

**BC8:** (8 Tons) for heavy duty wide conveyor belts in coal and coal fired power plants; copper and gold mining; iron ore and steel mills, and bulk shipping terminals.

- Max Belt Thickness: 2.25" (60 mm)



**BC3: (3 Ton)**  
Max Belt Thickness: .625" (15 mm)  
Maximum Screw Tension: 175 lbs/ft

**BC6: (6 Ton)**  
Max Belt Thickness: 1" (25 mm)  
Maximum Screw Tension: 200 lbs/ft

**BC8: (8 Ton)**  
Max Belt Thickness: 2.25" (60 mm)  
Maximum Screw Tension: 225 lbs/ft

**Safe-Guard® Return Idler Roll Changer**

The patented Safe-Guard® Return Roll Changer allows you to remove and replace a roller from a single side of a conveyor and from whichever side the catwalk is located.

- **Universal mounting**, Safe-Guard® Return Roll Changer can be mounted on either side of the conveyor system.
- **One Side Return Roller Access** – allows removal and replacement from a single side of the conveyor.
- **Reduces maintenance time** – for roller replacement.
- **All Steel Construction** – coated finish with industrial grade powder.
- **Custom Size Available**



Easy to change out from either side of the conveyor.





# COST EFFECTIVE METHOD FOR EXTENDING WEAR LIFE

## **Provide maximum impact and abrasion protection**

Minimize fugitive material, including dust, with quality skirting and wear liner products. ASGCO® manufactures a variety of conveyor wear liners with many options and sizes to choose from. Abrasion resistant, modular, high-wear material to line belts, chutes and bin impact areas. ASGCO's Wear Liners are designed to be an integral part of any bulk handling conveyor system.

## WEAR LINERS

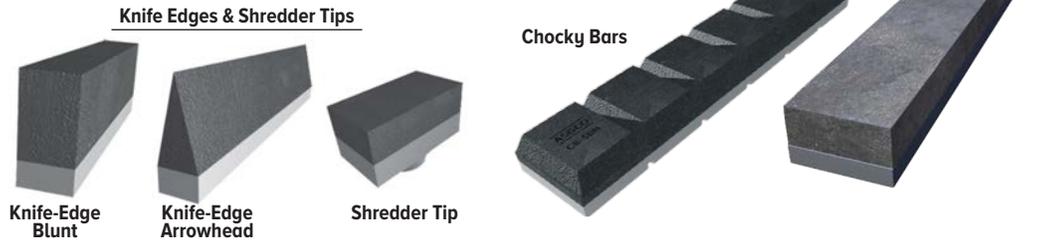
### Armorite® 700

Armorite® 700 Brinell is an extremely hard, laminated, bi-metallic, wear resistant composite, which has a nominal hardness of 700 BHN (63Rc) produced by combining a highly alloyed chromium-molybdenum white iron (to AS 2027 15/3 Cr/Mo) and metallurgically bonding it to a mild thick steel backing plate. The resultant bond possesses high shear strength of over 250 Mpa and will not separate.

- **Impact Resistant** – The mild steel backing cushions the white iron enabling it to withstand impact.
- **Easy to Install** – Armorite® is easy to weld with minimal preparation.

### Benefits

- Lower operating costs
- Longer service when compared to conventional materials
- Increased production
- Improved product efficiency
- Increased equipment availability



### Skirtboard Wear Liners (Dura-Tuff™ Urethane, Steel, Rubber, Ceramic)

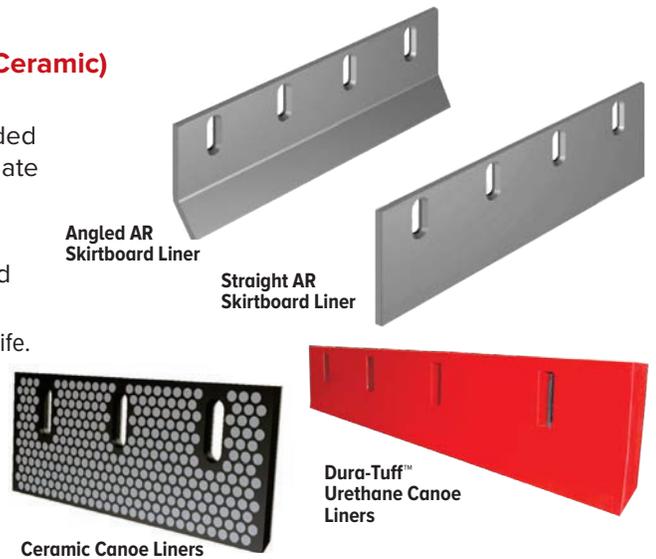
Protect your skirtboard and extend the life and effectiveness of your sealing compound. Use the straight design where belts are fully loaded and full chute width needs to be maintained. The angled deflector plate wear liner will force larger material to the center of the belt.

ASGCO® Ceramic Canoe Skirt Liners are highly effective for sealing inside the skirtboard, controls the material until it becomes stable and protecting the skirt wall from wearing.

- **Longer wear life** – Single edge bevel or dual edge bevel for reversible wear life.
- **Custom** – sizes, thickness and shapes are available at customers request.

Our Urethane Canoe Liners are engineered to absorb impact and abrasion in all types of material transfer operations.

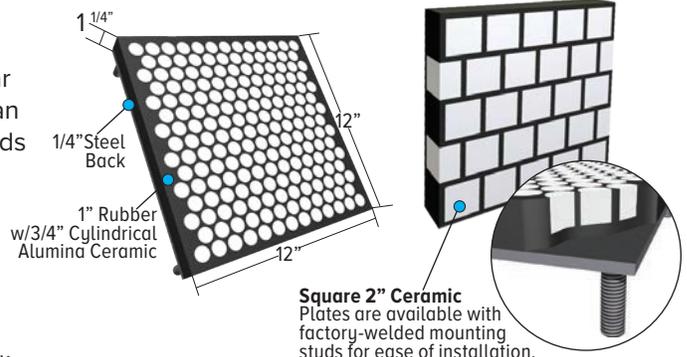
- Available in beveled edge or square edge.
- Slotted holes on 12" centers for easy adjustment in tight applications.



### X-Wear™ Mine Duty Liner

ASGCO® X-Wear™ Mine Duty Liner is made of extremely hard ceramics that provide unsurpassed resistance to abrasive wear while the rubber effectively dampens the impact forces that can crack the ceramic rods. The resilient rubber matrix that surrounds the ceramic rods is hot vulcanized for superior adhesion.

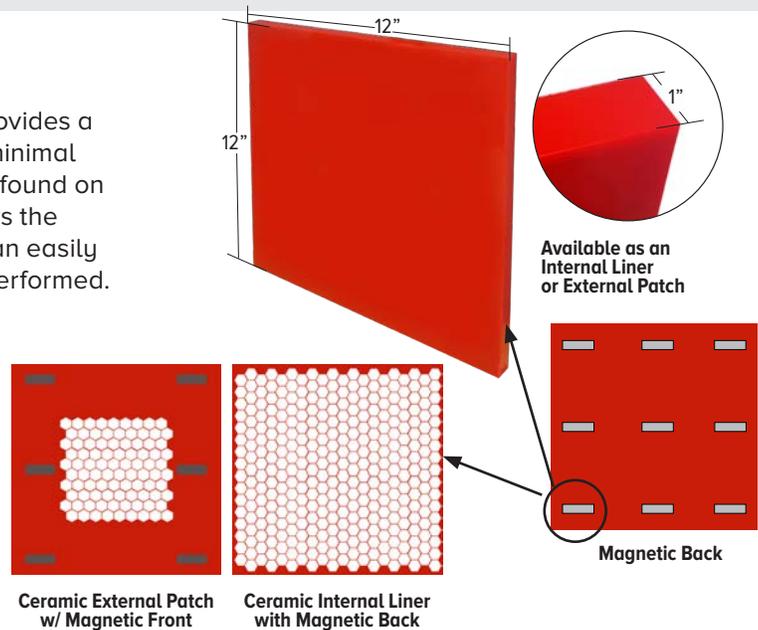
- **Wide Range of Use** – used in the mining and quarrying industries, where severe abrasion occurs and the angles of impact are low.
- **Excellent Wear Protection** – in tough mining conditions were there is a need for both wear protection and low noise materials.
- **Longest Wear Life Available** – zig-zag pattern prevents wear channeling.



### X-Wear™ Urethane Magnetic Patches & Liners

ASGCO® X-Wear™ Urethane Magnetic Patch & Liner provides a temporary yet reliable patch system. This allows for minimal downtime in repairing a leak or worn spot, that can be found on chutes or load points, to name a few. When time allows the ASGCO® X-Wear™ Urethane Magnetic Patch or Liner can easily be removed so that a more permanent repair can be performed.

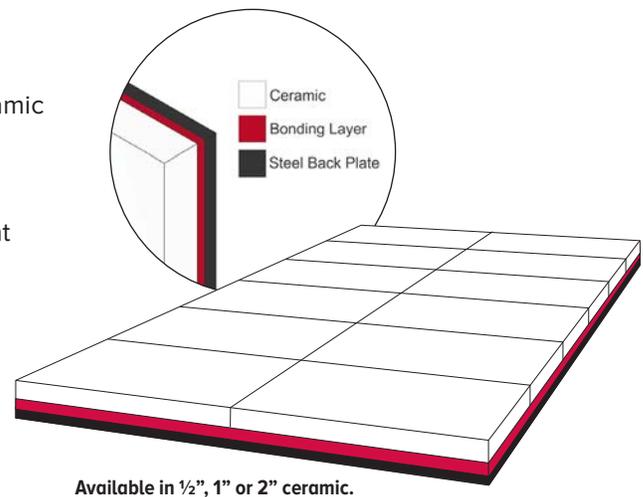
- Constructed with ASGCO-thane® Polyurethane
- No bolting, welding or cutting to the applied area
- Eliminates the need for Hot Work permits in most areas
- Stay securely in place on vibrating screens and chutes
- Custom Size Available Upon Request



### X-Wear™ (Ceramic) Liners

ASGCO® X-Wear™ Ceramic Wear Liners are a resilient wear resistant panel made up of high density abrasion resistant ceramic bonded to a mild steel backing plate with impact resistant urethane compound. It easily out performs steel, chromium carbide overlays and conventional ceramics. The ceramic is mechanically bonded to a 1/4" steel plate using impact resistant urethane epoxy.

- **Edges are Sealed** – using a urethane compound
- **Light Weight** – X-Wear™ is lightweight and easy to install by maintenance personnel.
- **Material Flow** – The smooth laminar surface of X-Wear™ provides the optimum sliding surface for material handling.

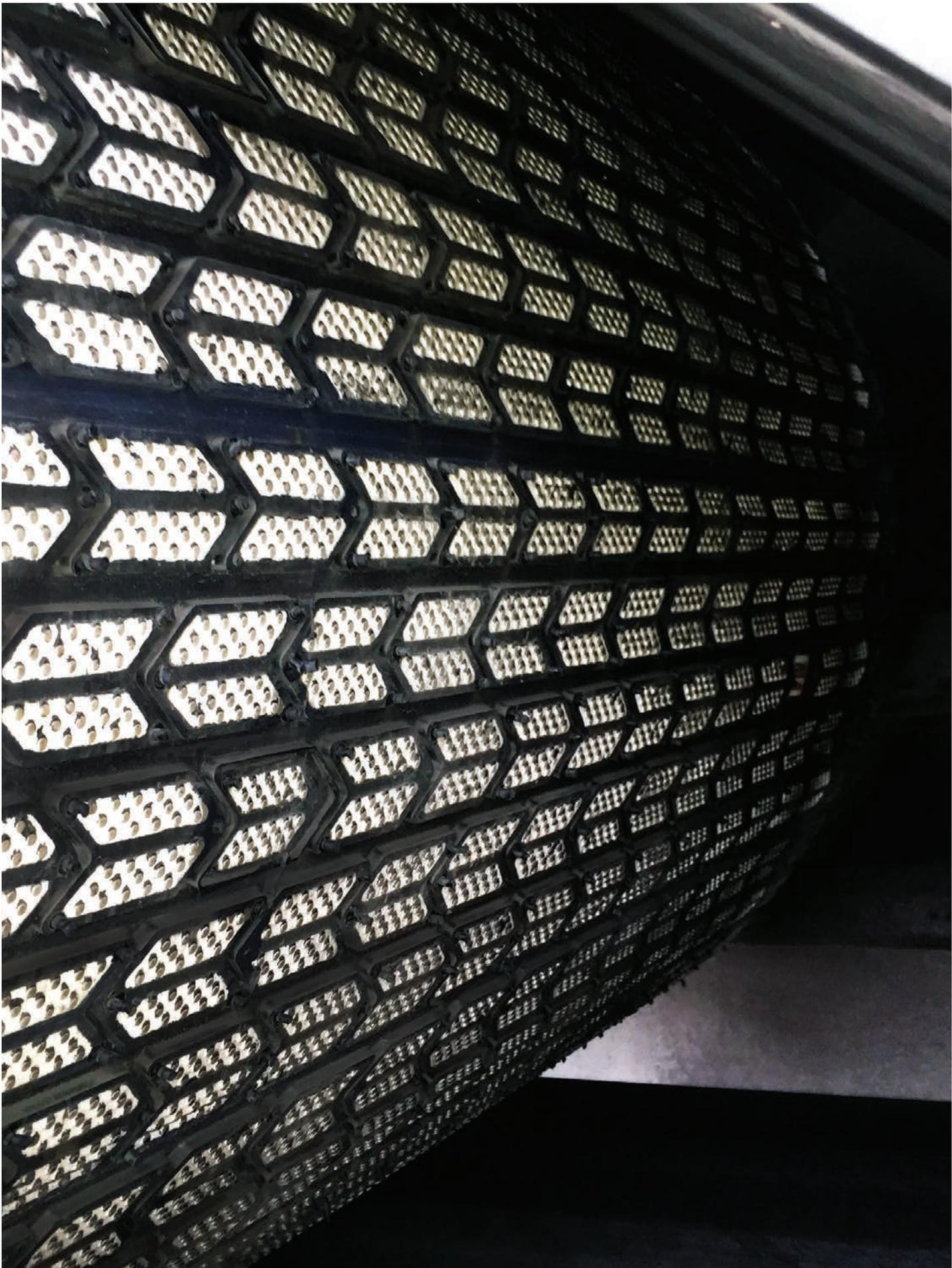


### Nitronic Sx™ Liners

Nitronic SX™ Stainless Steel is a nitrogen-strengthened stainless steel developed for applications requiring good level corrosion resistance and durability. The high work-hardening rate Nitronic Sx™ stainless steel results in a high-strength material with superior abrasion resistance and elongation superior to Type 304L.

- **Nitronic Sx™ Stainless Steel** – can be designed and fabricated in standard sizes, to allow the stocking of replacement liners. This can minimize crucial down time.
- **Nitronic Sx™ Stainless Steel** – can be cut, bent and formed to meet the contours of most existing wear areas.
- **Nitronic Sx™ Stainless Steel** – has the same weld and bending capabilities as standard 304 stainless steel.
- **Excellent Wet and Dry Abrasion Resistance**





# LONG-TERM SOLUTION TO CONVEYOR PULLEY WEAR AND SLIPPAGE PROBLEMS.

## Eliminate slippage and increases conveyor belt tractions.

ASGCO®'s arrowhead lagging products are precision molded and constructed of abrasion resistant ceramic to control slippage, ensuring that there is proper friction between the pulley and the conveyor belt. Increase belt traction with ASGCO®'s ceramic, drive and non-drive rubber arrowhead conveyor pulley lagging. We have pulley Lagging for all styles and types of head, tail, snub, bends, take-ups and drives.

Selection Criteria	Arrowhead® Ceramic	Semi-Ceramic™	Arrowhead Rubber	Arrowhead Smooth Rubber
Total Belt Thickness	1/2" (12.7 mm)	5/8" (15 mm)	1/2" (12 mm)	1/2" (12 mm)
Belt Width	18"-84" (450-2100 mm)	18"-84" (450-2100 mm)	Any Width	Any Width
Min. Pulley Diameter	12" (300 mm)	10" (250 mm)	8" (200 mm)	8" (200 mm)
Dry Friction	Excellent	Excellent	Very Good	Excellent
Wet Friction	Excellent	Excellent	Good	Average
Wet/Muddy Friction	Very Good	Very Good	Average	Average
Wear Life	Best	Excellent	Good	Good
Ease of installation	Good	Good	Good	Good
Drainage Grooves	Yes			
MSHAP/FRAS (Fire Resistant Anti-Static)	Available			
Rubber Compound	SBR			
Hardness (Shore A)	65+/3			
Ceramic Compound	Al <sub>2</sub> O <sub>3</sub>	Al <sub>2</sub> O <sub>3</sub>		
Ceramic Coverage	80%	39%		
Operating Temperature	-5°-185° F (15°-85° C)			

# PULLEY LAGGING

## Vul-Con® Pulley Lagging Tool Kit

The ASGCO Pulley Lagging Tool Kit is specially designed and developed for rubber products users / manufacturers. Our tool kit has wide variety of rubber working hand tools for conveyor belt pulley lagging work.

### Includes

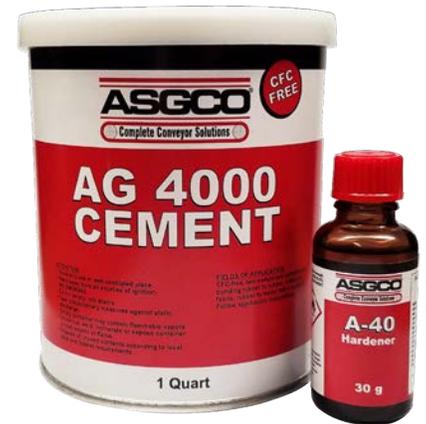
- Grinder/with backing pad
- Oscillating tool
- Stitcher
- Rubber Mallet
- Utility knife
- Spare blades 5pk
- Safety glasses
- Cut resistant gloves
- Chalk line
- Metal square
- Chip brushes 3pk
- Pincher
- File
- Stripper Clamp
- Tool Box
- Tape measure
- Refillable china marker
- 24 grit extra coarse disc (5 pack)



## Rubber Cement Lagging Adhesive

ASGCO®'s AG-4000 Cement and A-40 Hardeners is a two-part bonding system easy to operate on-site, no need to disassemble the drum and the drum could be back to work instantly after being coated. Our adhesive is a fast-setting, solvent type, synthetic rubber compound designed for industrial bonding operations on high speed production schedules. Bonding is accomplished by instantaneous pressure alone; no clamps, presses, or complicated heat curing schedules are needed. Produces an odorless, non-staining bond which is resistant to heat, moisture, oil, grease, and many other chemicals. The film is firm and tenacious, featuring high dead-load strength, yet sufficiently elastic to resist shock and fatigue.

- **Excellent Bonding Strength** – between metal to rubber.
- **Environmentally friendly** – Safe and flame-retardant, can be used in the special environment such as surface and underground coal mine.
- **Fast drying time** – drum could be back to work instantly after being coated.
- **Free of CFC (chlorofluorocarbons)**

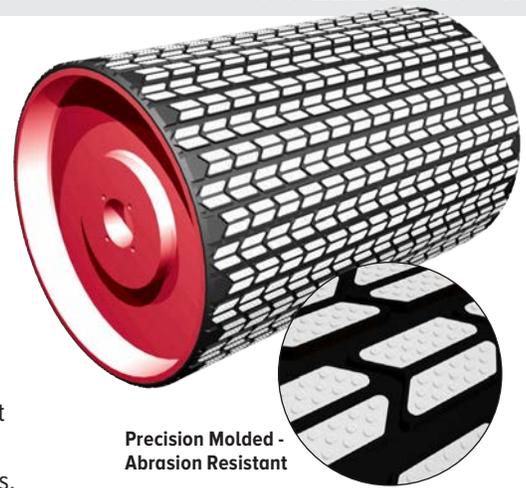


Pulley Diam. Inches (mm)	# of Strips	Pulley Diam. Inches (mm)	# of Strips	Pulley Diam. Inches (mm)	# of Strips	Pulley Diam. Inches (mm)	# of Strips	Pulley Diam. Inches (mm)	# of Strips
12.6-15.0 (320-381)	6	12.6-15 (320-381)	10	22.6-25 (574-636)	14	42.6-45 (1,083-1,145)	18	52.7-55.1 (1,339-1,400)	22
15.1-17.5 (382-445)	7	15.1-17.5 (382-445)	11	25.1-27.5 (637-700)	15	45.1-47.6 (1,146-1,210)	19	55.2-57.6 (1,403-1,463)	23
17.6-20.0 (446-510)	8	17.6-20 (446-510)	12	27.6-30 (701-764)	16	47.7-50.1 (1,212-1,273)	20	57.7-60.1 (1,466-1,527)	24
20.1-22.5 (511-573)	9	20.1-22.5 (511-573)	13	30.1-32.5 (765-827)	17	50.2-52.6 (1,275-1,336)	21	60.2-62.6 (1,529-1,590)	25

## Arrowhead® Ceramic Pulley Lagging

Arrowhead® Ceramic Pulley Lagging provides the solution when conventional rubber lagging fails to correct belt slippage and wears prematurely. Our unique Arrowhead Ceramic is designed for the highest drive factors unlike the conventional square tiles.

- **Increase Productivity** – by delivering increased traction between the belt and pulley, allows for lower belt tension than with rubber lagging.
- **Superior Wear** – ability in abrasive or highly wet or dry applications as seen in below ground and above ground mining.
- **Easy Installation** – can be done in place, on plant site, at your local distributor or at the pulley manufacturer. Each strip is 10” (250 mm) wide x pulley face (see chart).
- **Available** – 5/8” and 1” thicknesses in both SBR and MSHA grade rubber compounds.



Precision Molded -  
Abrasion Resistant

## Semi Ceramic Pulley Lagging

ASGCO®'s has added a Semi-Ceramic™ Pulley Lagging to their pulley lagging product line, featuring 35% coverage for smaller pulley's, non-drive pulley's and bend pulley's. ASGCO®'s Semi-Ceramic™ Pulley Lagging provides the solution when conventional rubber lagging fails to correct belt spillage and wears prematurely.

- **Newly Improved Ceramic Tile** – provides robust performance in dry, wet, or muddy applications.
- **Bonding Strength** – that is superior to others, due to 3 mm of our neoprene compound vulcanized into bottom-side of the lagging.
- **Pre-Chemical Backing** – for ease in installation
- **Increase Productivity** – by delivering increased traction between the conveyor belt and pulley, allowing for lower belt tension than with rubber lagging.
- **Reduce Down Time** – on non drive pulleys, where pulley change-out due to excessive wear is difficult.



Abrasion Resistant -  
tiles are fully enclosed  
by rubber

## Arrowhead Drive & Smooth Rubber Pulley Lagging

Arrowhead® Drive and Smooth Pulley Lagging is the solution, in an application where rubber is the answer, to help eliminate slippage, increase pulley life and to improve production. A specialty formulated combination of synthetic, natural, and neoprene rubber compounds provides our pulley lagging with excellent gripping strength and abrasion resistance.

- **Increase Productivity** – by delivering increased traction between the belt and pulley, and increasing pulley life and reducing buildup.
- **Improved Belt Tracking** – due to the Arrowhead patterns self-cleaning ability, which reduces material build up and thereby eliminates the major source of misalignment.
- **Superior Wear** – ability in abrasive or highly wet or dry applications as seen in below ground and above ground mining.
- **Bonding Strength** – that is superior to others, due to 3 mm of our neoprene compound vulcanized into bottom side of the lagging.
- **Easy Installation** – can be done in place, on plant site, at your local distributor or at the pulley manufacturer.



Natural & MSHA  
1C-174/2 FRAS Grade

Available  
in Smooth



# WORLD-CLASS VULCANIZING PRESSES, MECHANICAL FASTENERS, & TOOLS FOR ALL TYPES OF HEAVYWEIGHT CONVEYOR BELTS

## **SECTIONAL AND 2-PIECE VULCANIZING PRESSES**

ASGCO®'s VUL-CON® Vulcanizing Presses are lightweight, durable and versatile with complete availability of coverage for all splice lengths, fabric ply or steel cord. Our conveyor belt splicing presses are easy to set-up, operate and to maintain. VUL-CON® Vulcanizing Presses are made of high grade aluminum platens and beams to provide maximum tensile and bending strength with minimum weight. All VUL-CON® Vulcanizing Presses provide uniform temperature and pressure required to vulcanize a wide array of conveyor belts.

PARTNERS WITH

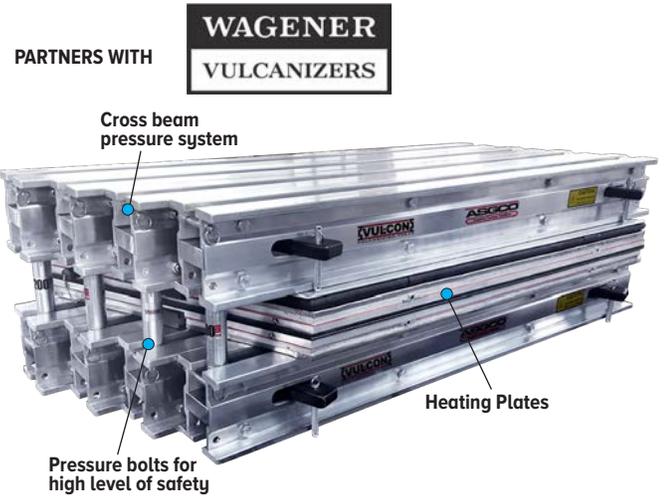


# VULCANIZING PRESSES

## Vul-Con® Sectional Vulcanizing Press

When portability and versatility are crucial the VUL-CON® Vulcanizing Press is the press of choice. This modular design can be set up quickly and efficiently. The side-by-side arrangement allows the presses to be joined to give a longer splice length. We manufacture to all sizes and have a stock of the more traditional sizes used in the industry.

- Lightweight compact design for easy transport
- Includes flush valves and inset bolts/nuts connecting the traverse bars
- All electrical systems are CE, CSA and UL approved
- Durable for use in harshest of environments
- Pressure bolts pass through the cross beam profile for a high level of safety
- Exact temperature regulation via an electronic control box
- Even pressure distribution across the splice area.
- Vulcanizing temperature is uniform and accurate.
- Automatic features for setting the temperature and curing time
- Standard sizes are available (custom size upon request)



### Replacement Parts Available



## Vul-Con® EZ Series Vulcanizing Press

ASGCO® VUL-CON® EZ Series Frame Press is a solid aluminum frame style vulcanizing press that allows for quick and easy operation. With end handles and positioning rings (for larger models), the Vul-Con® EZ Series Vulcanizing Press is easy to maneuver into the desired splice position.

- Pressure Bag uniform pressure system across splice surface
- Custom “Extruded Plank” cooling system within platens
- Innovative “Silicone Element” fast heating system
- Upper and Lower aluminum frames
- Platens built to order in either a rhombic or rectangular design.
- Platen maximum temperature 325°F (163°C)



## Vul-Con® Control Box

### Electronic Control Box with Electronic Temperature Control

The new VUL-CON® Switchgear Box is the most advanced control system in the world. Incorporating controls for 2 platens. Splice data can be stored and recalled through the built-in data logger.

- CE, CSA and UL Approved All electrical CE, CSA and UL approved
- Exact temperature reading in each heating plate via thermo-sensor PT 100
- Quick and simple programming of the electronic temperature control
- Differential monitoring, individual heating circuits
- Each control box can operate one set of platens
- Can be used on the Sectional Vulcanizing Press and EZ Series Vulcanizing Press



**PLATEN CORD** – Connects to the temperature controller and Vul-Con® Press

### Grizzly™ Screw-Splice

The Grizzly™ Screw-Splice conveyor belt splicing and fastening system delivers power, strength, and flexibility in every application. It is the perfect fastener to save you time and money while allowing a quick, accurate, and easy installation. ASGCO®'s Grizzly™ Screw-Splice outperforms competitor's products by offering more tensile strength and durability.

- **Versions Available** – Abrasion Resistant (AR), Heat Resistant (HTR) 400°F (204°C), Low Temperature (LT) -20°F (-28°C), Stainless Steel (SS), and Bare Back (BB).
- **Flexible** rubber splice that screws directly onto the belt.
- **Quick and Reliable** belt splicing solution.
- **Can be Installed regardless of the configuration** of the conveyor belt, access conditions, weather conditions.
- **Splice Types** – **35 / 63 / 65 • 80 / 85 • 100 • 180 • 200**



Grizzly™ Screw-Splice

Grade 5 Steel Screws

### ASGCO® Conveyor Belt Skiver

The battery operated ASGCO® Conveyor Belt Skiver is specially designed to help ensure quick, safe and accurate top cover removal at various depths for installation of recessed splices. Properly skive your conveyor belt for better mechanical fastener holding.

- Portable and lightweight - complete kit in a sturdy zippered canvas bag
- Battery Operated 18 volts – designed for a lifelong battery operation
- Accurate – top cover removal/recessing for mechanical fastener installation
- 2-blade cutter head – dual edge tungsten carbide blades for added performance and smooth finish



### ASGCO® Magnum® Rubber Cutter

The ASGCO® Magnum® Rubber Cutter offers precision cutting for finger splices as well as the heavy-duty torque required to cut through multiply belts up to 2" (51 mm) thick. Excellent for slitting and finger cutting, this tool is capable of cutting all fabric plied rubber belting and sheeting.

- Guard may be positioned by the operator's thumb during operation, and returns to closed position upon release
- Lightweight aircraft grade aluminum construction with machined parts
- Bearing wheels and ribbing on the frame for ease of glide
- Sharpen-able, replaceable, hardened 9" (229mm) D2 material blade
- Unit can be reversed in a binding situation
- Carrying case will fit the Magnum Rubber Cutter, spare blade, spare battery and charger





# WORKMANSHIP, SKILLS AND KNOWLEDGE MAKES ALL THE DIFFERENCE.

## **ASGCO® CONVEYOR TRAINING SCHOOL (ACT™)** **Conveyor Product & Installation Training**

Train with the experts in belt conveyor productivity. The curriculums are designed to thoroughly sharpen your installation and application skills through classroom lectures and actual hand on demonstrations. ACT™ covers a wide range of topics and skills, from product-specific to safety and maintenance fundamentals. You will learn terminology, basic structure, and operation of these systems. These courses cover belts, belt cleaners, idlers, and feed/discharge devices, as well as an explanation of installation, maintenance, replacement, and troubleshooting information of these components.

**ASGCO® Conveyor Technician Program (Conveyor 101)** – ASGCO® Conveyor Training School (ACT™) offers classes created to provide your team with the highest quality training to solve your conveyor problems. Our experienced staff will show your team the ease of installing and maintaining ASGCO® conveyor components.

**ASGCO® Conveyor Technician Program (Apprenticeship)** – offers a curriculum to prepare employees for careers as Conveyor Service Technicians. This degree program will prove to be invaluable to the employees that will be learning valuable skills and trades to help themselves, their families, and the industries that we serve that help to build the infrastructure of America.

**Splice Training School** – 2-day course you will gain valuable installation knowledge through hands-on training to prolong belt life and minimize maintenance concerns. Training includes plied and straight-warp belting, steel cord, and lightweight belting.

**Lunch & Learn** – An on-site 2-4 hour customized training program. ASGCO's Team of Conveyor Product and Service Managers will facilitate this session, which will provide a strong basis for attendees to learn more about maintaining and troubleshooting their conveyor systems.

**Webinars** – Sign up and learn how our programs have proven successful at facilities across the country. Free webinar classes will help you discover:

- Conveyor 101
- Importance of Belt Cleaners
- Conveyor Safety
- Track, Train, and Troubleshoot
- Custom Webinars on Request



# COMPLETE CONVEYOR SERVICE & SUPPORT LEADS TO SOLUTIONS

## CONVEYOR SERVICES

At ASGCO® Complete Conveyor Solutions, we use engineered products and services to provide our customers with the best solutions to their conveyor material handling applications. We are focused on developing cost effective and technologically advanced products, specifically designed for optimum conveyor performance. Combined with our national network of distributors, we can provide you with custom engineering and design to meet your specific conveyor needs, along with installation and maintenance programs that will streamline your operation by increasing production up time and lowering costs. Together we are part of a coordinated implementation team focused on insuring your success.

- Custom design & engineering
- International network of distributors
- Installation & Service
- Conveyor Product & Installation Training
- Custom Conveyor Maintenance Programs

## SERVICE AND SUPPORT

### Laser Alignment

ASGCO®'s Laser Alignment Services improves the overall conveyor performance using state-of-the-art laser equipment and digital processors. ASGCO® technicians can accurately analyze the alignment of all the components and structure of the conveyor for better conveyor efficiency.

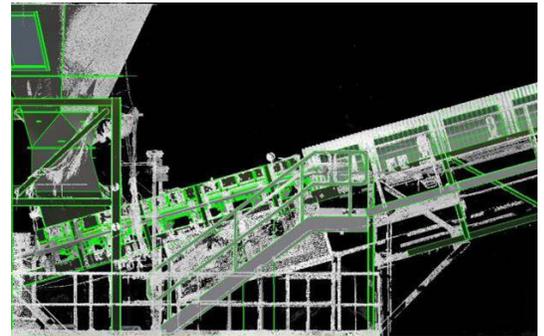
- Provides Accurate Analysis of all conveyor pulleys, drives, take-ups, components and structure.
- Precise Corrections are identified on a detailed conveyor status report.



### Point Cloud Laser Scanning

ASGCO® Point Cloud Laser Scanner delivers realistic and true-to-detail scan results. The ultra-portable Point Cloud Laser Scanner enables fast, straight forward, and then a 360° view accurate measurements of facades, complex structures, production and supply facilities, accident sites, and any environment.

- Ensures Visual Accuracy
- Safe and fast data capturing with superior color detail
- Reliable life-like visualization
- Reduced complexity by integrated scanning and imaging workflow for all kinds of measurements even in challenging environments



Engineered 3D model drawing overlaid into cloud point scan

### Installation & Field Services

Your equipment will be routinely serviced and checked to insure maximum performance. A program of planned and scheduled maintenance can avert many breakdowns. Our program's goal is to service the equipment properly at the lowest cost.

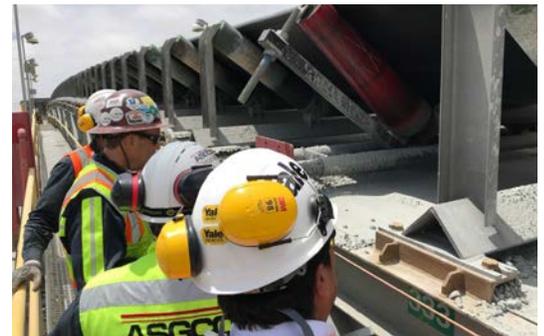
- Scheduled conveyor walk through
- Identification of problem areas
- Complete maintenance schedule
- Maximum product performance
- Increased productivity from less down time



### Maintenance Services

ASGCO®'s experienced field and service technicians are ASGCO® certified and trained. Our reliable emergency service is available 24/7/365 days a year. On-site and on-time fabrication and completion are essential in any installation to shorten the schedule and minimize downtime.

- Component Installation/Retrofitting
- On-Site Fabrication
- Dust Control Products & Services
- Custom Conveyor Maintenance



# INDUSTRY APPLICATIONS

## Coal & Power



3-DEM® Designed Transfer Chute

## Minerals & Pulp/Paper



Tru-Trainer® Dual Return Idler

## Metals & Steel



Skalper MDX®

## Cement & Aggregate



Safe-Guard® Return Idler Guard



Tru-Trainer® Dual Urethane Return Idler



Clamp-Mount® with Tri-Seal™



Load Zones & Transfer Points



Super-Skalper®



Impact Cradle Bed™



Tru-Trainer® Flat Return Idler



Tru-Trainer® Dual V-Return Idler



BC2™



Wash Box™ System



Bronco™ Brush Belt Cleaner



Arrowhead® Lagging



Urethane Canoe Liners



Super Skalper® and Razor-Back®



Razor-Back® with Spray Bar



Safe-Guard® Return Roll Changer



Tru-Trainer® Tapered Troughing Idler

