ASGCO®
Complete Conveyor Solutions

Providing the World Bulk Material Handling Industry with Productive, Safe and Reliable "Complete Conveyor Solutions."

Primary & Secondary Belt Cleaners





ASGCO®
Complete Conveyor Solutions

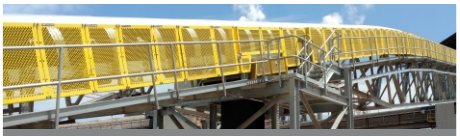
PRODUCTS AND SERVICE THAT LEAD TO SOLUTIONS

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. From engineers to designers, from technicians to product specialists. It's what drives everyone at ASGCO®, and the job is never done until our customer is satisfied.....***IT'S OUR GUARANTEE!***

MAXIMIZING EFFICIENCY

INCREASING PRODUCTIVITY



IMPROVING SAFETY

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..

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.

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®!***

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

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.

TABLE OF CONTENTS

Primary Belt Cleaners	2-3
Belt Cleaner / Blade / Tensioner Chart	4-5
Secondary Belt Cleaners	6-8

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 is multiple cleaners of any brand or type.
- Belt life is better with multiple lightly loaded cleaners rather than one overloaded cleaner
- A single cleaner is false economy
- 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/if any dribble chute
- Moisture Content

Primary / Secondary Belt Cleaners

We generally recommend multiple belt cleaners 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.

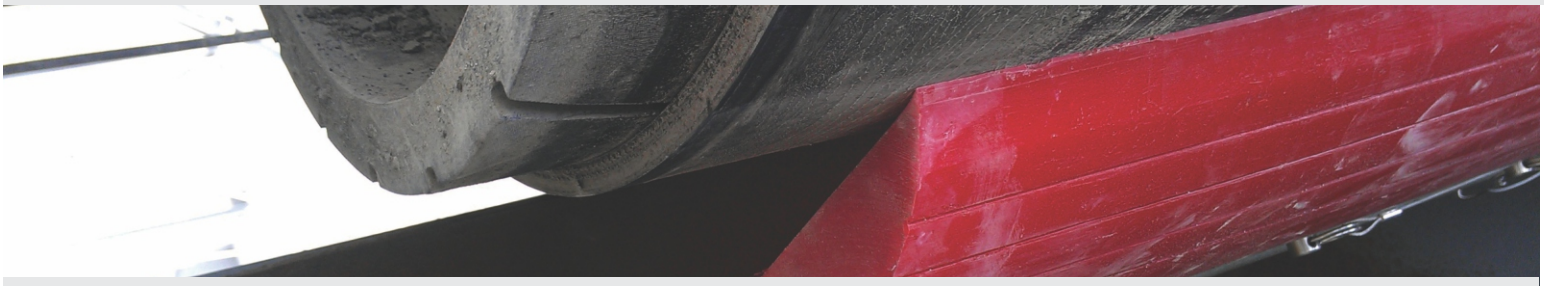
Secondary Cleaners

Is 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.

Our Guideline for Effective Belt Cleaners Are:

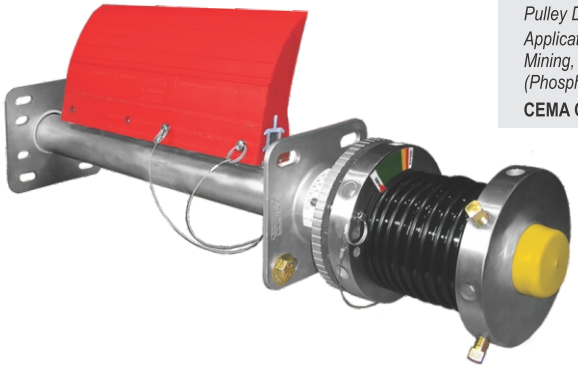
- Design for optimum clean with the least amount of pressure
- Position the blade out of the main flow of the material
- If possible, install the belt cleaners in the main chute or an area that will be easily cleaned and maintained
- Primary blades should be no more than the width of the material being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

PRIMARY BELT CLEANERS

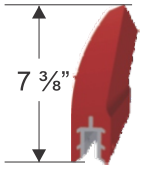


Skalper® Belt Cleaner

- 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 consistent tension throughout the life of the blade
- Blade-Wear Indicator allows you to monitor blade wear without shutting down for inspection.

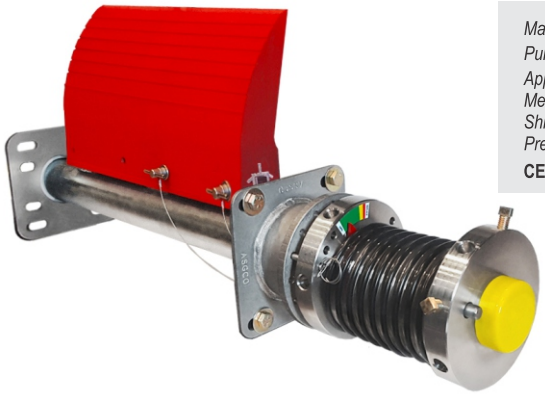


Maximum Belt Speed – 1000 fpm (5.0 m/sec)
Pulley Diameter – 12" – 36" (300 – 900mm)
Applications – Coal Fired Power Plants, Hard Rock Mining, Steel Mills, Iron Ore, Aggregate and Mineral (Phosphate, Potash, Salt) Mining
CEMA Class 4

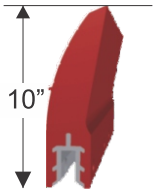


Super-Skalper® HD Belt Cleaner

- One Piece Single Mounting Tube for new robust, enhanced HD E-Z Torque® tensioner
- E-Z Torque® HD Tensioner is 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.
- Optional Ceramic (XC) beaded blade available for high speed high tonnage conveyor systems

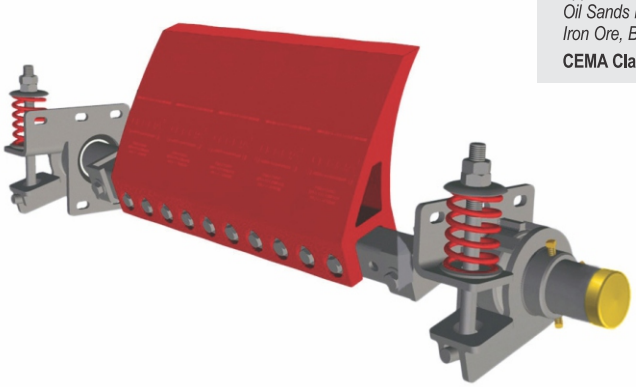


Maximum Belt Speed – 1200 fpm (6.0 m/sec)
Pulley Diameter – 20" + (400mm +)
Applications – Underground Mining, Hard Rock Mining, Metals (copper/gold) Mining, Steel Mills, Iron Ore, Bulk Shipping Terminals, Coal Fired Power Plants, Coal Preparation Plants
CEMA Class 5

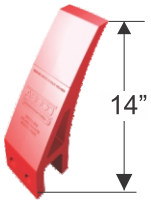


Skalper MDX™ Belt Cleaner

- Mine-duty Skalper MDX™ blades is one of the most rugged belt cleaners available
- Impact absorbing Torque-Cam™ action mounting system adjusts itself when large impact forces from mechanical fasteners or large lumps of carry-back hit the belt cleaner
- Engineered for the most abusive conditions and applications
- Installed as individual blade or as a cartridge
- Optional Ceramic (XC) beaded blade available for high speed high tonnage conveyor systems



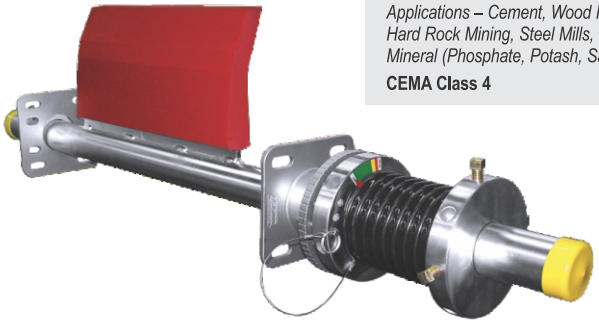
Maximum Belt Speed – 1200 fpm (6.0 m/sec)
Pulley Diameter – 24" + (600mm +)
Applications – Underground Mining, Hard Rock Mining, Oil Sands Mining, Metals (copper/gold) Mining, Steel Mills, Iron Ore, Bulk Shipping Terminals
CEMA Class 5

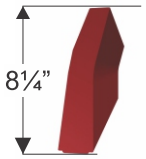


E-Z Skalper® Belt Cleaner

- E-Z Skalper® (patented) one piece blade maintains an effective cleaning edge throughout the life of the blade
- Available with either the E-Z Torque® (patented) torsion style tensioner or the Force-1™ tensioning system
- Blade-Wear Indicator allows you to monitor blade wear easily without having to shut the system down for inspection.

Maximum Belt Speed – 1000 fpm (5.0 m/sec)
Pulley Diameter – 12" – 36" (300 – 900mm)
Applications – Cement, Wood Processing, Recycling, Hard Rock Mining, Steel Mills, Iron Ore, Aggregate and Mineral (Phosphate, Potash, Salt) Mining
CEMA Class 4

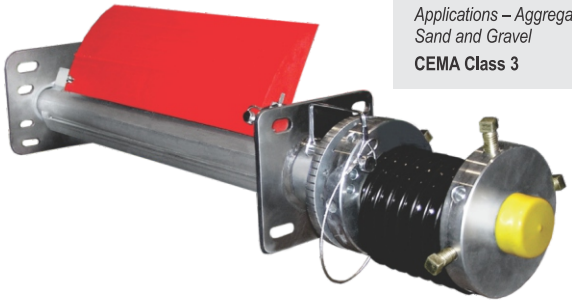


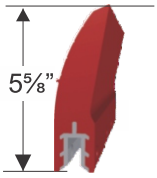


Pit-Skalper® Belt Cleaner

- Pit-Skalper® Blade design (patented) maintains an effective cleaning edge throughout the life of the blade
- The 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 – 500mm)
Applications – Aggregate, Ready Mix, Asphalt, Recycling, Sand and Gravel
CEMA Class 3

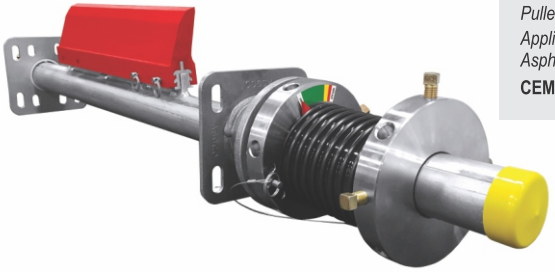


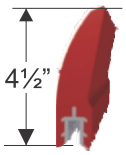


Mini-Skalper® Belt Cleaner

- Skalper® (patented) compact one piece blade maintains an effective cleaning edge throughout the life of the blade
- Force-1™ Tensioning system provides constant tension
- Visual tension check
- Quick blade change outs and minimal maintenance

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





- *All belt cleaner tensioners and mounting hardware are constructed from 304 Stainless Steel and all have a life-time guarantee for the life of the belt cleaning system.*
- *Conveyor belt conditions, belt speeds, pulley diameters and general conveyor and maintenance conditions should all be considered before selecting the belt cleaner that will be most effectively utilized.*
- *Underground mining mounting kits are also available.*

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 MDX™
Belt Width	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
Belt Speed	< 500 fpm 2.5m/sec.	< 1000 fpm 5.0m/sec.	< 1000 fpm 5.0m/sec.	< 1200 fpm 6.0m/sec.	< 1200 fpm 6m/sec.
Head Pulley Diameter	6-22" 150-550 mm	12"-36" 300-900 mm	12"-36" 300-900 mm	20" + 400 mm +	24" + 600 mm +
Primary Tensioners					
Force-1™	YES	YES	YES	NO	NO
E-Z Torque®	YES	YES	YES	YES	NO
Air-Shoc™ *(Primary)*	NA	NA	NA	YES	YES
Spring-Shoc™ *(Primary)*	NA	NA	NA	NA	YES
Belt Conditions					
OK on reversible belt?	YES	YES	NO	YES	YES
Blade Materials					
Skalper® IV	YES	YES	YES	YES	YES
Skalper® III	YES	YES	N/A	NO	NO
Skalper® II	YES	YES	YES	YES	YES
Skalper® HT	YES	YES	YES	YES	YES
Skalper® UHT	YES	YES	YES	YES	YES
Skalper® XC (Ceramic)	N/A	N/A	N/A	YES	YES
Skalper® AR	YES	YES	YES	YES	YES


Skalper®


Super-Skalper®


Super-Skalper®


Skalper® MDX

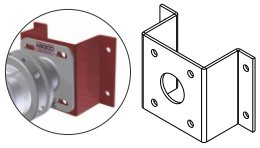
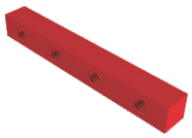
Skalper® Blades

Skalper® Blade Materials							
Blade Type	**Skalper® IV**	**Skalper® III**	**Skalper® II**	**Skalper® HT**	**Skalper® UHT**	**Skalper® XC**	**Skalper® AR**
Durometer	82	82	95	82	95	82	95
Description	Abrasion Resistant	General Use	Xtra Abrasion Resistant	High Temp	Ultra High Temp	Ceramic	Acid Resistant
Belt Speed	< 1000 fpm <5m/sec	< 700 fpm < 3.5m/sec	< 1200 fpm < 6m/sec	< 1000 fpm < 6m/sec	< 1200 fpm < 6m/sec	< 1400 fpm < 7m/sec	< 1400 fpm
Temperature Range	-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
Use w/Mech. Fasteners	Yes	Yes	No	Yes	No	No	No

Primary Tensioners

E-Z Torque®	Spring Shoc™	Air-Shoc™	Force-1™
			
• All 304 stainless steel construction • Lifetime Warranty • Stainless steel torsion spring will not take a set	• Zinc plated mild steel construction • Lifetime Warranty • Rubber and UHMW impact bushing	• Enclosed air system with auto-motive quality shocks maintain constant blade to belt contact for continuous cleaning pressure.	• All 304 stainless steel construction • Lifetime Warranty • Compact size

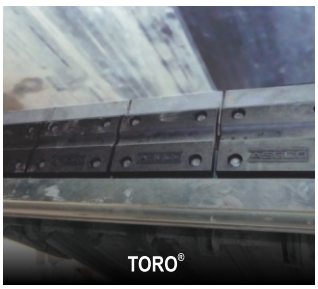
Primary Mounting Brackets

E-Z Torque® Extension Bracket	Boss Block	Mounting Plate
		
• E-Z Torque tension side extension bracket provides additional clearance for ease of tensioning • Made from zinc plated mild steel	• W1" X L8 with (4) 5/8-11 tapped holes • Weld on both sides of pulley and bolt on steel plate	• H15" X L30" with (4) 5/8-11 holes • For use with Boss Block to mount precleaners on open head pulleys

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™
Belt Width	18"-96" 450-1200 mm	18"-96" 450-2400 mm	18"-96" 450-2400 mm	18"-96" 900-2400 mm
Belt Speed	<1000 fpm 5m/sec.	< 1000 fpm 5m/sec.	< 1200 fpm 6m/sec.	< 500 fpm 2.5m/sec.
Secondary Tensioners				
Bolt-Up™	YES	YES	NA	NA
Spring-Shoc™	YES	YES	NA	NA
Bolt-Up™ MDX	NO	NO	YES	NA
Air-Shoc™ MDX	NO	NO	YES	NA
Spring-Shoc™ MDX	NA	NA	YES	NA
Belt Conditions				
OK on reversible belt?	YES	NO	NO	YES
Blade Materials				
TORO™ U-Tips	YES	N/A	N/A	N/A
TORO™ F-Tips	YES	N/A	N/A	N/A
TORO™ C-Tips	YES	N/A	N/A	N/A
F-Tips	N/A	YES	N/A	N/A
C-Tips	N/A	YES	N/A	N/A
V-Tips	N/A	YES	N/A	N/A
U-Tips	N/A	YES	N/A	N/A
XC-Tips	N/A	YES	YES	N/A
MDX F-Tips	N/A	YES	YES	N/A
MDX C-Tips	N/A	YES	YES	N/A
MDX V-Tips	N/A	YES	YES	N/A


Razor-Back® w/V-Tips

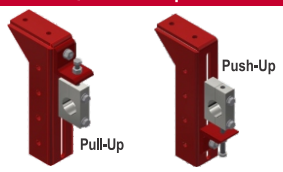
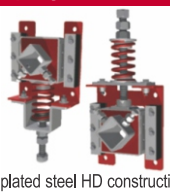

TORO®


CHEVRON

Secondary Blades

Blade Materials											
Blade Type	**TORO™U-Tips**	**TORO™F-Tips**	**TORO™C-Tips**	**F-Tips**	**C-Tips**	**V-Tips**	**U-Tip**	**XC-Tip**	**MDX F-Tips**	**MDX C-Tips**	**MDX V-Tips**
Belt Speed	< 1000 fpm	< 1000 fpm	< 1000 fpm	< 1000 fpm	< 1000 fpm	< 1000 fpm	< 1000 fpm	< 1400 fpm	< 1200 fpm	< 1200 fpm	< 1200 fpm
	< 5 m/sec	< 5 m/sec	< 5 m/sec	< 5 m/sec	< 5 m/sec	< 5 m/sec	< 5 m/sec	< 7 m/sec	< 6 m/sec	< 6 m/sec	< 6 m/sec
Temperature Range	-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
Use w/Mech. Fasteners	Yes	Yes	Yes	Yes	Yes	No	Yes	No	Yes	Yes	No

Secondary Belt Cleaner Tensioners

Bolt-up™ / Bolt-up MDX™	Spring-Shoc™ / MDX	Duo-Spring™	Air-Shoc MDX™	Secondary Mounting Bracket
				
• Powder coated steel bracket • 304 stainless steel construction of adj. blocks • Lifetime Warranty • Visual tension check • Push-up or Pull-up tensioning options	• Zinc plated steel HD construction • Lifetime Warranty • UHMW slide bushings • Push-up or Pull-up tensioning options	• All 304 stainless steel construction • Lifetime Warranty • Push-up or Pull-up tensioning options	• Zinc plated steel HD construction • Lifetime Warranty • UHMW slide bushings	• Powder coated mild steel • Available in Stainless Steel upon request

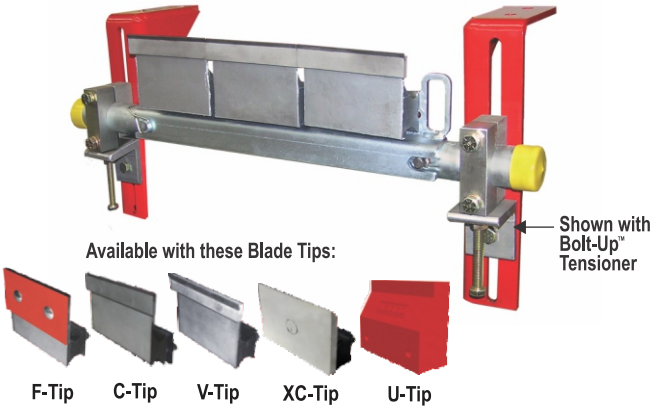
SECONDARY BELT CLEANERS

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 Bolt-up™, Duo-Spring™ or Air-Shoc™ Tensioning Systems
- Available with optional water spray

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

Applications – Coal Fired Power Plants, Hard Rock Mining, Steel Mills, Iron Ore, Aggregate and Mineral (Phosphate, Potash, Salt) Mining

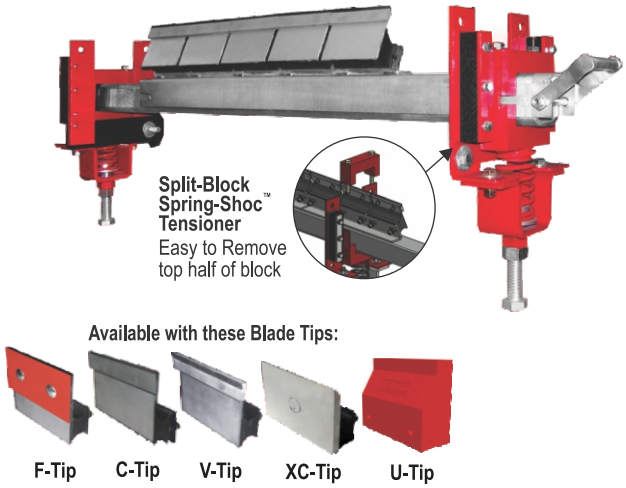


Razor-Back Retractable System™

- Longwearing Abrasion Resistant – tungsten carbide blades provides and maintains a great cleaning edge against the conveyor belt.
- Quick-Change – slide-out mounting system allows for simple removal of the cartridge from one side of the conveyor system, without having to break the plane of the conveyor structure, or having to remove mounting brackets or the main mounting tube.
- Impact Absorbing Tension Cushions – tension each individual blade to the belt for a controlled and effective conveyor belt cleaning across the entire width of the belt.
- Compact Design – allows for an installation that requires less then 9" of clearance to be installed and maintained.

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

Applications – Coal Fired Power Plants, Hard Rock Mining, Steel Mills, Iron Ore, Aggregate and Mineral (Phosphate, Potash, Salt) Mining

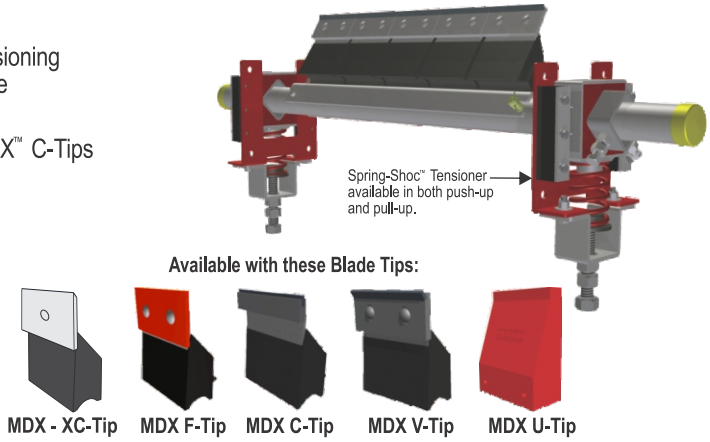


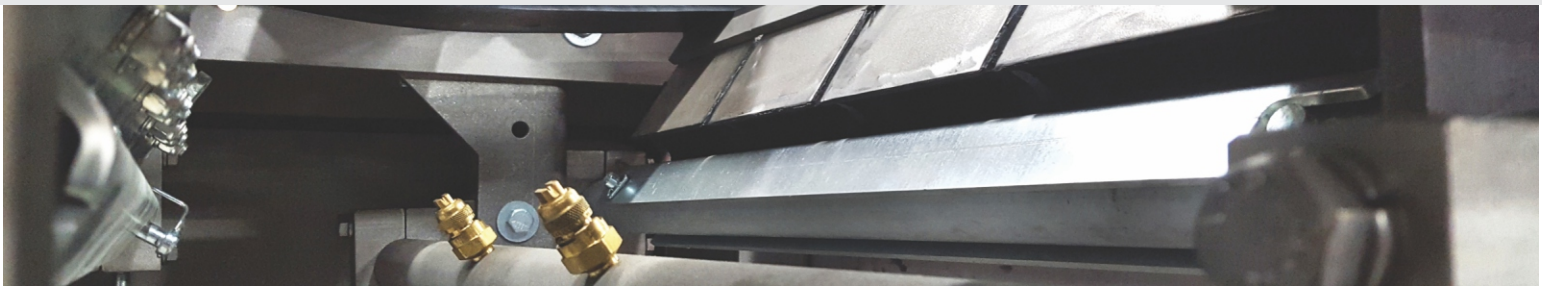
Razor-Back MDX™ Belt Cleaner

- ForceFlex™ (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
- Available with Bolt-up™, Spring-Shoc™ or Air-Shoc™ Tensioning Systems

Maximum Belt Speed – 1200 fpm (6.0 m/sec)

Applications – Underground Mining, Hard Rock Mining, Metals (copper/gold) Mining, Steel Mills, Iron Ore, Bulk Shipping Terminals, Coal Fired Power Plants

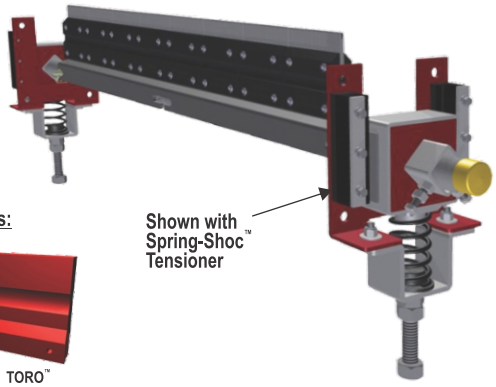




TORO™ Belt Cleaner

- Effective flexible belt cleaner that can accommodate reversing conveyor belt systems
- 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 Bolt-Up™, Duo-Spring™ or Air-Shoc™ Tensioning Systems

Maximum Belt Speed – 1000 fpm (5.0 m/sec)
Applications – Aggregate, Cement, Coal Fired Power Plants, Mineral (Phosphate, Potash, Salt Mining, Wood Processing, Recycling)

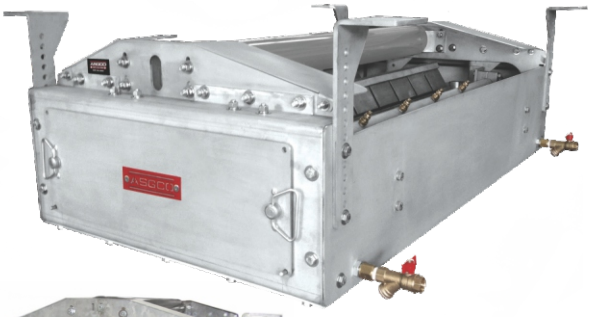


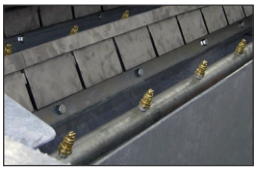
Available in Three Blade Tips:

Wash Box™ Belt Cleaning System

- Complete belt cleaning system that incorporates a series of spray bars, belt cleaners and pressure/deflection roll to maximize the effectiveness and virtually eliminate all carry-back
- Fully enclosed system that contains the wash waste fluid and carry-back
- Large removable service doors allow the system to be easily inspected and service.
- Can be customized to meet exact application needs

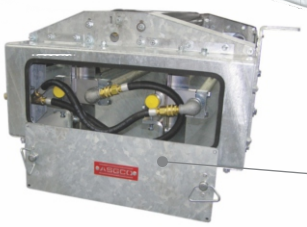
Maximum Belt Speed – 1000 fpm (5.0 m/sec)
Applications – Coal Fired Power Plants, Bulk Shipping Terminals, Coal Preparation Plants, Underground Mining, Hard Rock Mining, Steel Mills, Iron Ore, Mineral (Phosphate, Potash, Salt) Mining





Wash-Box™ Spray Bar

The Wash Box™ Spray Bars, apply an optimal spray of water which softens the carry-back for a gentle cleaning made by the secondary cleaner. To maximize the effectiveness the Wash- Box™ "wash down" bar cleans the drain pan for any remaining carry-back to prevent clogging.

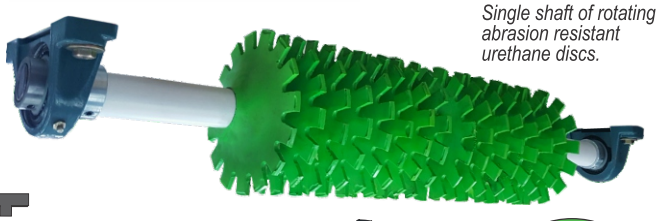


REMOVABLE INSPECTION DOOR - on each side, with wash down hose included.

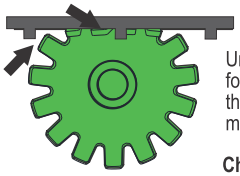
Chevron™ Belt Cleaner System

- Patented concave shaped rubber or urethane discs perform a sweeping action to clean chevron, raised top or grooved conveyor belts
- Unique rotary fingers remove the carry-back and is designed to work only when the conveyor belt is running
- Easily serviced and no motors, air nozzles or other problematic equipment to maintain
- Single or dual shaft systems available

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



Single shaft of rotating abrasion resistant urethane discs.



Unique rotary fingers are forced against the base of the chevrons to dislodge material from the belt.

Chevron™ Discs are available in both Rubber and Urethane, Notched or Solid.

Chevron™ Notched Disc (Urethane)

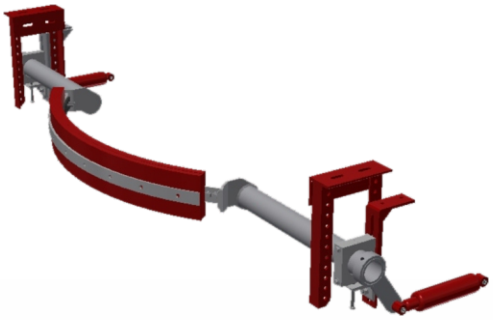
Chevron™ Solid Disc (Urethane)

CONVEYOR BELT CLEANERS

U-Blade Belt Cleaner

- Removes excess water to ensure a dry carry side of the belt down the belt line.
- Tensioned by two air cylinders to assure equal and constant blade pressure, reducing maintenance and ensuring high cleaning efficiency throughout the life of the blade.
- Flippable two-sided, dual durometers blade to give you twice the blade life.

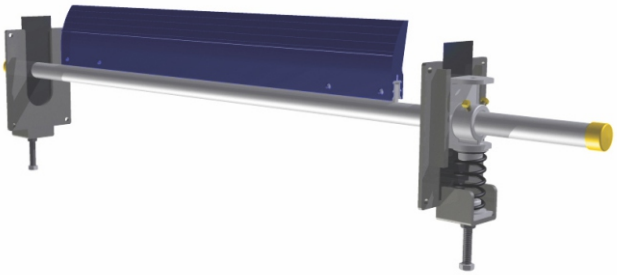
Maximum Belt Speed – 1000 fpm (5.0 m/sec)
Applications – Underground Mining, Coal Preparation Plants



Dry Wipe Belt Cleaner

- Removes excess water to ensure a dry carry side of the belt down the belt line
- Available with Bolt-up, Duo-Spring™ or Air-Shoc™ Tensioning Systems

Maximum Belt Speed – 1000 fpm (5.0 m/sec)
Applications – Underground Mining, Coal Preparation Plants



Vibrating Dribble Chute

- Vibrating liner keeps material moving and accumulations from clogging chute and burying cleaners.
- Rubber lined "isolation" bracket protects chute by transferring vibration to liner, avoiding metal fatigue.
- Low-friction UHMW lining promotes material flow without accumulation and cuts build-up.
- Rugged vibrator provides precise performance - 115 Volt 60HZ Single Phase (with switchbox) Electric Vibrator provides 480 lbs of Force with durable performance.

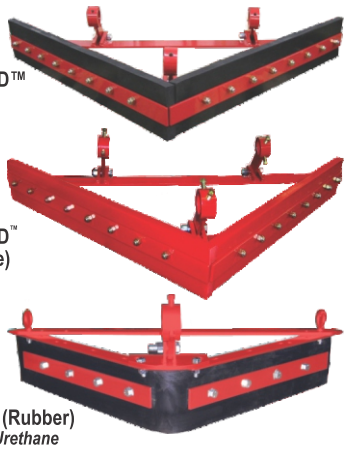
Maximum Belt Speed – 1000 fpm (5.0 m/sec)
Applications – Underground Mining, Coal Preparation Plants

Custom sizes can be made at customer's request.

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

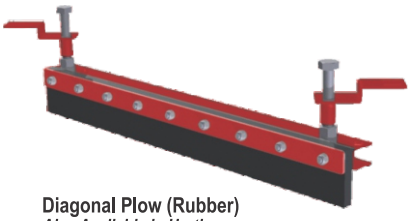
- V-Plow XD™ is a patent pending design for tough mine duty applications that can be flipped to maximize results
- Hinged V-Plow™ is a patented "Hinged" design for low, tight clearance applications
- Diagonal Plow discharges material from one side of the belt
- Available with rubber or urethane plow material

Maximum Belt Speed – 1000 fpm (5.0 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



V-Plow XD™ (Rubber)

V-Plow XD™ (Urethane)



Diagonal Plow (Rubber)
Also Available in Urethane

Hinged V-Plow™ (Rubber)
Also Available in Urethane

Primary Belt Cleaners

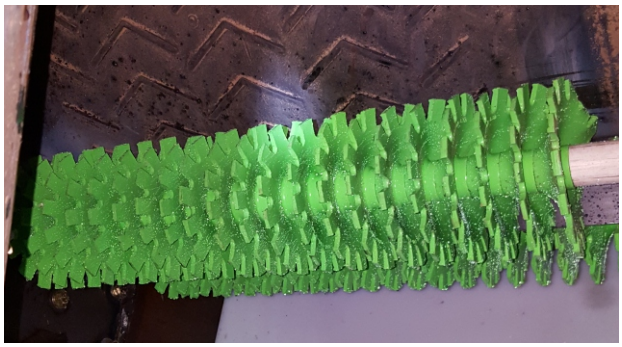
Super-Skalper® Primary Belt Cleaner

Skalper IV® Primary Belt Cleaner

Skalper MDX® Primary Belt Cleaner

Secondary Belt Cleaners

Wash Box™ Secondary Belt Cleaning System



Chevron® Single Shaft with Urethane Discs Secondary Belt Cleaner

Razor-Back® Secondary Belt Cleaner