Primary & Secondary Belt Cleaners

Providing the World Bulk Material Handling Industry with Productive, Safe and Reliable “Complete Conveyor Solutions.”
Engineered Conveyor Products & Services For Bulk Material Handling Systems

Asgco® "Complete Conveyor Solutions", headquartered in Allentown, PA, is a leading manufacturer of proprietary bulk conveyor components and accessories that enhance material flow performance. Founded in 1971 by Alfred S. Gibbs and his son Todd Gibbs, Asgco® believes 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.

Asgco® is a diversified and innovative company with six major divisions that serve specific targets of the material handling industry. We market these innovative products and services through selected distributors, joint ventures, and representatives worldwide. The growth of the company, over the years, is due to recognized improvements in the productivity of our customers operations.

Every material handling system has conditions—either large or small, constant or intermittent, open or obscure—that an Asgco® study can identify and improve.

We also believe that a consulting study will provide improvements that will be a wise investment. That's because, no matter what the basic assignment, we always seek out ways to increase production and to reduce operating costs.

We typically start these services with a thorough on-site inspection to observe the operation and gather data. Next, we analyze and study the data, and often search for additional information. The end result: recommendations for new procedures and improved equipment—all aimed at providing solutions that can be pragmatically implemented.

Asgco® will continue to serve the needs of the traditional bulk materials industry. Every client can be assured that Asgco® bases its reputation on quality service and products. We promise that we will not just meet, but exceed your expectations in helping our customers increase production and reduce operating costs.
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 ensure equal and constant blade pressure, reducing maintenance and ensuring high cleaning efficiency throughout the life of the blade.
- Flipable two-sided, dual durometers blade to give you twice the blade life.
Max Speed Belt – 1500 bph (5.5 m/min)
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 Bob-up, Duo-Spring® or Al-Shoc® Tensioning Systems
Max Speed Belt – 1000 bph (3.6 m/min)
Applications – Underground Mining, Coal Preparation Plants

Vibrating Dribble Chute
- Vibrating liner keeps material moving and accumulations from clogging chute and burying cleaners.
- Rubber lined “enclosure” bracket protects chute by transforming vibration to liner, avoiding metal fatigue.
- Low-friction UHMW brings promote material flow without accumulation and cuts build-up.
- Rugged vibrator provides precise performance – 115 Volt 60Hz Single Phase (with switchbox).
- Electric vibrator provides 450 lbs of force with durable performance.
Max Speed Belt – 1000 bph (5.5 m/min)
Applications – Underground Mining, Coal Preparation Plants

V-Flow XD™, Hinged V-Flow™ & Diagonal Plow Belt Cleaners
- V-Flow XD™ is a patent pending design for tough mine duty applications that can be flipped to maximize results.
- Hinged V-Flow™ is a patented “hinged” design for low, light clearance applications.
- Diagonal Plow discharges material from one side of the belt.
- Available with rubber or urethane plow material.
Max Speed Belt – 1500 bph (5.5 m/min)
Applications – Coal Feed Power Plants, Hard Rock Mining, Underground Mining, Coal Preparation Plants, Steel Mills, Iron Ore, Aggregate, Metal (supported) Mining, Mineral (Phosphate, Potash, Salt) Mining, Bulk Shipping Terminals

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.
- Baffle 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 faced belt.
- Diameter of the head pulley.
- Material and temperature of product being conveyed.
- Belt speed.
- Location available for proper installation.
- Location off 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
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 all belt cleaners in the main chute or an area that will be easily cleaned and maintained.
- Belt 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/checkout doors are critical to safely inspect and maintain belt cleaning systems.
PRIMARY BELT CLEANERS

Skalter® Belt Cleaner
- Skalter® (patented) one-piece blade maintains an effective cleaning edge throughout the life of the blade.
- E-Z Torque® (patented) tensioning system provides a constant consistent tension throughout the life of the blade.
- Black-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/min)
Fulky Diameter = 27” - 36” (300 - 900mm)
Applications: Coal Fired Power Plants, Hard Rock Mining, Steel Mills, Iron Ore, Aggregate and Mineral (Phosphate, Potash, Salt) Mining

Super-Skalter® Belt Cleaner
- The mini-duty patented Super Skalter™ one-piece blade maintains an effective cleaning edge throughout the life of the blade.
- Heavy-duty, 3 piece designed mounting tube with E-Z Torque® (patented) tensioner style tensioning system provides a constant consistent tension throughout the life of the blade.
- Black-Wear Indicator allows you to monitor blade wear easily without having to shut the system down for inspection.
- Optional Ceramic (XC) beaded blade available for high speed high tonnage conveyor systems

Maximum Belt Speed = 1200 fpm (6.0 m/min)
Fulky Diameter = 20” - 40” (500mm - 1000mm)
Applications: Underground Mining, Hard Rock Mining, Metal (copper/lead) Mining, Steel Mills, Iron Ore, Bulk Shipping Terminals, Coal Fired Power Plants, Coal Preparation Plants

Super-Skalter® HD Belt Cleaner
- One Piece Single Mounting Tube for new robust, enhanced HD E-Z Torque® tensioner
- 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.
- Black-Wear Indicator allows you to monitor blade wear easily without having to shut the system down for inspection.
- Optional Ceramic (XC) beaded blade available for high speed high tonnage conveyor systems

Maximum Belt Speed = 1200 fpm (6.0 m/min)
Fulky Diameter = 20” - 40” (500mm - 1000mm)
Applications: Underground Mining, Hard Rock Mining, Metal (copper/lead) Mining, Steel Mills, Iron Ore, Bulk Shipping Terminals, Coal Fired Power Plants, Coal Preparation Plants

SECONDARY BELT CLEANERS

TORO® Belt Cleaner
- Effective flexible belt cleaner that can accommodate reversing conveyor belt systems.
- Available with replaceable U-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 Belt-Up®, Duo-Spring® or Anti-Shoc® Tensioning Systems

Maximum Belt Speed = 1050 fpm (5.3 m/min)
Applications: Aggregate, Cement, Coal Fired Power Plants, Mineral (Phosphate, Potash, Salt) Mining, Wood Processing, Recycling

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 water 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/min)
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 Bar, apply an optional 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 clears the entire pan for any remaining carry-back to prevent digging.

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 = 600 fpm (3.0 m/min)
Applications: Wood Processing, Mineral (Phosphate, Potash, Salt) Mining, Recycling

Chevron™ Notched Disc (Urethane)
Chevron™ Bolt-Disc (Urethane)

Single shaft of rotating abrasive resistant urethane discs

Unique rotary fingers are forced against the base of the Chevron™ to dislodge material from the belt.
Razor-Back™ Belt Cleaner

- Impact absorbing, self-honing 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™, Pull-Out™ or All-Shot™ Tensioning Systems
- Available with optional water spray.

Maximum Belt Speed = 1500 ft/min (457 m/min)
Applications - Coal Fired Power Plants, Iron Ore, Mining, Aggregate and Mineral (Phosphorus, Potash, Salt) Mining

Razor-Back Retractable System™

- Longwearing Abrasion Resistant - tungsten carbide blades provide and maintain 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 than 9” of clearance to be installed and maintained.

Maximum Belt Speed = 1500 ft/min (457 m/min)
Applications - Coal Fired Power Plants, Iron Ore, Mining, Aggregate and Mineral (Phosphorus, Potash, Salt) Mining

Razor-Back MDX™ Belt Cleaner

- ForosFlex® (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™, Pull-Out™ or All-Shot™ Tensioning Systems

Maximum Belt Speed = 1200 ft/min (366 m/min)
Applications - Underground Mining, Hard Rock Mining, Oil Sands Mining, Steel Mills, Iron Ore, Bulk Shipping Terminals, Coal Fired Power Plants

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 = 1300 ft/min (396 m/min)
Applications - Underground Mining, Hard Rock Mining, Oil Sands Mining, Metals (copper/nickel) Mining, Steel Mills, Iron Ore, Bulk Shipping Terminals

Skalper® III Belt Cleaner

- Skalper® (patented) 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 = 750 ft/min (229 m/min)
Applications - Aggregate, Sand & Gravel, Rock-Mix and Asphalt, Cement, Wood Processing/Recycling

Skalper® III 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 ft/min (152 m/min)
Applications - Aggregate, Sand & Gravel, Rock-Mix and Asphalt, Cement, Wood Processing/Recycling

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 ft/min (152 m/min)
Applications - Aggregate, Sand & Gravel, Rock-Mix and Asphalt, Cement, Wood Processing/Recycling

All belt cleaner tensioners and mounting hardware are constructed from 316 Stainless Steel and have a 50-year 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 mining 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.

<table>
<thead>
<tr>
<th>Pro-Cleaner</th>
<th>Mini-Skaber®</th>
<th>Skaber®</th>
<th>E-Z Skaber®</th>
<th>Super-Skaber®</th>
<th>Skabar MX®</th>
</tr>
</thead>
<tbody>
<tr>
<td>Belt Width</td>
<td>18”-28”</td>
<td>450-720 mm</td>
<td>18”-28”</td>
<td>450-720 mm</td>
<td>18”-28”</td>
</tr>
<tr>
<td>Belt Speed</td>
<td>&lt; 500 ft/min</td>
<td>&lt; 1250 ft/min</td>
<td>&lt; 1250 ft/min</td>
<td>&lt; 1500 ft/min</td>
<td>&lt; 1500 ft/min</td>
</tr>
<tr>
<td>Head Pulley Diameter</td>
<td>62”-82”</td>
<td>100-200 mm</td>
<td>12”-38”</td>
<td>300-400 mm</td>
<td>12”-38”</td>
</tr>
</tbody>
</table>

Primary Tensioners

| Force-1® | YES | YES | YES | NO | NO |
| E-Z Tension | YES | YES | YES | YES | NO |
| Air-Static® (Optional) | NA | NA | YES | YES | NO |
| Spring-Loaded (Optional) | NA | NA | NO | NO | YES |

Secondary Belt Cleaner Tensioners

| Belt Width | 18”-28” | 450-720 mm | 18”-28” | 450-720 mm | 18”-28” | 900-2400 mm | 18”-28” | 900-2400 mm |
| Belt Speed | < 1500 ft/min | < 1320 ft/min | 600 mm/sec | 900 mm/sec | < 1320 ft/min | 1200 mm/sec | < 1320 ft/min | 1500 mm/sec |

Blade Materials

| Skabar® | YES | YES | YES | YES | YES |
| Skabar® M | YES | YES | YES | YES | YES |
| Skabar® E | YES | YES | YES | YES | YES |
| Skabar® F | YES | YES | YES | YES | YES |
| Skabar® II | YES | YES | YES | YES | YES |
| Skabar® IIIF | YES | YES | YES | YES | YES |
| Skabar® IIIF-Ceramic | YES | YES | YES | YES | YES |
| Skabar® All | YES | YES | YES | YES | YES |

Skabar® Blades

<table>
<thead>
<tr>
<th>Blade Type</th>
<th>Skabar®V</th>
<th>Skabar®Y</th>
<th>Skabar®I</th>
<th>Skabar®IIIF</th>
<th>Skabar®IIIF-Ceramic</th>
<th>Skabar®All</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description</td>
<td>Shears on Top</td>
<td>90° Abrasion</td>
<td>90° Abrasion</td>
<td>90° Abrasion</td>
<td>90° Abrasion</td>
<td>90° Abrasion</td>
</tr>
<tr>
<td>Belt Speed</td>
<td>&lt; 1250 ft/min</td>
<td>&lt; 1500 ft/min</td>
<td>&lt; 1500 ft/min</td>
<td>&lt; 1500 ft/min</td>
<td>&lt; 1500 ft/min</td>
<td>&lt; 1500 ft/min</td>
</tr>
<tr>
<td>Temperature Range</td>
<td>20°F - 80°F</td>
<td>30°F - 90°F</td>
<td>30°F - 90°F</td>
<td>30°F - 90°F</td>
<td>30°F - 90°F</td>
<td>30°F - 90°F</td>
</tr>
</tbody>
</table>

Secondaries

<table>
<thead>
<tr>
<th>Blade Type</th>
<th>Toro® U-Tips</th>
<th>Toro® T-Tips</th>
<th>Toro® C-Tips</th>
<th>F-Tips</th>
<th>C-Tips</th>
<th>V-Tips</th>
<th>U-Tips</th>
<th>X-C Tips</th>
<th>MOX F-Tips</th>
<th>MOX C-Tips</th>
<th>MOX V-Tips</th>
</tr>
</thead>
<tbody>
<tr>
<td>Belt Speed</td>
<td>&lt; 1500 ft/min</td>
<td>&lt; 1500 ft/min</td>
<td>&lt; 1500 ft/min</td>
<td>&lt; 1500 ft/min</td>
<td>&lt; 1500 ft/min</td>
<td>&lt; 1500 ft/min</td>
<td>&lt; 1500 ft/min</td>
<td>1200 ft/min</td>
<td>&lt; 1500 ft/min</td>
<td>&lt; 1500 ft/min</td>
<td>&lt; 1500 ft/min</td>
</tr>
<tr>
<td>Temperature Range</td>
<td>20°F - 80°F</td>
<td>30°F - 82°F</td>
<td>30°F - 82°F</td>
<td>30°F - 82°F</td>
<td>30°F - 82°F</td>
<td>30°F - 82°F</td>
<td>30°F - 82°F</td>
<td>30°F - 82°F</td>
<td>30°F - 82°F</td>
<td>30°F - 82°F</td>
<td>30°F - 82°F</td>
</tr>
</tbody>
</table>

Primary Mounting Brackets

<table>
<thead>
<tr>
<th>Bracket Type</th>
<th>E-Z Tension</th>
<th>Spring-Roo®</th>
<th>Air-Static®</th>
<th>Force-1®</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mounting Plate</td>
<td>E-Z Tension Extension Bracket</td>
<td>Base Bracket</td>
<td>Mounting Plates</td>
<td></td>
</tr>
</tbody>
</table>

Secondaries

| Belt Width | 18”-28” | 450-720 mm | 18”-28” | 450-720 mm | 18”-28” | 900-2400 mm | 18”-28” | 900-2400 mm |
| Belt Speed | < 1500 ft/min | < 1500 ft/min | < 1500 ft/min | < 1500 ft/min | < 1500 ft/min | < 1500 ft/min | < 1500 ft/min | < 1500 ft/min |
| Temperature Range | 20°F - 80°F | 30°F - 82°F | 30°F - 82°F | 30°F - 82°F | 30°F - 82°F | 30°F - 82°F | 30°F - 82°F | 30°F - 82°F |
| Use Widely | Feasible | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |

Tensioners

| Belt Width | 18”-28” | 450-720 mm | 18”-28” | 450-720 mm | 18”-28” | 900-2400 mm | 18”-28” | 900-2400 mm |
| Belt Speed | < 1500 ft/min | < 1500 ft/min | < 1500 ft/min | < 1500 ft/min | < 1500 ft/min | < 1500 ft/min | < 1500 ft/min | < 1500 ft/min |
| Temperature Range | 20°F - 80°F | 30°F - 82°F | 30°F - 82°F | 30°F - 82°F | 30°F - 82°F | 30°F - 82°F | 30°F - 82°F | 30°F - 82°F |

<table>
<thead>
<tr>
<th>Roll-Up</th>
<th>Spring-Roo®</th>
<th>Dual-Roo®</th>
<th>Air-Static®</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tensioners</td>
<td>Powder coated</td>
<td>Zinc plated</td>
<td>Powder coated</td>
</tr>
<tr>
<td>Material</td>
<td>Stainless steel</td>
<td>Stainless steel</td>
<td>Stainless steel</td>
</tr>
<tr>
<td>Corrosion Resistance</td>
<td>Excellent</td>
<td>Excellent</td>
<td>Excellent</td>
</tr>
</tbody>
</table>

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.

<table>
<thead>
<tr>
<th>Blade Type</th>
<th>Toro® U-Tips</th>
<th>Toro® T-Tips</th>
<th>Toro® C-Tips</th>
<th>F-Tips</th>
<th>C-Tips</th>
<th>V-Tips</th>
<th>U-Tips</th>
<th>X-C Tips</th>
<th>MOX F-Tips</th>
<th>MOX C-Tips</th>
<th>MOX V-Tips</th>
</tr>
</thead>
<tbody>
<tr>
<td>Belt Speed</td>
<td>&lt; 1500 ft/min</td>
<td>&lt; 1500 ft/min</td>
<td>&lt; 1500 ft/min</td>
<td>&lt; 1500 ft/min</td>
<td>&lt; 1500 ft/min</td>
<td>&lt; 1500 ft/min</td>
<td>&lt; 1500 ft/min</td>
<td>1200 ft/min</td>
<td>&lt; 1500 ft/min</td>
<td>&lt; 1500 ft/min</td>
<td>&lt; 1500 ft/min</td>
</tr>
<tr>
<td>Temperature Range</td>
<td>20°F - 80°F</td>
<td>30°F - 82°F</td>
<td>30°F - 82°F</td>
<td>30°F - 82°F</td>
<td>30°F - 82°F</td>
<td>30°F - 82°F</td>
<td>30°F - 82°F</td>
<td>30°F - 82°F</td>
<td>30°F - 82°F</td>
<td>30°F - 82°F</td>
<td>30°F - 82°F</td>
</tr>
</tbody>
</table>

| Use Widely | Feasible | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |

Tensioners

| Belt Width | 18”-28” | 450-720 mm | 18”-28” | 450-720 mm | 18”-28” | 900-2400 mm | 18”-28” | 900-2400 mm |
| Belt Speed | < 1500 ft/min | < 1500 ft/min | < 1500 ft/min | < 1500 ft/min | < 1500 ft/min | < 1500 ft/min | < 1500 ft/min | < 1500 ft/min |
| Temperature Range | 20°F - 80°F | 30°F - 82°F | 30°F - 82°F | 30°F - 82°F | 30°F - 82°F | 30°F - 82°F | 30°F - 82°F | 30°F - 82°F |

<table>
<thead>
<tr>
<th>Roll-Up</th>
<th>Spring-Roo®</th>
<th>Dual-Roo®</th>
<th>Air-Static®</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tensioners</td>
<td>Powder coated</td>
<td>Zinc plated</td>
<td>Zinc plated</td>
</tr>
<tr>
<td>Material</td>
<td>Stainless steel</td>
<td>Stainless steel</td>
<td>Stainless steel</td>
</tr>
<tr>
<td>Corrosion Resistance</td>
<td>Excellent</td>
<td>Excellent</td>
<td>Excellent</td>
</tr>
<tr>
<td>Available</td>
<td>Stainless Steel</td>
<td>Stainless Steel</td>
<td>Stainless Steel</td>
</tr>
</tbody>
</table>

2018 AAGCO/COOETE Catalog
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.

<table>
<thead>
<tr>
<th>Pro-Cleaner</th>
<th>Mini-Scraper</th>
<th>Scraper</th>
<th>E-Z Scraper®</th>
<th>Super-Scraper®</th>
<th>Skajder MXA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Belt Width</td>
<td>18”-24”</td>
<td>450-600 mm</td>
<td>18”-24”</td>
<td>450-600 mm</td>
<td>30”-40”</td>
</tr>
<tr>
<td>Belt Speed</td>
<td>&lt; 500 fpm</td>
<td>2.5m/sec</td>
<td>&lt; 500 fpm</td>
<td>2.5m/sec</td>
<td>&lt; 1000 fpm</td>
</tr>
<tr>
<td>Head Pulley Diameter</td>
<td>6”-2”</td>
<td>150-500 mm</td>
<td>12”-3”</td>
<td>300-900 mm</td>
<td>12”-3”</td>
</tr>
</tbody>
</table>

Primary Tensioner

- Force-1®: YES | YES | YES | NO | NO |
- E-Z Traction®: YES | YES | YES | YES | NO |
- Air-Shoe® (nonaxial): NA | NA | NA | NO | YES |
- Spring-Loaded (nonaxial): NA | NA | NA | NA | YES |

Blade Conditions

- OK on reversible belt?: YES | YES | NO | YES | YES |

Blade Material

- Skajder® V: YES | YES | YES | YES | YES |
- Skajder® A: YES | YES | YES | YES | YES |
- Skajder® B: YES | YES | YES | YES | YES |
- Skajder® C: YES | YES | YES | YES | YES |
- Skajder® AT: YES | YES | YES | YES | YES |
- Skajder® KC (Ceramic): NO | NA | NA | NA | YES |
- Skajder® AR: YES | YES | YES | YES | YES |

Secondary Belt Cleaner Tensioners

- Double-Spring®: YES | YES | YES | YES | YES |
- Spring-Loaded®: NO | NO | NO | YES | YES |
- Air-Shoe® MXA: NA | NA | NA | NA | NA |
- Roll-Up®: YES | YES | YES | YES | YES |

Secondary Blades

- E-Z Traction®: YES | YES | YES | YES | YES |
- Air-Shoe®: NO | NO | NO | YES | YES |
- Primary Mounting Brackets

Primary Belt Cleaner Tensioners

- Roll-Up®: YES | YES | YES | YES | YES |
- Backup® MXA: YES | YES | YES | YES | YES |
- Spring-Loaded® MXA: NO | NO | NO | YES | YES |
- Double-Spring®: YES | YES | YES | YES | YES |
- Air-Shoe® MXA: NO | NO | NO | YES | YES |

Secondary Belt Cleaner Tensioners

- Roll-Up®: YES | YES | YES | YES | YES |
- Backup® MXA: YES | YES | YES | YES | YES |
- Spring-Loaded® MXA: NO | NO | NO | YES | YES |
- Double-Spring®: YES | YES | YES | YES | YES |
- Air-Shoe® MXA: NO | NO | NO | YES | YES |

Secondary Blades

- E-Z Traction®: YES | YES | YES | YES | YES |
- Air-Shoe®: NO | NO | NO | YES | YES |
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 carriage allows for easy service and inspection.
- Available with Bolt-Up®, Snap-Spring® or All-Shock® Tensioning Systems.
- Available with optional water spray.
- Maximum Belt Speed = 1000 ft/min (3.05 m/s).

Razor-Back Retractable System™
- Longwearing Abrasion-Resistant tungsten carbide blades provide and maintain 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, allowing for cleaning of the other side without breaking 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 than 9’ of clearance to be installed and maintained.
- Maximum Belt Speed = 1000 ft/min (3.05 m/s).

Razor-Back MDX™ Belt Cleaner
- Foroflex® (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 or F-Tips for conveyor belts with mechanical fasteners.
- Slide-out service carriage allows for easy service and inspection.
- Available with Bolt-Up®, Snap-Spring® or All-Shock® Tensioning Systems.
- Maximum Belt Speed = 1200 ft/min (3.66 m/s).

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 blades or as a cartridge.
- Optional Ceramic (XC) coated blade available for high speed high tonnage conveyor systems.
- Maximum Belt Speed = 1200 ft/min (3.66 m/s).

Skalper III Belt Cleaner
- Skalper® (patented) 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 = 750 ft/min (2.3 m/s).

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 ft/min (1.52 m/s).

- All belt cleaner components and mounting hardware are constructed from 304 Stainless Steel and all have a life-time guarantee for the life of the belt cleaning system.
- Convex 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 mining kits are also available.
**Skalper® Belt Cleaner**

- Skalper® (patented) one piece blade maintains an effective cleaning edge throughout the life of the blade.
- E-Z Torque® (patented) tensioning system provides a constant consistent 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.

Maximum Belt Speed = 1000 fpm (5.0 miles/hour)

FUll Diameter: 17" – 36" (430 – 915mm)

Applications: Coal Fired Power Plants, Hard Rock Mining, Steel Mills, Iron Ore, Aggregates and Minerals

**Super-Skalper® Belt Cleaner**

- The micro-duty patented Super Skalper™ one piece blade maintains an effective cleaning edge throughout the life of the blade.
- Heavy-duty, 3 piece designed mounting tube with E-Z Torque® (patented) tensioner style tensioning system provides a constant consistent tension throughout the life of the blade. Blade widths over 45" and above require dual tensioners.
- Blade-Wear Indicator allows you to monitor blade wear easily without having to shut the system down for inspection.
- Optional Ceramic (XC) beaded blade available for high speed high tonnage conveyor systems

Maximum Belt Speed = 1200 fpm (6.0 miles/hour)

Full Diameter: 20" – (400mm+)

Applications – Underground Mining, Hard Rock Mining, Metal (copper/zinc) Mining, Steel Mills, Iron Ore, Bulk Slipping Terminals, Coal Fired Power Plants, Coal Preparation Plants

**Wash Box® Belt Cleaning System**

- Complete belt cleaning system that incorporates a series of spray bars, belt cleaners and pressure/water collection roll to maximize the effectiveness and virtually eliminate all carry-back
- Fully enclosed system that contains the wash water 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 (5.5 miles/hour)

Applications – Coal Fired Power Plants, Bulk Slipping Terminals, Coal Preparation Plants, Underground Mining, Hard Rock Mining, Steel Mills, Iron Ore, Minerals (Phosphate, Potash, Salt Mixings)

**Chevron™ Belt Cleaner System**

- Patented concave shaped rubber or urethane discs perform a sweeping action to clean chvron, 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 miles/hour)

Applications – Wood Processing, Minerals (Phosphate, Potash, Salt Mixings, Recycling

**TORO® Belt Cleaner**

- Effective flexible belt cleaner that can accommodate reversing conveyor belt systems
- Available with replaceable V-Tips for Vulcanized conveyor belts or ST-Tips for conveyor belts with mechanical fasteners
- Slide-in service cartridge allows for easy service and inspection
- Available with Belt-Up®, Duo-Spring® or An-Show® Tensioning Systems

Maximum Belt Speed = 1000 fpm (5.0 miles/hour)

Applications – Aggregate, Cement, Coal Fired Power Plants, Minerals

(Phosphate, Potash, Salt Mixings, Wood Processing, Recycling

**Chevron™ Notched Disc**

- Unique rotary fingers are forced against the base of the chevron to discharge material from the belt
- Chevron™ Discs are available in both Rubber and Urethane, Notched or Solid

**Chevron™ ROLL Dics**

- Single shaft rotating abrasion resistant urethane discs

**Toro® Bolt-Dics**

- Shown with Spring-Loaded Tensioner

REMOVABLE INSPECTION PORTS – on each side with wash drain hose included.
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 ensure equal and constant blade pressure, reducing maintenance and ensuring high cleaning efficiency throughout the life of the blade.
- Flipable two-sided, dual durometers blade to give you twice the blade life.

Maximum Belt Speed = 1500 ftm (5.0 m/min)
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 Bob-up, Duo-Spring® or Al-Shoc® Tensioning Systems

Maximum Belt Speed = 1000 ftm (3.0 m/min)
Applications: Underground Mining, Coal Preparation Plants

**Vibrating Dribble Chute**
- Vibrating liner keeps material moving and accumulations from clogging chute and burying cleaners.
- Rubber lined “excloner” bracket protects chute by transmitting vibration to liner, avoiding metal fatigue.
- Low-friction UP/AV bring promotes material flow without accumulation and cuts build-up.
- Rugged vibrator provides precise performance - 115 Volt 60HZ Single Phase (with switchbox)

Electric Vibrator provides 400 lbs of Force with durable performance.

Maximum Belt Speed = 1000 ftm (3.0 m/min)
Applications: Underground Mining, Coal Preparation Plants

**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, light clearance applications.
- Diagonal Plow discharges material from one side of the belt.
- Available with rubber or urethane plow material.

Maximum Belt Speed = 1500 ftm (5.0 m/min)
Applications: Coal Feed Power Plants, Hard Rock Mining, Underground Mining, Coal Preparation Plants, Steel Mills, Iron Ore, Aggregates, Metals (corresponding alloys), Mineral (Phosphate, forest, salt) Mining, Bulk Shipping Terminals

---

TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Page</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-3</td>
<td>Primary Belt Cleaners</td>
</tr>
<tr>
<td>4-5</td>
<td>Belt Cleaner / Belts / Tensioner Chart</td>
</tr>
<tr>
<td>6-8</td>
<td>Secondary Belt Cleaners</td>
</tr>
</tbody>
</table>

---

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 downtimes.

**Cleaning Systems Approach:**
- Cleaners work more efficiently in a system.
- A system is multiple cleaners of any brand or type.
- Ball 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 faced belt.
- Diameter of the head pulley.
- Material and temperature of product being conveyed.
- Belt speed.
- Location available for proper installation.
- Location off 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**
Installs 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.

**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 of 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.

---

www.asgco.com | 800.344.4000

---

---
Engineered Conveyor Products & Services For Bulk Material Handling Systems

ASGCO® “Complete Conveyor Solutions”, headquartered in Allentown, PA, is a leading manufacturer of proprietary bulk conveyor components and accessories that enhance material flow performance. Founded in 1971 by Alfred S. Gibbs and his son Todd Gibbs, ASGCO® believes 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.

ASGCO® is a diversified and innovative company with six major divisions that serve specific targets of the material handling industry. We market these innovative products and services through selected distributors, joint ventures, and representatives worldwide. The growth of the company, over the years, is due to recognized improvements in the productivity of our customers operations.

Every material handling system has conditions — either large or small, constant or intermittent, open or obscure — that an ASGCO® study can identify and improve. We also believe that a consulting study will provide improvements that will be a wise investment. That’s because, no matter what the basic assignment, we always seek out ways to increase production and to reduce operating costs.

We typically start these services with a thorough on-site inspection to observe the operation and gather data. Next, we analyze and study the data, and often seek additional information. The end result: recommendations for new procedures and improved equipment — all aimed at providing solutions that can be pragmatically implemented.

ASGCO® will continue to serve the needs of the traditional bulk materials industry. Every client can be assured that ASGCO® bases its reputation on quality service and products. We promise that we will not just meet, but exceed your expectations in helping our customers increase production and reduce operating costs.
Belt Cleaners

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

Primary & Secondary Belt Cleaners