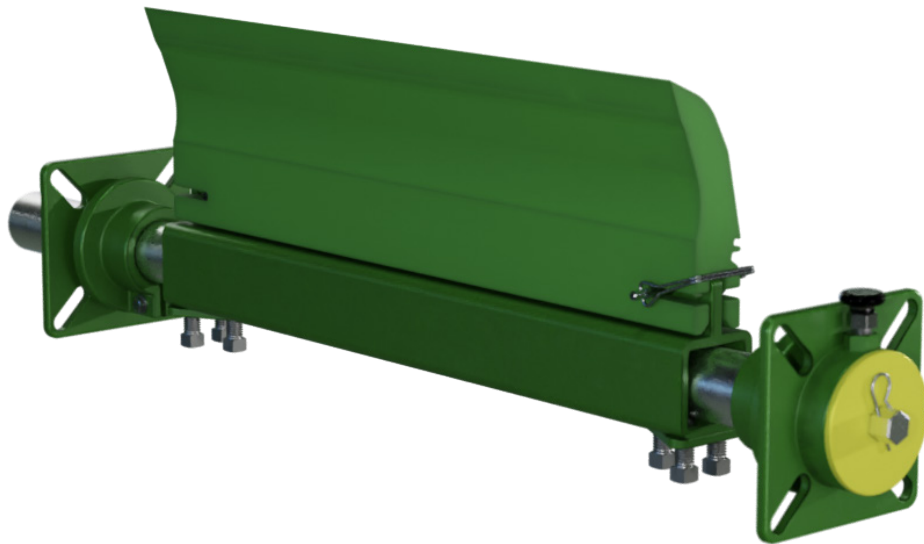


REPLACEMENT & AFTERMARKET

PRIMARY BELT SCRAPERS



Collaborate / Create / Convey

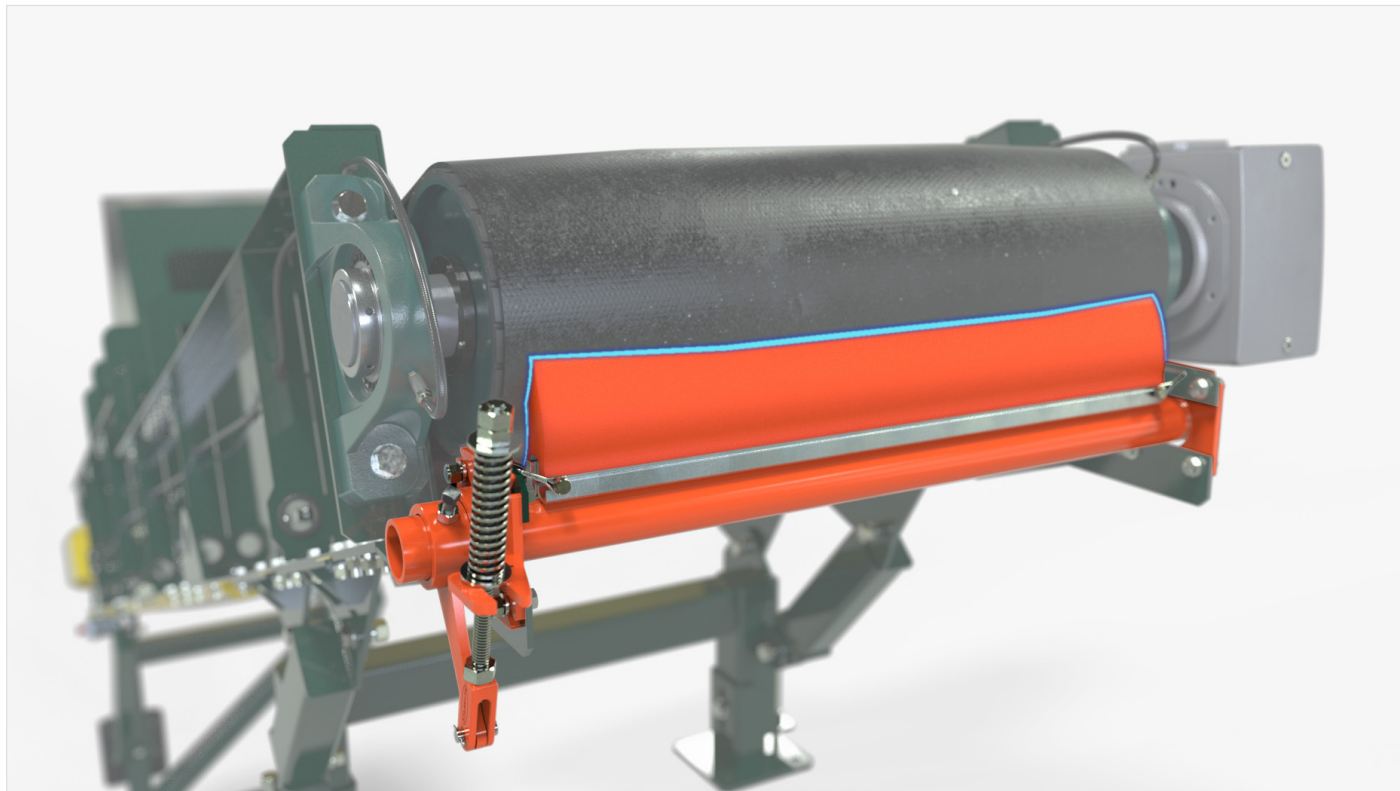
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PRIMARY BELT SCRAPERS



Primary Belt Scrapers

Belt conveyors handle bulk materials that adhere to the belt past the discharge point, creating carryback. This fugitive material accumulates on return idlers and structures, leading to required cleanup labor and accelerated belt wear. Primary belt scrapers mount at the head pulley to shear off 60–70% of initial carryback before it enters the return run.

Constructed with heavy-duty urethane or tungsten carbide blades, these precleaners maintain consistent contact across the full belt width. Tensioning systems adjust blade-to-belt pressure dynamically, allowing deflection when mechanical splices pass while preserving cleaning efficiency. Available in standard, compact, and reversing configurations, the assemblies mount via adjustable brackets or direct pulley shaft clamps to match specific conveyor geometries.



APPLICATIONS



Recycling & Waste Management

Conveyors in material recovery facilities process mixed, moderately abrasive materials. Polyurethane primary scrapers shear debris at the head pulley.



Mining & Aggregate

Heavy aggregate and crushed stone generate severely abrasive carryback. Tungsten carbide-tipped blades withstand high-friction contact.



Food Processing

Washdown environments require sanitary material handling without product contamination. FDA-compliant urethane blades remove wet or sticky residue.



Foundries & Hot Materials

High-temperature conveying subjects standard elastomers to rapid heat degradation. Heat-resistant urethane compounds operate continuously in temperatures up to 400°F.



Outdoor & Wash Systems

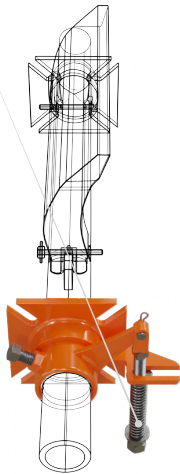
High moisture content creates sticky material that resists dry scraping. Polyurethane blades with grooves channel wet material away from the belt surface.

KEY FEATURES

01

Automatic Pneumatic Tensioning System:

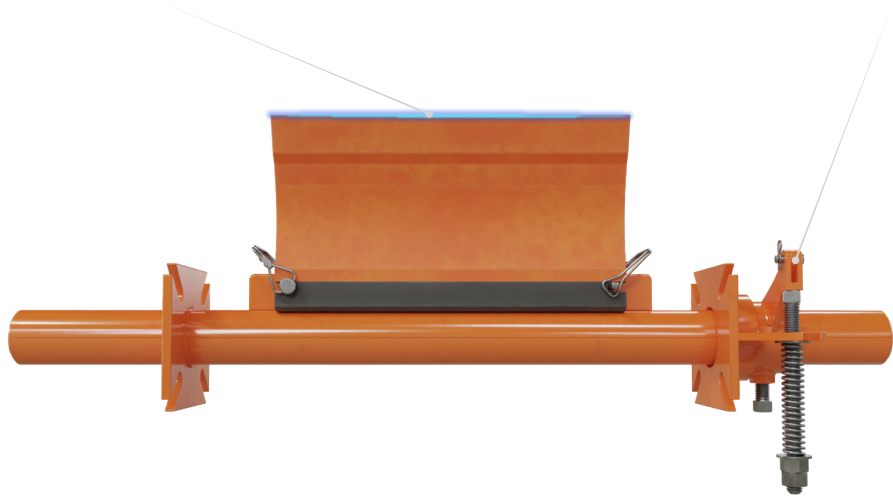
Pneumatic mechanisms maintain constant blade-to-belt pressure continuously without manual intervention.



02

Tungsten Carbide Tip Assembly:

Carbide tips bonded to a urethane backing handle severely abrasive applications, such as mining and crushed stone.



03

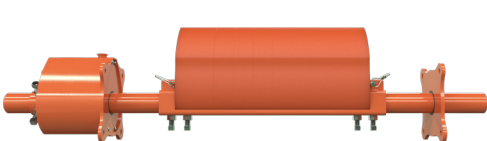
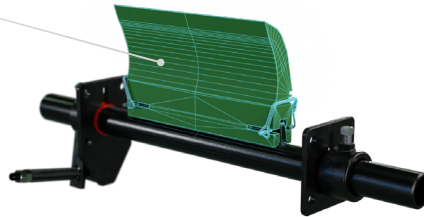
Manual Click Tensioning Mechanism:

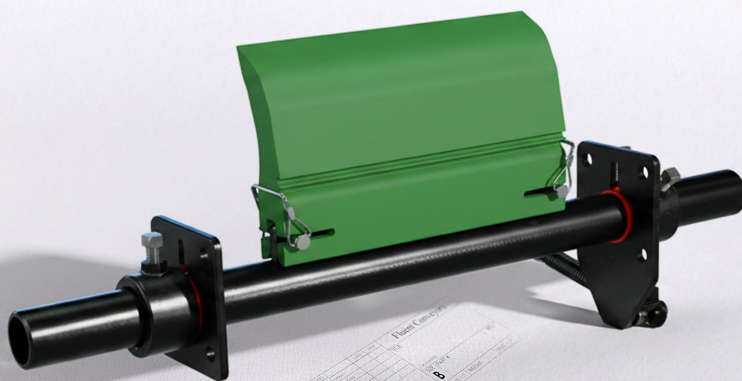
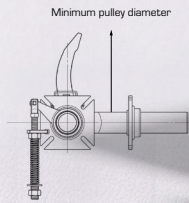
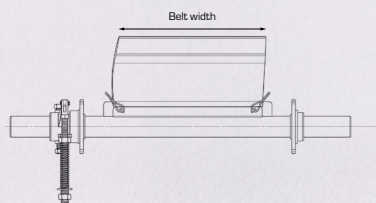
Audible click adjusters allow operators to advance blade position against the belt as material wear occurs.

04

Heavy-Duty Polyurethane Blade Construction:

Polyurethane profiles shear non-abrasive to highly abrasive material from the belt surface while maintaining compatibility with mechanical and vulcanized splices.





PRIMARY BELT SCRAPERS SPECIFICATIONS

Parameter	Standard Range	Extended/Custom
Belt width	12" - 120"	Model-specific ranges vary
Belt speed	500 - 2000 fpm	High-speed models available for 1500+ fpm
Minimum pulley diameter	6" - 20"	Compact models for limited space
Temperature range	-30°F to 300°F	Heat-resistant options up to 400°F
Splice compatibility	Mechanical and vulcanized	Low-profile designs prevent splice damage

Blade Compound

Duty Class	Durometer	Build Material
General Duty	45-60	Polyurethane
Moderately Abrasive	60-70	Polyurethane
Highly Abrasive	80-90	Polyurethane
Severely Abrasive	N/A	Carbide + urethane backing
Wet or Sticky	60-70	Polyurethane with grooves

THE ENGINEERING ADVANTAGE

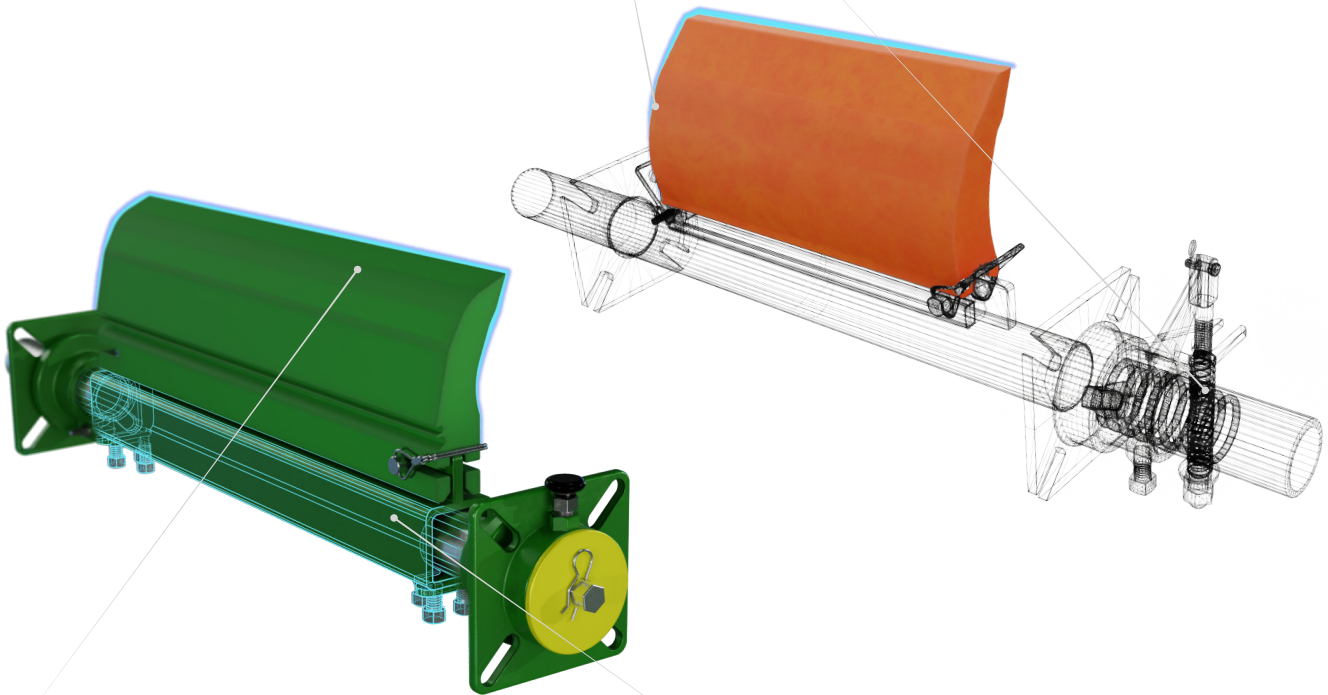
This section outlines the structural methodology behind primary belt scrapers, covering blade composition and tensioning mechanics to ensure continuous operation and component service.

Mechanical Splice Deflection Geometry:

Low blade-to-belt pressure settings allow the urethane structure to flex and pass mechanical fasteners without damaging the splice or the blade.

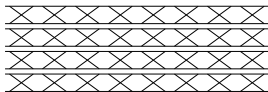
Constant-Pressure Tensioning Mechanics:

Spring and pneumatic assemblies adjust dynamically to blade wear, ensuring continuous belt contact across the entire face width.



Bidirectional Groove Configuration:

Reversing models utilize symmetrical designs and diamond groove patterns to shear material regardless of the belt's travel direction.



High-Speed Damping Integration:

Conveyors exceeding 1000 fpm utilize stiffer blade compounds and reinforced mounting brackets to prevent blade vibration.

CONTACT INFORMATION

OUR ENGINEERS WILL SPEC THE EXACT PART FOR YOUR SYSTEM

For product specifications, engineering support, or order inquiries, please contact our team using the information provided below. Our specialists are available to ensure accurate recommendations and efficient service for your application requirements.

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