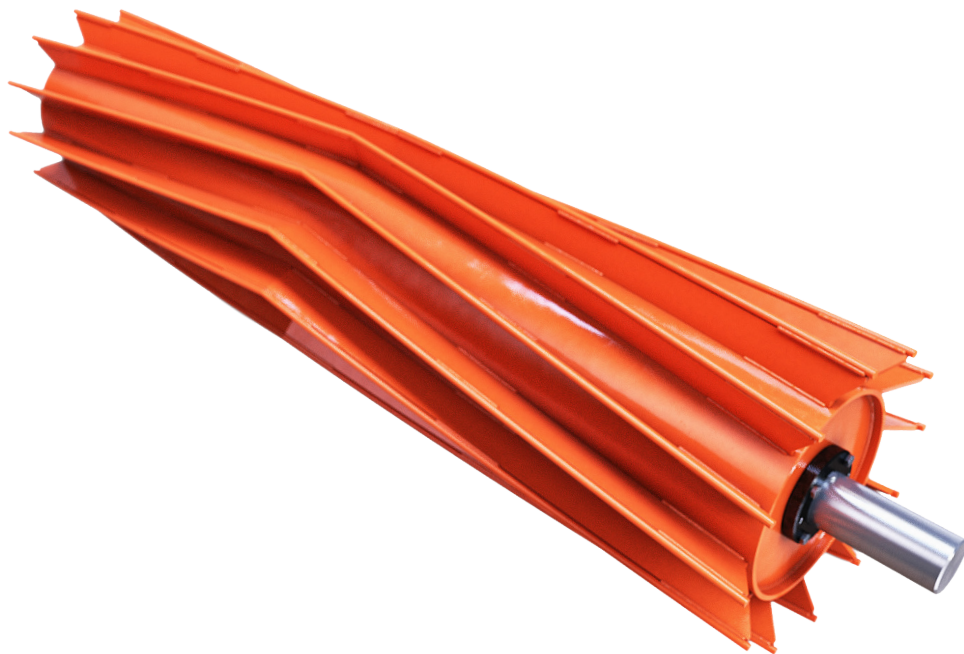


REPLACEMENT & AFTERMARKET

WINGED TAIL PULLEYS



Collaborate / Create / Convey

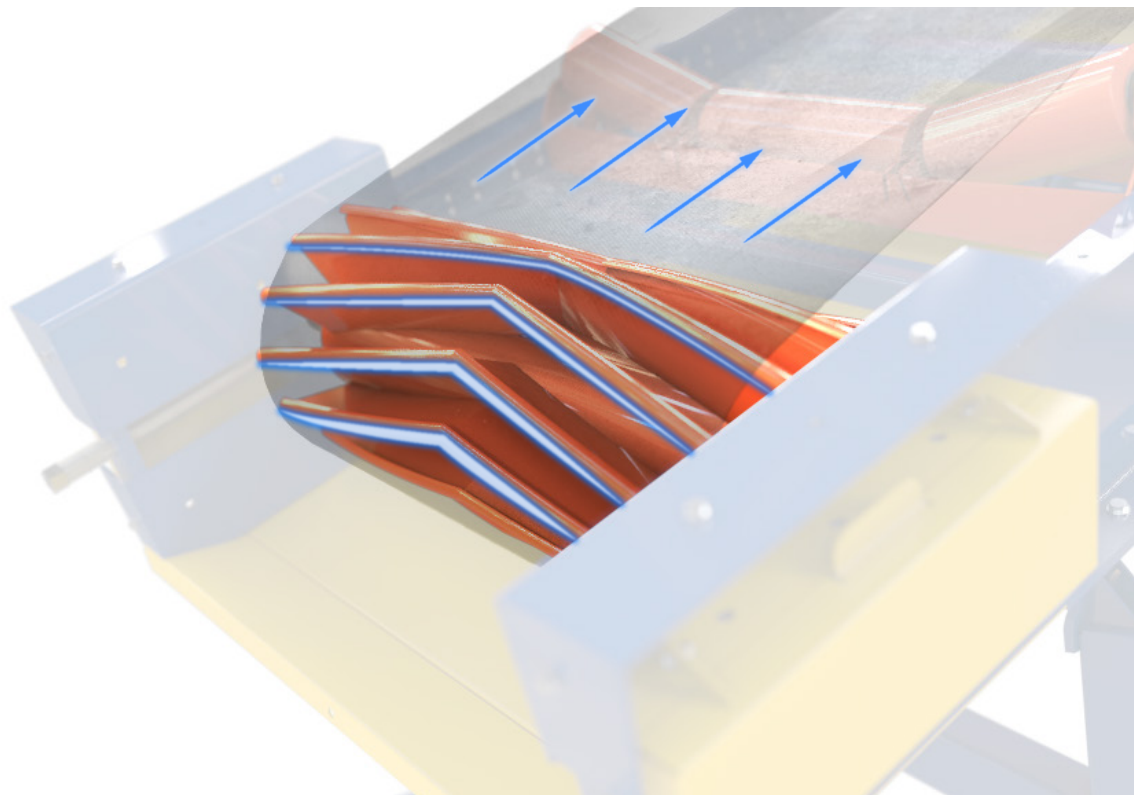
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WINGED TAIL PULLEYS



Winged Tail Pulleys

Operating in severe conveying environments, tail and bend pulleys face extreme degradation from fugitive material. Traditional straight wing designs constantly struggle with rock entrapment and wing bending. This trapped debris creates destructive pressure points that puncture belting and destroy mechanical splices, inevitably leading to costly downtime and component failure.

Engineered to eliminate these failures, our advanced V-shaped wing pulleys guarantee absolute reliability. The optimized geometry continuously centers the belt while aggressively deflecting abrasive material. Forged with thick rims and solid precision welds, this continuous-contact architecture naturally resists bending, protects belting, and drastically cuts mechanical noise by up to 50 dB.

APPLICATIONS



Waste & Recycling

Engineered to conquer unpredictable material flows. Forged with thick rims and solid precision welds, it naturally resists the severe wing bending caused by jagged debris, guaranteeing maximum belt protection and continuous uptime in demanding recovery circuits.



Heavy Mining & Mineral Extraction:

Actively deflects abrasive ores and fugitive rocks. This prevents material entrapment that would otherwise puncture belting or destroy mechanical splices.



Aggregates (Sand & Gravel):

Built for high-volume load-out and transfer circuits, the optimized geometry prevents aggregate lodging and guarantees constant belt contact, drastically extending component life.



Energy, Marine, & Overland Transfer:

Steady, continuous contact between the pulley and the belt minimizes mechanical chatter, cutting operational noise and vibration by up to 50 dB for reliable, long-distance conveying.



Construction & Demolition (C&D) Recycling:

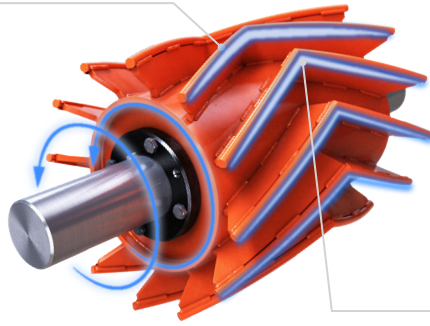
Forged with exceptionally thick rims and solid precision welds, the structure naturally resists the severe wing-bending forces caused by unpredictable, jagged debris.

KEY FEATURES

01

Acoustic & Vibrational Precision:

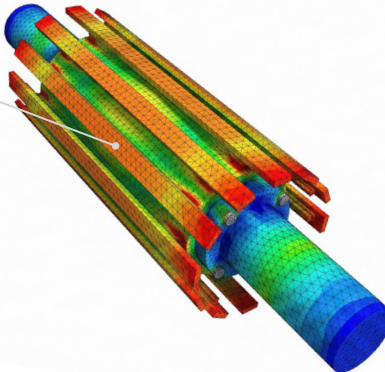
Steady, continuous contact between the pulley and the conveyor belt drastically reduces mechanical chatter, cutting noise and vibration by up to 50 dB per pulley.



02

Guaranteed Bending Resistance:

The complex geometric profile naturally resists the severe wing bending issues that frequently plague traditional pulley designs.



03

Versatile Wing Pattern Catalog:

Available in Standard, Chevron, Herringbone, Spiral, and Round Bar configurations, each engineered to handle specific material challenges, from aggressively shedding sticky carryback in recycling to providing continuous belt contact for vibration-sensitive e-waste sorting.



04

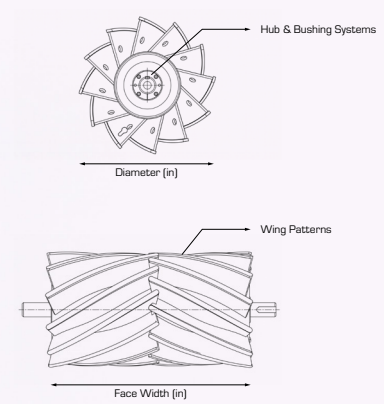
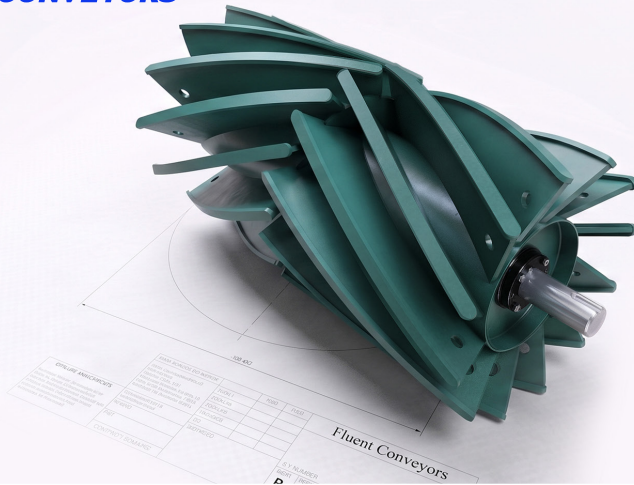
Optimized Material Deflection:

The specialized V-shape intelligently deflects fugitive rock and material outward, preventing entrapment and buildup between the wings.

05

Enhanced Surface Contact Bars:

By eliminating trapped fugitive material that punctures belting and ensuring constant contact, the design is significantly gentler on mechanical belt splices, ensuring long-lasting performance.



WINGED TAIL PULLEYS SPECIFICATIONS

Winged Tail Pulleys Technical Specifications

Feature	Details
Diameter Range (in)	6" – 60" (Duty class dependent)
Face Widths (in)	6" – 72" (Custom increments available)
Wing Patterns	Standard, Chevron, Herringbone, Spiral, Round Bar
Duty Classes	CEMA, Mine Duty, Super Duty
Hub & Bushing Systems	QD, XT, Taper-Lock, Keyless Locking Devices
Face Profile	Flat or Crowned
Performance Upgrades	AR Steel Contact Bars, Dynamic Balancing, Center Disc Reinforcement

Duty Class Application

Duty Class	Loading Conditions	Build Strength
CEMA	Uniform loads, infrequent starts	1/4" – 1/2" Wing Bars
Mine Duty	Full, non-uniform loads	5/8" – 1" Wing Bars
Super Duty	Severe loads & frequent cycles	3/4" – 1" Wing Bars

THE ENGINEERING ADVANTAGE

This section outlines key engineering principles behind our wing pulleys, focusing on precision design, validated performance parameters, and controlled manufacturing standards to reduce risk, ensure seamless system integration, and extend overall service life.

Center-Plate Elimination:

Meticulously designed without a traditional center plate. In standard designs, a worn center plate acts as a blade that can catastrophically cut conveyor belts.

Linked Center Geometry:

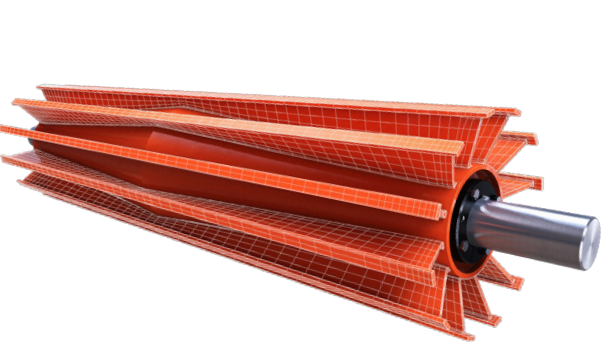
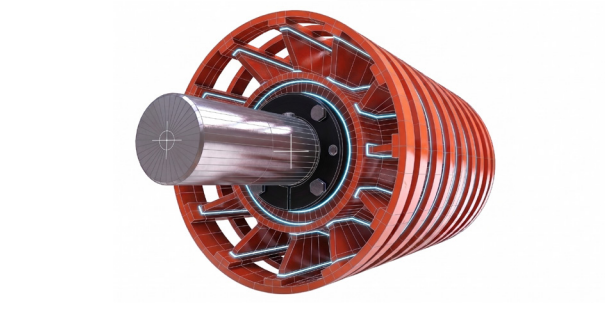
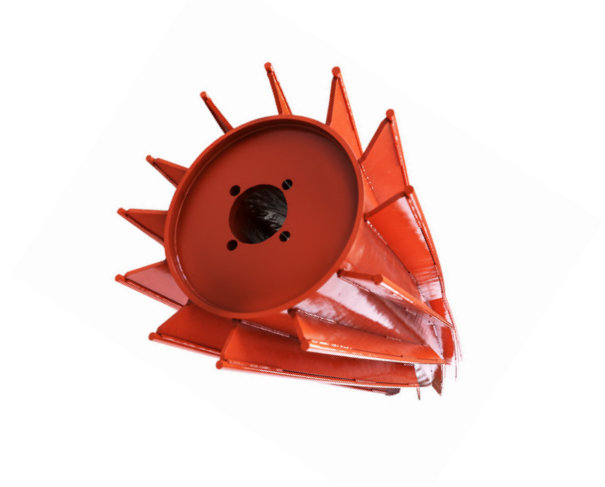
The wings are structurally linked at the center, completely removing the pinch point where fugitive material typically becomes trapped.

Uncompromising Structural Integrity:

Fabricated with thick rims and solid, precision welds to ensure guaranteed dynamic balance and smooth rotation.

Abrasion Resistant (AR) Optimization:

Available with a full-width wearable wing and an optional high-grade Abrasion Resistant (AR) steel construction upgrade, engineered to extend service life exponentially in the most punishing applications.



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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Send us your questions or requests, and we'll respond promptly.

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