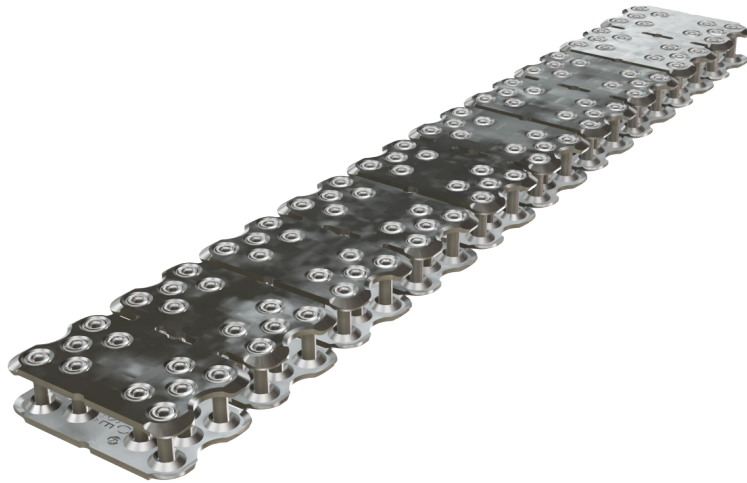


REPLACEMENT & AFTERMARKET

RIVET SPLICE KITS



Collaborate / Create / Convey

TABLE OF CONTENTS

Rivet Splice Kits	02	Product specifications	05
Applications	03	The Engineering Advantage	07
Key Features	04	Contact Information	08

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RIVET SPLICE KITS



Rivet Splice Kits

Medium- and heavy-duty conveyor belts concentrate their highest stresses at the splice, where hinge wear, fastener pull-out, and material sifting through the joint determine how long the belt stays in service. A splice that cannot be opened locks the belt onto the conveyor for every cleaning, extension, or removal, while a splice that leaks fines contaminates the product stream and abrades return-side components from the inside. On belts too worn for vulcanizing, a failed joint can strand the entire line for hours.

Rivet splice kits join belt ends with self-setting rivets driven through steel fastener hardware in two systems. Rivet hinged fasteners pair low-profile fastener strips with a removable hinge pin, forming a separable joint rated to 2,000 PIW that opens for belt removal, extension, or cleaning. Rivet solid plate fasteners compress heavy-gauge top and bottom plates through the belt in staggered rivet patterns, closing the joint sift-free at ratings to 800 PIW. Every kit is specified against belt thickness after skiving, PIW rating, and minimum pulley diameter, so the installed splice matches the belt and conveyor it serves.

APPLICATIONS



Recycling

Sorting lines and transfer conveyors run worn, unevenly abraded belts through contaminated streams that rule out vulcanized repairs and demand frequent belt access for cleaning. Rivet hinged fasteners in medium-duty sizes splice belts in the field with hammer or power tools, and the removable hinge pin opens the joint whenever the belt comes off for maintenance.



Aggregates & Cement

Sand, crushed stone, and cement fines sift through any opening in a splice, dusting return idlers and eroding the joint from within. Solid plate fasteners in 6-rivet and 10-rivet staggered configurations compress the full belt width, sealing the splice against fine material leakage.



Mining

High-tension trunk and haulage conveyors carry thick belting on layouts where a splice failure strands the whole operation. Hinged fasteners rated to 2,000 PIW and 14-rivet solid plate configurations rated to 800 PIW hold splice strength on belts up to 1" thick.



Agriculture

Grain elevators and feed lines combine combustible dust atmospheres with product streams that no fastener fragment may enter. Non-sparking copper alloy plate fasteners deliver spark-free operation while formed rivets grip the carcass without severing its fibers.



Food Processing

Washdown chemistry, sanitation regimes, and magnetic separators disqualify standard plated hardware on processing lines. Stainless steel hinged fasteners resist acids and repeated washdown, with extra resistance to magnetic attraction where separator systems operate.



General Material Handling

Package handling and portable conveyors pair thin belting with small-diameter pulleys and tight service windows. Light-duty hinged sizes splice belts from 1/8" thick on pulleys down to 5", installing with nothing more than a hammer.

KEY FEATURES

01

Low-Profile Fastener Strips:

Formed steel strips rivet to each belt end at a reduced height that clears belt cleaners, return idlers, and scraper blades along the carrying and return runs.

02

Scalloped Plate Edge:

Contoured strip and plate edges taper the fastener perimeter away from cleaner blade contact, cutting the wear that squares-off edges concentrate on a splice.

03

Lugged Hinge Pin:

A cable pin cut to belt width joins the two fastener strips, with formed lugs engaging the fastener loops to block pin migration while the belt flexes around pulleys.

04

Staggered-Pattern Plate Sets:

Heavy-gauge top and bottom plates compress the belt in 6-, 10-, or 14-rivet staggered patterns, distributing splice tension across multiple offset load points.

05

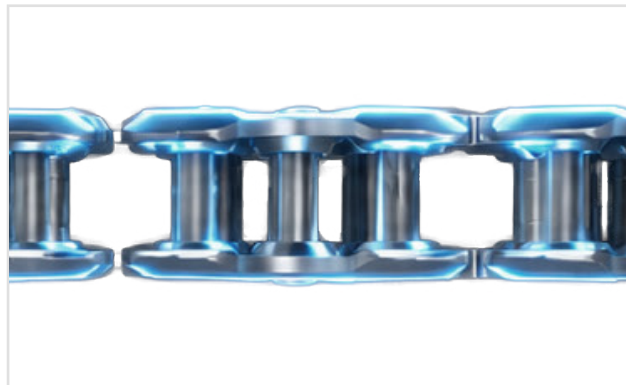
Self-Setting Rivet Hardware:

Rivets with pre-assembled pilot nails drive between the carcass fibers and form heads on both belt faces, seating under hammer or power tools with color-coded sizing by belt thickness.

06

Stainless and Alloy Fastener Grades:

Plated steel hardware serves standard duty, with 300 and 430 series stainless, high-strength alloy, corrosion-resistant alloy, and non-sparking copper alloy grades matched to washdown, coastal, abrasive, and explosive atmospheres.





RIVET SPLICE KITS SPECIFICATIONS

Rivet Hinged Fastener Selection

Size	PIW rating	Belt thickness range	Min. pulley Ø (100% tension)	Min. pulley Ø (75% tension)	Applications
Size 2	330 PIW (60 kN/m)	1/8" - 3/8" (3 - 10 mm)	5" (125 mm)	-	Light industrial, portable conveyors
Size 3	400 PIW (70 kN/m)	7/32" - 7/16" (6 - 11 mm)	9" (230 mm)	7" (175 mm)	Package handling, light aggregate
Size 5	450 PIW (79 kN/m)	7/32" - 7/16" (6 - 11 mm)	9" (230 mm)	7" (175 mm)	Medium-duty aggregate, recycling
Size 5-1/2	650 PIW (114 kN/m)	5/16" - 19/32" (8 - 15 mm)	12" (300 mm)	10" (250 mm)	Mining, heavy aggregate
Size 6	800 PIW (140 kN/m)	13/32" - 11/16" (10.5 - 17 mm)	18" (450 mm)	16" (400 mm)	Coal, cement, quarry operations
Size 6 Low Profile	800 PIW (140 kN/m)	5/16" - 23/32" (8 - 18 mm)	18" (450 mm)	16" (400 mm)	Scraper-compatible applications
Size 8	1,500 PIW (263 kN/m)	13/32" - 11/16" (10.5 - 17 mm)	18" (450 mm)	-	Heavy mining, long-distance haulage
Size 9	2,000 PIW (350 kN/m)	5/8" - 1 (16 - 25.5 mm)	42" (1,050 mm)	-	Maximum-capacity mining operations

Rivet Solid Plate Fastener Selection

Configuration	PIW rating	Belt thickness range (after skiving)	Min. pulley Ø (100% tension)	Min. pulley Ø (75% tension)	Applications
Staggered	400 PIW (70 kN/m)	3/16" - 21/32 (5 - 17 mm)	14" (350 mm)	-	Sand, gravel, crushed stone, grain
10-rivet staggered	650 PIW (114 kN/m)	7/32" - 11/16" (6 - 17 mm)	18" (450 mm)	16" (400 mm)*	Coal, cement, salt, aggregate
14-rivet staggered	800 PIW (140 kN/m)	13/32" - 15/16" (10 - 24 mm)	36" (900 mm)	34" (860 mm)	Heavy mining, high-tension systems

RIVET SPLICE KITS SPECIFICATIONS

Hinge Pin and Material

Option	System	Service environment
Nylon-covered steel cable pin	Rivet hinged	Standard duty with reduced hinge wear
Armored steel cable pin	Rivet hinged	Standard applications
Heavy armored steel cable pin	Rivet hinged, Size 5-1/2 and larger	Heavy-duty, high-tension service
Plated steel fasteners	Both systems	Indoor and dry applications, standard duty
300 series stainless steel	Rivet hinged	Food processing, washdown, corrosive atmospheres, magnetic separator zones
430 series stainless steel	Rivet solid plate	Outdoor service, chemical exposure, moderate corrosion
High-strength alloy	Rivet hinged, select sizes	Extreme abrasion service
Corrosion-resistant alloy	Rivet hinged	Outdoor and coastal environments with salt exposure
Non-sparking copper alloy	Rivet solid plate, select 6-rivet sizes	Grain handling and explosive atmospheres

Note: Fastener rating must equal or exceed the belt's rated PIW strength. Minimum pulley diameter is a hard requirement; do not install fasteners where the belt wraps a pulley less than 90°, and subtract 20% of overall diameter when calculating effective minimum diameter on self-cleaning wing-type pulleys. Dash (—) indicates no reduced-tension pulley allowance published for that size; run at 100% tension diameters. *10-rivet configuration permits 14" (350 mm) at further reduced tension. Not all material grades are available in all sizes; consult Fluent Conveyors for availability.

THE ENGINEERING ADVANTAGE

This section outlines the fastening methodology behind rivet splice kits, covering rivet-to-carcase engagement, splice profile control, joint separability, and installation tooling to ensure a full-rated splice matched to the belt and its pulley system.

Between-Fiber Rivet Setting:

Self-setting rivets displace the carcass fibers instead of severing them, preserving belt tensile strength through the splice zone on rubber-ply, PVC solid woven, and straight warp constructions.

Separable Hinge Construction:

Withdrawing the hinge pin opens the splice without damaging either fastener strip, releasing the belt for removal, extension, shortening, or cleaning and reclosing for continued service.

Countersunk Fastener Seating:

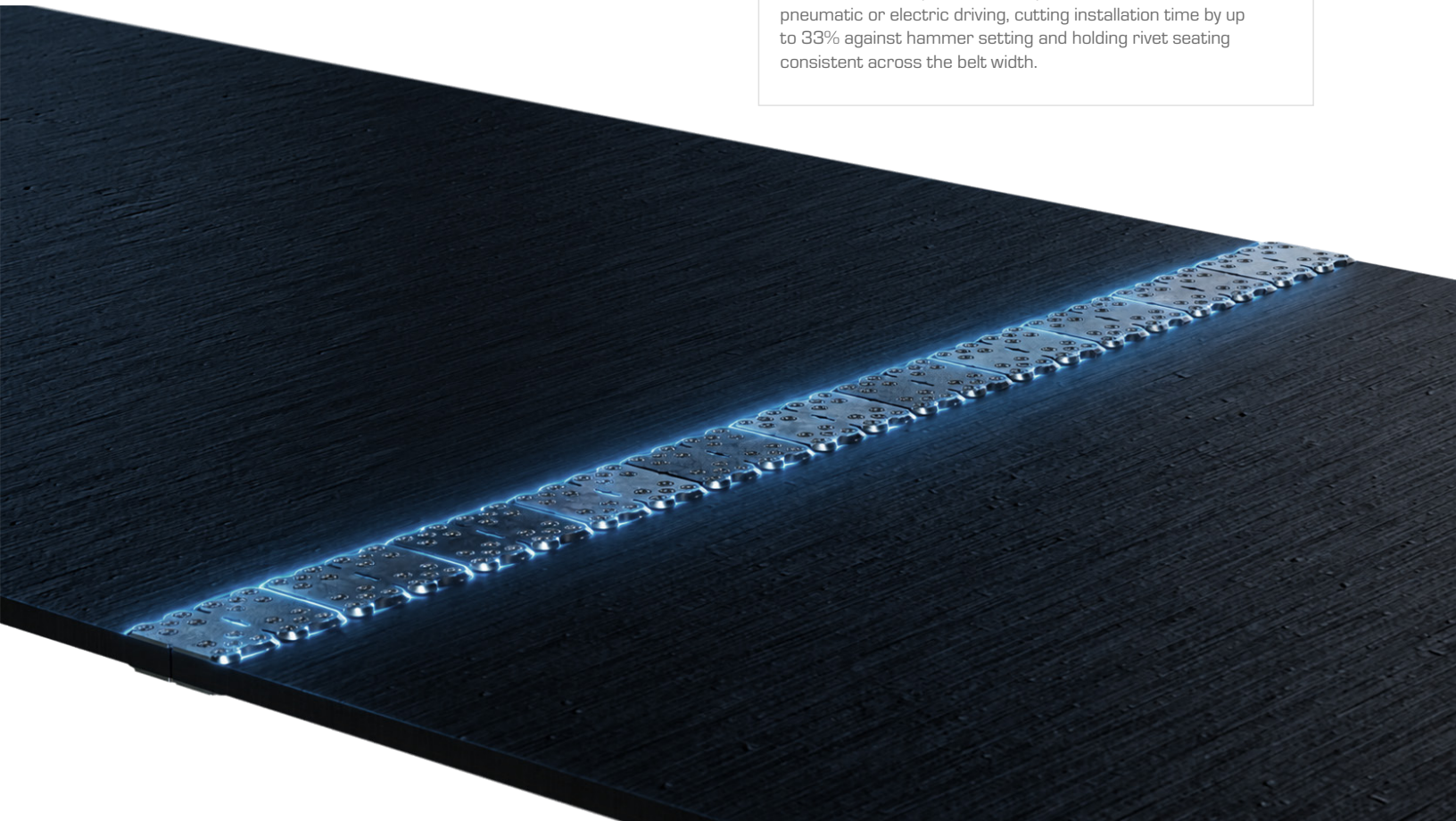
Skiving the belt cover to a specified depth seats the fastener flush with the belt surface, holding the splice profile below cleaner blades and pulley lagging contact.

Full-Width Plate Compression:

Top and bottom plates clamp the belt across its entire width under staggered rivet loading, closing the joint against fine material leakage in high-tension service.

Collated Rivet Strip Loading:

Guide blocks accept collated strips of 20 rivets at a time for pneumatic or electric driving, cutting installation time by up to 33% against hammer setting and holding rivet seating consistent across the belt width.



CONTACT INFORMATION

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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.

Reach Us Directly

Email

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

sales@fluentconveyors.com

Phone

Call us for immediate assistance and technical support.

[+1\(866\) 764-2980](tel:+18667642980)

Business Hours

Monday - Friday

8:00 AM – 5:00 PM MST

Departments

Sales & Quoting

Product pricing, availability, and order placement.

sales@fluentconveyors.com

Customer Service

Product pricing, availability, and order placement.

[+1 \(303\) 390-1228](tel:+13033901228)

Engineering

Technical specs, application review, custom configurations.

engineering@fluentconveyors.com