Mechanical Belt Fasteners

Strength, Longevity, and easy installation make them a Smart option for heavy-duty belt conveyor operations.





FLEXCO® SR[™] RIVET HINGED FASTENING System

Quality and Performance

The Flexco® SR™ Rivet Hinged Fastening System has earned a reputation for quality and performance in the most demanding material handling applications on earth. Wherever belt conveyors are used, you need a fastener system that lets you set up, splice, and get out of the way ... fast. Flexco SR fasteners deliver the performance, long life, and easy installation that maximise belt availability and help keep productivity on a roll.





Market Applications

- Coal and Hard Rock
- Underground and Surface Mining
- Wood Processing
- Asphalt Plants
- Construction and Road Equipment



Lower fastener profile extends belt splice life Less effort required for installation Reduces maintenance costs Viewport assures proper installation alignment





Fastener Overview

The SR* (Self-Setting Rivet) Fastener utilizes staggered pattern, multiple rivet attachments that pass between carcass fibers without severing them. The specially shaped head of each pilot nail works in conjunction with the installation tool anvil plate to set the rivets. The same hammer blows that set the rivets also compress the fastener plates into the belt covers. This provides maximum holding ability and distributes splice tension evenly across the width of the belt. Patented scalloped edge provides for lower fastener profile to extend belt life and reduce exposure to belt conveyors and other conveyor components.

FLEXCO® SR[™] RIVET HINGED Installation

Aluminum Installation Multiple Rivet Driving Tool

Designed for ease-of-use and portability to make multiple rivet driving simple and fast. The Aluminum MSRT tools hold the belt, fastener strip, and guide blocks securely in place allowing for a low profile, even tension finished splice. The Aluminum MSRT Applicator includes two SR700 Multiple Guide Blocks, SR759 Multiple Drive Rod, one 3lb Hammer, one set of modular gauge pins, one set of modular pieces, and one Metal box container.





Specially machined Scalloped Edge™ on riser plate allows fasteners to nest securely for accurate alignment of fasteners.

Flexco® Rivet Hinged Fastener Selection Chart

	Fastener Rating		Belt Thickness Range	Recommended Min. Pulley Diameter	
Fastener Size	For Belt Tension Rating Up To:	For Belt Strength Up To:	Measured After Skive	Operating Tension 75-100% of Fastener Rating	Operating Tension Under 75% of Fastener Rating
	PIW	kN/m	mm	mm	mm
R2	330	580	3-10	127	127
R5	450	790	6-11	230	175
R5-1/2	650	1140	8-15	300	250
R6	800	1400	10.5-17	450	400
R6LP	800	1400	8-18	450	400
R8	1500	2630	10.5-17	450	400
R9	2000	3500	16-25.5	1050	1050

^{*} These tools are also available in steel

FLEXCO® BR™ RIVET SOLID PLATE Solid Plate Fasteners

Flexco® Solid Plate Fasteners for Higher Tension Applications with Smaller Pulley Diameters

The new Flexco® Solid Plate Fasteners fastener is an addition to our Rivet Solid Plate fastening system. Ideal for pulley diameters as small as 14" (350 mm), the 6-rivet configuration provides a staggered,multiple-point rivet attachment to allow rivets to pass between carcass fibers without severing them for maximum resistance to pull-out. Plus the patented Scalloped Edge™ provides for a lower fastener profile to extend belt splice life and reduce exposure to belt cleaner blades and other conveyor components.



Features and Benefits



Flexco® BR6 fasteners nest securely in the tool to allow for fast, accurate installation.

Flexco® Rivet Solid Plate Fastener Selection Chart

	Fastener Rating		Belt Thickness Range	Recommended Min. Pulley Diameter	
Fastener Size	For Belt Tension Rating Up To:	For Belt Strength Up To:	Measured After Skive	Operating Tension 75-100% of Fastener Rating	Operating Tension Under 75% of Fastener Rating
	PIW	kN/m	mm	mm	mm
BR6	400*	700*	5-17	350	300
BR10	650	1140	6-17	450	400
BR14	800	1400	10-24	900	860

^{*}Contact Flexco Engineering for applications greater than 400 PIW (700 kN/m).

Flexco® Bolt Hinged Fastener System

Ideal for Applications that Use Smaller Pulleys, but Still Require a High-Strength, Dependable Splice.

Sturdy hinged construction makes Flexco $^{\circ}$ Bolt Hinged fasteners ideal. A choice of sizes accommodate belts from 6 mm (1/4") to 16 mm (5/8") thick.

Versatile, easy-to-install design

For belt conveyor applications subject to frequent length adjustments, the Bolt Hinged fastener is easy to install — and re-install. The joint can be separated simply by removing the hinge pin.

On-site installation requires hand or power tools. Our exclusive piloted bolt also simplifies installation and holds fastener plates firmly in place. For added strength and pull-out resistance, specially formed teeth penetrate deep into the belt carcass without damaging carcass fibers.









No. 375X

No. 550

FLEXCO® BOLT SOLID PLATE FASTENING SYSTEM

The Industry Standard for Strong, Long-Lasting Splices

Flexco® Bolt Solid Plate fasteners are engineered to meet the demands of the toughest material handling applications, providing a strong, sift-free splice with superior holding ability. A choice of sizes accommodates belts from 3/16" (5 mm) to over 15/16" (24 mm) thick.



Exclusive Piloted Bolts: Tapered tips that cradle nuts securely in place. Reduce installation time Easy to use.

Flexco® Bolt Solid Plate Fastener Selection Chart

	Fastener Rating		Belt Thickness Range	Recommended Min. Pulley Diameter When installing a 45 degree splice the minimum pulley diameter is reduced by 25%.	
Fastener Size	For Belt Tension Rating Up To:	For Belt Strength Up To:	Measured After Skive	Operating Tension 75-100% of Fastener Rating	Operating Tension Under 75% of Fastener Rating
	PIW	kN/m	mm	mm	mm
1	150	260	5-11	300	250
140*, 140VP	225	400	5-11	350	300
190,190VP	375	650	8-14	450	400
1-1/2	300	500	11-17	450	400
2,2VP	440	770	14-21	760	710
2-1/4	620	1080	14-30	920	860
2-1/2	450	790	19-25	1050	1050
3	560	980	24-32	1220	1220

Note: When used with extra long bolts the maximum belt thickness is 1-7/8" (48 mm) for No. 2-1/4 and 2" (50 mm) for No. 3.



High strength.

High strength is the result of superior design and plate compression on both the top and bottom sides of the belt. High tensile strength bolts compress top and bottom plates to distribute splice tension evenly across the entire width of each fastener plate. For added strength and pullout resistance, specially formed teeth penetrate deep into the belt carcass — without damaging carcass fibers.

Easy installation.

Field-proven templets, punches, and boring tools make it easy to quickly and accurately prepare belts for fastener installation. Fasteners are easily installed on-site using portable hand tools or power tools. Our exclusive piloted bolts also contribute to faster installation.

Market applications.

- Sand Gravel Crushed Stone Grain
- Coal Cement Salt





Installation Tools

90° and 45° Templets

Templets are required for 90° and 45° Bolt Solid Plate fastener installation. Templets simplify installation by providing a guide for accurate bolt-hole placement. Lengths for all standard belt widths are available.

* These tools are also available in steel

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Rip Repair

Use standard Flexco[®] Solid Plate fasteners to repair conveyor belt holes and edge tears. For jagged length-wise conveyor belt tears, standard Bolt Solid Plate fasteners can be combined with three-bolt Rip Repair fasteners. Three-bolt Rip Repair fasteners can also be used to bridge "soft" spots in the belt before they become rips.