

Flexco® Splicing of Corrugated Sidewall Belts

Purpose:

Recommended mechanical splicing method on a sidewall belt where the belt changes planes and uses deflection wheels at the transition point.

Recommendations:

BELT SQUARING

Accurate squaring of belt ends is essential to optimal positioning of the belt splice and provides for better fastener performance. Unevenly squared belts can lead to uneven belt tensions, belt mistracking, spillage issues, and ultimately to splice failure.

BELT SKIVING

Prior to fastener installation, Flexco recommends removing a portion of the belt top cover to optimize fastener installation. This allows the fasteners to create a stronger grip on the belt carcass and achieve a lower splice profile.

SPLICE LOCATION

If possible, splice belt at the lower end of the conveyor.

Best Practices:

Unlike standard mechanical splices, the splice on a corrugated sidewall belt should reside as close to the belt edge as possible. The splice should be installed continuously across the width of the belt including under the sidewalls.

NEVER Trim or Notch the belt edge of a splice on corrugated sidewall belt.

Inspect splice prior to start up to make sure fastener plates do not extend past edge of belt and leading edges of plates are fully compressed into belt.



Flexco® SR™ Preparation:

For initial selection of the proper Flexco® SR fastener size for your application:

1. Determine Belt Tension.
2. Measure Belt Thickness.
3. Measure the Diameter of the Smallest Pulley in your Drive.
4. Choose the Fastener Size that is appropriate for your specification from Fastener Selection Chart.

SR™ Fastener Selection Chart				
Fastener Size	For Belts With Mechanical Fastener Ratings Up To:	Belt Thickness Range	Recommended Min. Pulley Diameter	
			Operating Tension Under 100% of Belt Rating	Operating Tension Under 75% of Belt Rating
			P.I.W.	in.
R2	330	1/8-3/8	5	5
R5	450	7/32-7/16	9	7
R5-1/2	650	5/16-19/32	12	10
R6	800	13/32-11/16	18	16
R6LP	800	5/16-23/32	18	16
R8	1500	13/32-11/16	18	16
R9	2000	5/8-1	42	42

For proper SR™ installation, follow these steps:

1. Determine required strip length based on belt width.
2. Remove plates from required strip length as indicated in the Fastener Strip Width Chart below.
3. Follow installation instructions included with strip set.
4. If your hinge pins “migrate” or have a tendency to move, use Flexco Hinge Pin Retaining Collars.

Fastener Strip Width Chart			
Belt Width (in.)	Flexco® SR™ Strip Length Required (in.)	Number of Plates to be Removed	Hinge Pin Length (in.)
18	24	3	18
24	30	3	24
30	36	3	30
36	42	2	36
42	46	1	42
46	48	1	46
48	54	2	48
54	60	3	54
60	72	6	60
72	84	6	72

Flexco® Bolt Solid Plate Preparation:

For initial selection of the proper Flexco® Bolt Solid Plate fastener size for your application:

1. Determine Belt Tension.
2. Measure Belt Thickness.
3. Measure the Diameter of the Smallest Pulley in your Drive.
4. Choose the Fastener Size that is appropriate for your specification from Fastener Selection Chart.

Flexco® Bolt Solid Plate Fastener Selection Chart					
Fastener Size	For Belts With Mechanical Fastener Ratings Up To:	Belt Thickness Range	Recommended Min. Pulley Diameter (90°)		
			Operating Tension 75-100% of Belt Rating	Operating Tension 50-75% of Belt Rating	Operating Tension Under 50% of Belt Rating
			P.I.W.	in.	in.
1	150	3/16-7/16	12	10	8
140*, 140VP	225	3/16-7/16	14	12	10
190, 190VP	375	5/16-9/16	18	16	14
1-1/2	300	7/16-11/16	18	16	14
2, 2VP	440	9/16-13/16	30	28	24
2-1/4	620	9/16-1-3/16	36	34	34
2-1/2	450	3/4-1	42	42	42
3	560	15-16 & over	48	48	48

For Flexco® Bolt Solid Plate 140 and 190:

1. Follow instructions included with fasteners

Flexco® Bolt Solid Plate 140 & 190 Fasteners	
Belt Width	Number of Fastener Sets Required
12	15
18	20
24	25
30	30
36	35
46	
48	40
54	45
60	50
72	61



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