Increase Uptime

## TECHNICAL SOLUTIONS FOR BELT CONVEYOR PRODUCTIVITY

## **Repairing Damaged Heavy-Duty Conveyor Belts**

Jagged chunks of stone, coal, salt, and other materials can take a heavy toll on a conveyor system. If jagged-edged materials catch on your conveyor's support structure, rips, slits, or tears can occur on the belt to the point the system must be shut down and the belt repaired. When belt damage occurs, it is critical to avoid the lengthy downtime and expensive repairs normally associated with returning conveyors to service after surprise belt rips.

Assuming the belt damage is repairable, the response is to cut out the damaged section and, depending on available take-up, either join the newly cut belt ends or insert a new piece of belting. When a tear extends in from the belt edges 25% or more across the width of the belt, the damaged area should be cut out and a new splice installed. If recurring rips and tears are a problem, having a rip repair kit with installation tools and different size fasteners will enable you to respond quickly and cut downtime losses. Using the right mechanical fasteners and tools will simplify maintenance in a broad range of applications. Using mechanical rip repair fasteners is often a costeffective solution to lengthwise rips and worn spots in heavy-duty belts as thick as 1-3/16 in. Mechanical rip repair fasteners offer the advantages of:

09-04

- Faster installation
- Lower cost
- Virtually no belt waste
- Immediate installation by on-site workers using simple tools.

Whether the trouble is minor or major – a lengthwise rip, a small puncture, a soft spot or even a hole – there are rip repair methods that will temporarily preserve the integrity of the damaged belt and get it back in operation with minimal downtime.





## **Rip Repair**

- For a small puncture, apply a standard bolt solid plate fastener crosswise on the belt over the damaged area.
- *For a larger size hole,* a patch of belting can be attached to the original belt using bolt solid plate fasteners.
- For clean lengthwise rips, standard bolt solid plate fasteners can be applied the length of the rip. Recommended spacing for most lengthwise rips is six inches.
- For jagged, lengthwise tears or bridging soft spots, integrate standard bolt solid plate fasteners with three-bolt rip plate fasteners. Note the placement of the three bolt fasteners on the rip line. Two of the three bolts should be placed along the weak or "flap" side of a jagged tear to increase stability. Alternating two and three bolt fasteners is recommended.
- For quick temporary repairs, Turtle fasteners are recommended every four to six inches along the rip. Keep in mind, these fasteners should never be used for joining belt ends together, only for temporary rip repairs.

Rip repair fasteners keep your belt – and your production – moving until a permanent repair can be performed during scheduled downtime. Integrate bolt solid plate fasteners and rip repair fasteners into your operation and see how dramatically you can speed up your recovery from belt damage.



For clean lengthwise rips, standard bolt solid plate fasteners can be applied the length of the rip.



Alternating two and three bolt fasteners is recommended for jagged, lenghthwise tears.



Rip repair fasteners keep your belt and your production moving

2525 Wisconsin Avenue • Downers Grove, IL 60515-4200 • USA Tel: (630) 971-0150 • Fax: (630) 971-1180 • E-mail: info@flexco.com

Visit www.flexco.com for other Flexco locations and products.



Partners in Productivity

©2009 Flexible Steel Lacing Company. Flexco<sup>®</sup>, is a registered trademark. 04-14. For Reorder: X2212