INSIGHTS™
Belt Conveyor Maintenance
TECHNICAL SOLUTIONS FOR BELT CONVEYOR PRODUCTIVITY

Protecting Your Load Point

The belt sees every ounce of every ton of product. It's amazing they last as long as they do. By the same token, the load support sees every ton too. Be sure to consider abnormal conditions when choosing a support system, because the same belt that runs 6" minus coal could have 300-lb. slabs from a roof fall on it too. Just as one large pothole can wreck your tire, one large rock can wreck the load support and belt if it exceeds the design capacity.

Challenges in the load point

Once in the impact area, there are several challenges that can be addressed to improve the load point. Every load zone needs consideration given to selecting proper support of the belt. Sometimes impact idlers are enough, while others may need a sophisticated impact bed to provide the required protection for the belt. Sealing the load zone from escaping dust and spillage will also be a consideration for selecting a belt support solution.

In many cases, there is not enough support for the belt in that area. Some common examples of this problem include not using impact idlers or beds; spacing impact idlers apart, which creates gaps in the seal that can cause spillage; catenary idlers that have too much "give," which can cause belt damage and spillage; and mistracking caused by off-center loading at the impact point.

Knowing the material lump weight and drop height are essential to choosing proper impact point protection. If these numbers aren't taken into account, the impact bed will fail, as seen here.

Choosing your protection

Keeping these issues in mind, you want to make sure the belt is continuously supported. A proper impact bed can be the solution to all of these challenges, but you'll need to make sure you have all of your specifications correct. Knowing the largest material lump weight and drop height are essential to choosing the proper bed. When these numbers are multiplied together it will provide the impact force for your application. Once you have this information, make sure that your solution's ratings are never lower than your calculated impact force.

In some cases impact idlers are enough, while others may need a true impact bed to provide the required protection for the belt.

Keep in mind, however, that the success of any part of the conveyor is dependent on several different areas of the system. It is for this reason that an evaluation of the entire system can only benefit an operation. A few simple changes to a system can increase efficiency and productivity and decrease the amount of time spent crunching numbers to cut costs, so it's also important to evaluate the areas before and after the load point.

INSIGHTS™

Load point solutions from Flexco

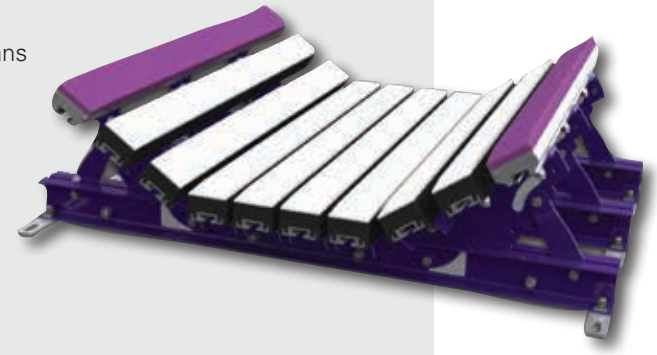
Flexco has several solutions for issues occurring at the load point to suit loads of every shape and size for multiple price ranges.

DRX200, DRX750, DRX1500, and DRX3000 Impact Beds

DRX (Dual Relief Xtra™) Impact Beds are designed with one simple goal: protect the belt. Superior belt protection is designed into the entire structure - not just the bars. The Velocity Reduction Technology, including Impact Bar Supports and the Isolation Mounts, ensure a level of protection unlike any other. Less belt wear and damage, less rebounding and material degradation, and two levels of impact absorbing force reduction. The DRX 3000 takes this theory to the extreme with Impact Energy Absorbers that react to the most severe loads.

Sturdy components, robust construction, and convenient maintenance make our line more durable and efficient. DRX impact beds separate in the middle, allowing the two sides to slide apart and out. This provides direct access to all the bars and bolts for quick, easy, and safe maintenance.

Flexco Impact Beds*



Flexco Impact Beds are designed to offer a simple and effective means of protecting the belt in the load zone. Specification and installation of the bed is made easier with adjustable trough angles, while still providing the rugged durability found with all Flexco products. This series features universal components that result in an effective, yet affordable, solution. Available in both light duty and medium duty options, with adjustable trough angles at 20°, 35°, 45°, Flexco Impact Beds are designed to complement Flexco DRX Impact Beds.

**Can be paired with the Flexco Slider Beds to create a holistic load zone system.*

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.

FLEXCO

Partners in Productivity