



Your partner in the
IRON ORE
INDUSTRY

FLEXCO

FLEXCO IS CONVEYING CONTROL IN IRON ORE



MEET FLEXCO

For over 110 years, Flexco has focused on creating belt conveyor solutions that meet ever-changing customer needs. Flexco is committed to applying our superior knowledge and equipment to make your belt conveyor operation in the iron ore industry as productive as possible.

Our world-class customer support system focuses on your needs first to help you achieve optimal belt conveyor performance.



Sales members will meet you on site to help understand your issues and recommend the correct solutions for your applications.



Flexco experts are available to train your team to ensure your Flexco products are operating optimally 24/7.



Customer Support is there to help with any questions or queries you may have.

A PARTNER IN THE IRON ORE INDUSTRY

Key Partnerships—We cultivated deep relationships with key partners in the iron ore industry, gaining industry expertise and earning a reputation as a trusted partner in belt conveyor productivity.

Iron Ore Focus—We spent countless hours working alongside iron ore customers to understand the nuances of your everyday challenges, and we used our hard-won knowledge to design a comprehensive lineup of belt conveyor products to address your pain points throughout your iron ore processing facility.

Innovation—To serve an industry with lower ore grades and increasing demand, our focus must be on innovation. With the iron ore industry growing, many conveyor systems are operating at higher capacities than they were designed for, and downtime is not an option. By always searching for new ways to make belt conveying in iron ore more efficient, we aim to partner with you to enter a new productivity era.



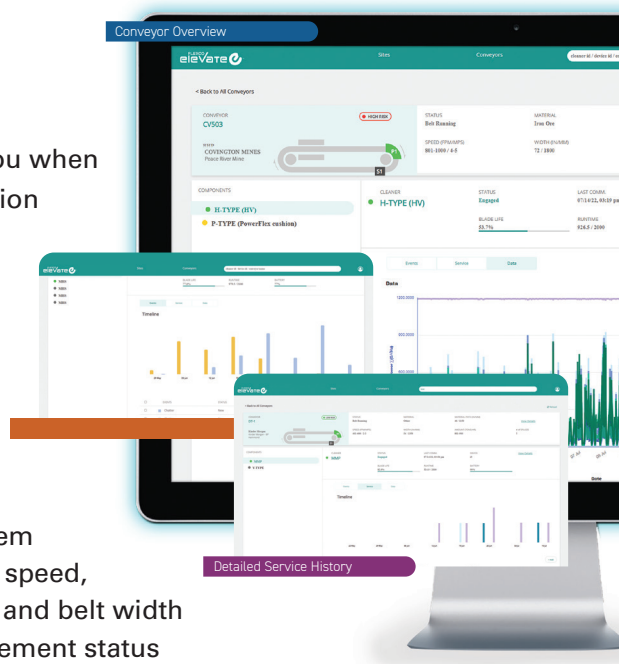
A Check Engine Light For Your Conveyor Belt System

Similar to the check engine light in your car, Elevate® alerts you when your belt cleaners need attention – so you don't miss production impacting events on your conveyor system.

What The Interactive Dashboard Tells Operators

A key feature of the Elevate® Dashboard is Flexco's traffic light system. Points are allocated based on the severity of each alert and tallied so that users can easily view the general health of their conveyor belt. Below are the other features and benefits of the Elevate® system:

- Abnormal event notification
- Chatter alerts
- Disengaged cleaner notification
- Tamper detection notification
- Urethane and carbide blade wear
- Location of installed cleaners across your operation
- Belt conveyor system specifications: belt speed, material conveyed and belt width
- Belt cleaner engagement status
- Belt and cleaner run times
- Digital maintenance logs



HIGHLIGHTS IN INNOVATION

Universal Lightweight Pole—Flexco's Universal Lightweight Pole was created with safety in mind. Weighing up to 60% less than their steel counterparts with the same heavy-duty performance.

DRX™ 4500—With its industry exclusive shock relief system, the DRX 4500 is sturdy enough to handle the largest impact zones while still flexing appropriately to protect your belt.

Extended Life V-Tips—For extremely high wear areas these blade tips have 20 mm (3/4") of tungsten carbide (10 mm (3/8") is standard) imbedded in the tip to extend blade life and make blade changes much less frequent.

Flextreme Cushions—Flexco's patented Flextreme cushions are designed to combat delamination for high speed belt applications.

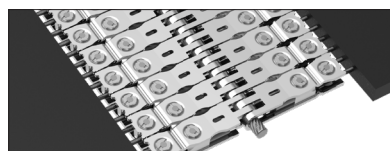
Continuous Blade Secondary Cleaner—The CBS cleaner is an excellent option due to its cleaning efficiency for both new and worn/cupped belts.

FXC™ Steel Cord Belt Fastening System—When your steel cord belt gets damaged, and you can't wait for a belt crew to come and vulcanize the belt, this can allow you to get back up and running quickly and will work until your belt crew arrives to create a permanent splice.

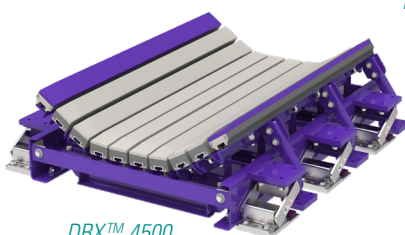
Flexco Elevate® - Cleaner Mounted i3 Device



Universal Lightweight Pole



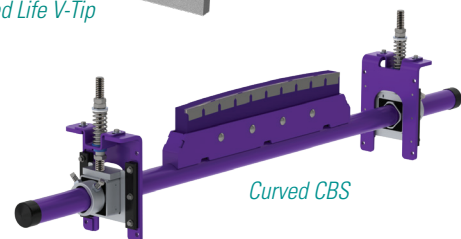
FXC™ Steel Cord Belt Fastening System



DRX™ 4500



Extended Life V-Tip



Curved CBS

THE CRUSHING CIRCUIT

CARRYBACK



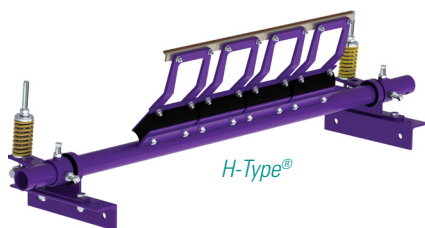
THE PROBLEM: Carryback on the belt can cause buildup on structures, piles under belts, and requires man hours for cleanup in an often remote area of the plant.



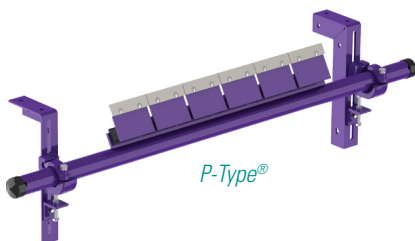
H-Type®



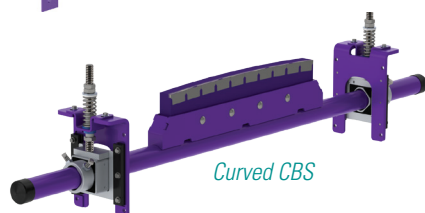
THE SOLUTION



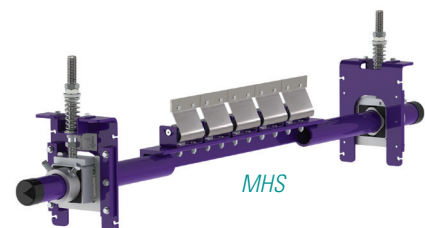
H-Type®



P-Type®



Curved CBS



MHS



Flextreme™ Cushion



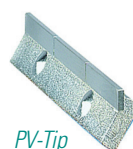
Extended Life V-Tip



HV & HV2



HVP



PV-Tip

CLEANERS

Heavy-duty—Robust cleaners are appropriate for this area. A large, high abrasion resistant precleaner paired with a carbide secondary creates an efficient cleaning system that withstands heavy abuse.

Primary Cleaners—The H-Type® is the ultimate iron ore belt cleaner when coupled with tungsten carbide tips. The carbide quickly profiles to the belt while being tough enough to continually scrape carryback off of the belt's surface.

Secondary & Tertiary Cleaners—The P-Type® coupled with Flextreme™ cushions is an excellent option due to its cleaning efficiency. For belt with excessive wear or damage, the curved CBS blade will profile perfectly to the belt.

Extended Life V-Tips—This is a great option in extremely high wear areas to extend blade life and make blade changes much less frequent.

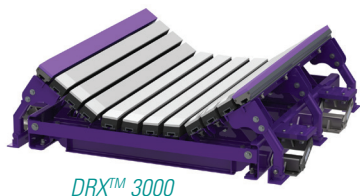
IMPACT



THE PROBLEM: Heavy impact on the conveyor can cause severe damage. The ore is still relatively large at this point and can have sharp corners, which may result in belt damage.



THE SOLUTION



DRX™ 3000

IMPACT BEDS

Extreme Impact—The area between the primary crusher and the ore stockpile sees more tonnage, larger rocks, and higher drops than any other in the iron ore process, making load zone support critical to protect the belt and extend its life.

Precise Calculation—It is important to calculate the impact to verify bed selection in this area. After filling out a data sheet, our engineering team looks at each and every impact bed to ensure the correct bed is selected.

DRX™ 4500—Under the primary crusher and in other areas with an extremely aggressive impact, our DRX™ 4500 provides an unmatched level of both impact absorption and relief to protect the belt while still being very resilient. This result leads to longer belt life and minimal maintenance.



MISTRACKING



THE PROBLEM: Belts conveying ore stockpiles are often longer and more expensive. Mistracking can damage the belt edges, which is costly to repair and replace.



THE SOLUTION



PTEZ™ Heavy Duty



PT Max™ Return Side

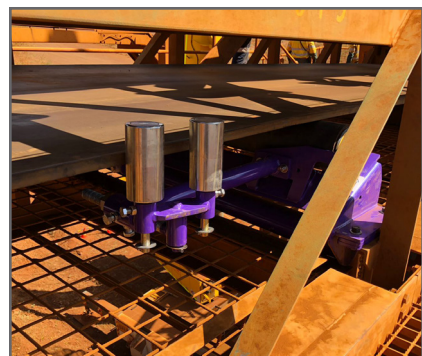


PT Max™ Top Side

TRAINERS

PTEZ™ and PT Max™—Both of these robust trackers are suitable for most standard iron ore applications.

PT Max™ Super Duty—Available for the most extreme applications like steel cord belts and other extremely high tension, speed, and tonnage applications.



PT Max™ Return Side



PTEZ™

“Flexco has several options for trainers on both the top-side and return-side of the conveyor belt.”

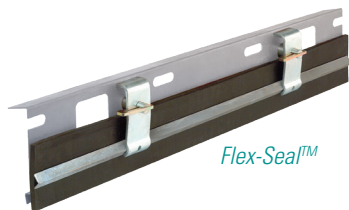
SPILLAGE



THE PROBLEM: Cleaning around the impact area and under the crusher can be difficult, especially if the crusher is underground. If the spillage leads to sharp and potentially large pieces of ore going through the tail pulley, you risk damaging the belt.



THE SOLUTION



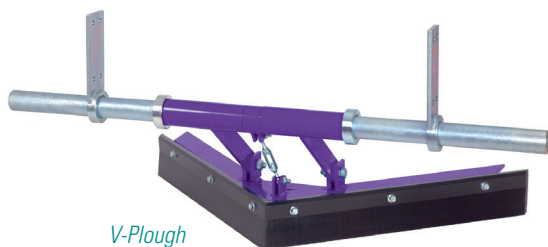
Flex-Seal™



Polyurethane Skirting



RMC1 Skirt Clamp
(Standard)



V-Plough



MXDP

SKIRTING AND PLOWS

Sealing—Needed in the load zone as materials can be anything from dust to small boulders.

Skirting and Skirt Board—Should be utilized in these instances, sometimes running all the way to the next transfer depending on the length of the belt and the amount of dust being created.

Ploughs—Ensures that any material that may spill out does not get pulled into the tail pulley.



V-Plough



Flex-Lok™ sealing system with
Polyurethane skirting.

PROCESSING & PORT FACILITIES

DUST AND SPILLAGE



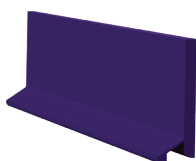
THE PROBLEM: Dry tailings and iron ore concentrate are both very fine and very dry in these areas, creating lots of dust and fine spillage.



THE SOLUTION



Flex-Lok™ Skirt Clamps



Dual Seal Skirting



Enclosed Skirting System

SKIRTING SYSTEMS

Fine, Dry Material is difficult to contain and can create substantial amounts of dust. Skirting systems help contain and seal the load zone and can be extremely impactful to reducing the amount of dust and fine spillage.

Flex-Lok™—Allows for quick adjustment of skirting to make maintenance easier.

Dual Seal Skirting—Provides a second seal that can drastically reduce the amount of spillage and dust in these load zones.

Enclosed Skirt System—Helps to both contain and resettle dust onto the belt in areas that are extremely dusty.



Polyurethane Skirting



Enclosed Skirting System

MISTRACKING



THE PROBLEM: Dry tailings belts can often be very long making them difficult to track properly.



THE SOLUTION



PTEZ™ Heavy Duty



PT Max™ Top Side

TRAINERS

PTEZ™ and PT Max™—Ideal for the lengthy belts that are used in this area.

PT Max™ Super Duty—Available for the most extreme applications like steel cord belts and other high tension, speed, and tonnage applications.



PTEZ™



PT Max™ Top Side

PROCESSING & PORT FACILITIES

CORROSION



THE PROBLEM: Material in the agglomerator and on the heap leaching pads is highly acidic and tends to have a high moisture content. This makes the material very corrosive and sticky, making it build up and stick to belts and structures, causing components to corrode very quickly.



THE SOLUTION

STAINLESS STEEL COMPONENTS

High moisture content of ore during processing can make belts in this area exceedingly difficult to maintain, and can be extremely abusive to conveyor components. That's why we have stainless steel options available for all of our cleaners.

Water Spray Pole System—The use of a limited amount of water improves the belt cleaner's cleaning performance, especially on belts with hard-to-clean or sticky carryback materials.

Wash Box—Designed to deliver superior cleaning efficiency in applications where the conveyor must be very clean or when head-end cleaning is not possible.



Water Spray Pole



Wash Box
Stainless Steel



Stainless Steel MHS



Water Spray Pole System



Wash Box

BELT MAINTENANCE



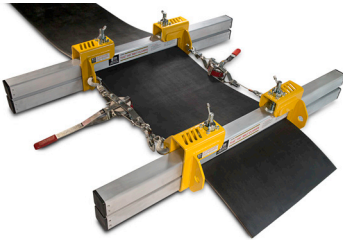
THE PROBLEM: Maintaining belt conveyor systems is the key to efficiency, but many operators have very limited time to spend on maintenance. They need easy-to-use belt maintenance tools that reduce repair time while ensuring worker safety.



THE SOLUTION



Flex-Lifter™



TUG™ HD® Belt Clamps



CEBC1



Pulley Lifter

FLEX-LIFTER™ BELT LIFTER

Quickly and safely lift belts out of the way to perform belt maintenance. This portable tool lets you efficiently set up a splicing station or replace idlers.

TUG™ HD® BELT CLAMPS

Provide the ultimate grip strength by clamping over the belt with modular components that allow for increased versatility and portability. They can be used on multiple conveyor belting types including flat, sidewall, chevron, and other specialty profiles.

FLEXCO BELT CUTTERS

Squared belts and belts with clean cut edges are essential to long-lasting splices and belts that track on center. Flexco belt cutters are available in multiple sizes to accommodate various belt widths.

FLEXCO PULLEY LIFTER

Designed for in situ-maintenance of conveyor pulleys including fast and simple removal and installation. The unique U-shape design means you don't have to cut the belt to remove the pulley, eliminating time spent on cutting and the vulcanizing process in re-joining.

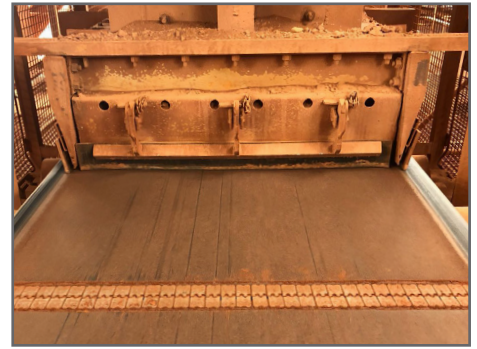


Flex-Lifter™

BELT REPAIR AND SPLICE OPTIONS



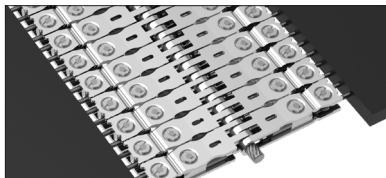
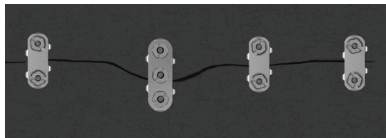
THE PROBLEM: While vulcanizing is generally used when installing a new belt, for rips and repairs, having belt fastening equipment on hand is essential.



Flexco® Size R5 Fasteners



THE SOLUTION



BOLT SOLID PLATE

Whether you need them for a standard splice or a rip repair, Flexco's bolt solid plate fasteners have been doing the job for nearly 100 years. They make a strong, sift-free connection that can handle the abuse of light and medium duty applications.

FXC™ STEEL CORD BELT FASTENING SYSTEM

When your steel cord belt gets damaged, and you can't wait for a belt crew to come and vulcanize the belt, our steel cord splice can get you up and running again. Intended to be a temporary splice, this can have you operating again in just a few hours until your belt crew arrives to create a permanent one.

FLEXCO® RIVET HINGED FASTENING SYSTEM

The Flexco® SR™ Rivet Hinged Fastening System is ideal for use on rubber-ply belting and for worn belts unfit for vulcanized splices, delivering performance and long life.

MECHANICAL FASTENING SYSTEMS

Whether they are used as a quick repair or as a permanent connection, mechanical splices allow for easy maintenance and are a viable option for most iron ore applications. Selecting the right splice and proper installation for each application is important. For in-depth help with selection and maintenance, Flexco has developed multiple options for training your crew.

FLEXCO

CONVEYING EDUCATION IN IRON ORE



FLEXCO UNIVERSITY

To help our end users achieve optimal conveyor productivity, we go beyond just supplying the right products. We provide extensive training and support on how to properly choose, install, maintain, and troubleshoot Flexco solutions.

HOW DO YOU WANT TO BE TRAINED?

AT FLEXCO

- Multi-day in-class education at training facilities around the globe
- Technical training, application insights, and problem-solving
- Hands-on installation and troubleshooting
- Focused learning without distractions

ON-SITE

- Flexco representatives and certified distributors come to you
- Customized training based on schedules and employee knowledge
- From multi-day training to hour-long lunch and learns



In-House Training

FLEXCO ESSENTIALS™

Flexco Essentials™ is an eLearning course that focuses on the essentials of heavy-duty conveyor systems to upskill new talent.

ONLINE

- Expert insights and best practices
- Knowledge checks throughout the course
- A cumulative assessment evaluates comprehension
- Pure conveyor content – no marketing, no sales – just the essentials



On-Site Training



**SCAN THE QR CODE TO VISIT THE
FLEXCO ESSENTIALS™ WEBSITE**

YOUR PARTNER IN IRON ORE



FLEXCO

**Global Support
Wherever You
Need It, Whenever
You Need It.**

FLEXCO DIRECT SUPPORT

Flexco has 13 locations strategically positioned around the world. Our team of sales, engineering, and service personnel is dedicated to supporting your iron ore operation.

FLEXCO CERTIFIED SERVICE DISTRIBUTORS

Flexco distributors are present in over 150 countries. Trained by Flexco and certified to sell, install and maintain our product line, Flexco distributors can diagnose problems, recommend solutions, and share advanced knowledge to better maintain your belt conveyor over the long haul.

