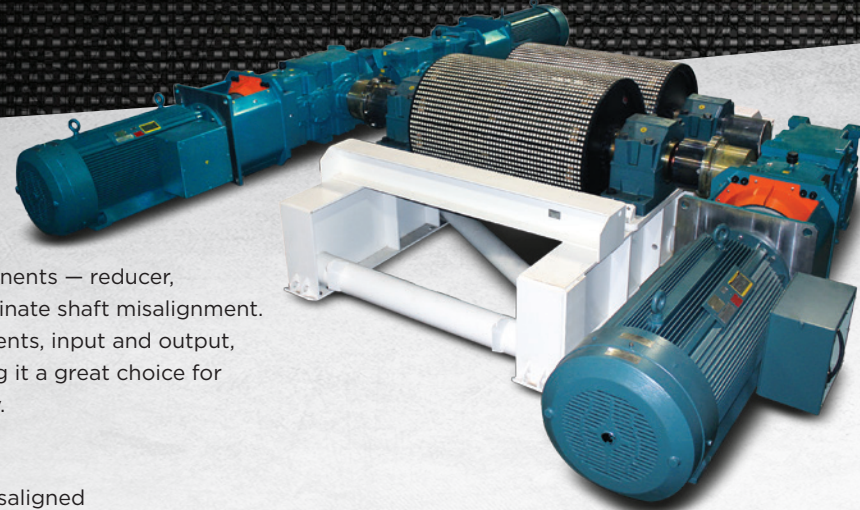


NEW CONVEYOR EQUIPMENT
Parts & Services

BELT DRIVES

West River Conveyors + Machinery Co. specializes in new conveyor equipment and belt drives tailored to specific operational needs for underground and above-ground operations.



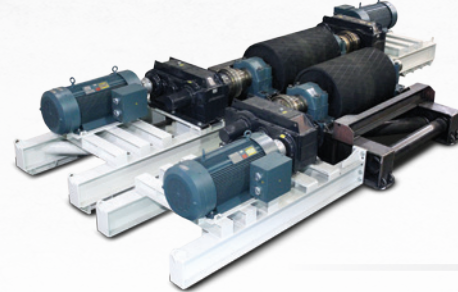
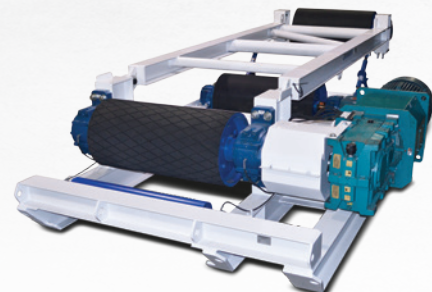
Belt drives can be custom built with an attached or remote discharge boom.

» Alignment-Free Drive

An alignment-free drive refers to the power base components — reducer, fluid coupling and motor — properly constructed to eliminate shaft misalignment. With an alignment-free drive, there are two critical elements, input and output, where the need to align is completely eradicated, making it a great choice for those interested in long-term cost savings and efficiency.

Benefits:

- Eliminates catastrophic immediate failure of input if misaligned
- Eliminates rapid wear of components if output is misaligned
- Most energy efficient choice, none wasted in transmission
- Reduces need for spare parts inventory
- Bolt-together construction allows for ease of installation



» Combination Drive/ Take-Up Unit

A combination/take-up drive is a belt drive and take-up unit all within one skid. This type of drive uses commonly available drive components including a shaft mounted reducer, v-belts and belt sheaves, making the drive less expensive than special designed units. This drive is widely used and a popular choice among those interested in quick installation and preconstructed alignment.

Benefits:

- Quick installation
- Easy transport — both drive and take-up on one movable base
- Desirable for short runs (1,500-1,800 ft.)
- Utilizes less expensive and readily available components

» Alignment-Free Combination Drive/Take-Up Unit

The Alignment-Free Combination Drive, sometimes called a “boom” drive, uses a rigid low speed coupling and fluid coupling with a tunnel instead of traditional belts and sheaves. By eliminating the use of belts and sheaves, the need to align the drive is completely eradicated.

Benefits:

- Quick installation
- Quick transport from one location to another as drive and take-up are on one movable base
- Readily available, less expensive components
- Need for alignment is eradicated
- Components can be used to match other 150HP & 200HP drives

» VFD Belt Drive

The VFD Belt Drive uses a special inverter-duty constant torque motor that works in conjunction with the VFD starter. The special motor installed on the VFD drive allows the frequency of the electrical power supplied to the motor to increase speed, maneuverability, and responsiveness. With other types of starters, high currents occur when turning on a switch. With a VFD drive, a low frequency starts the motor.

Benefits:

- Maximizes energy savings by reducing the speed of the motor (consumes less energy)
- Low motor starting current
- Simple installation

STARTERS

West River Conveyors + Machinery Co. can supply any type of starter to accommodate your particular drive.

» Across-the-line Starters

This type of starter is the simplest, most common type because it applies full voltage directly to the motor, resulting in a quick, full torque start.

Benefits:

- Works with NEMA designed induction motors
- Easy on/off push button
- Applies full voltage directly to the motor



» Soft Start Starters

Unlike across-the-line starters, soft starters are used to start or stop motors by reducing the voltage to each phase of a motor and slowly increasing the voltage until the motor gets up to full voltage at a fixed frequency.

Benefits:

- Minimizes wear and tear on conveyor belts, gears and gearboxes by reducing the torque from the motor
- Offers more control over start times and speed control
- Larger energy savings than any other kind of starter

» VFD Starters

A variable frequency drive (VFD) starter controls the frequency of the electrical power supplied to a motor to increase speed, maneuverability, and responsiveness. This type of starter is widely used because it initially applies a low frequency to start the motor, avoiding the high current that occurs by turning on a switch. Using a VFD starter increases longevity of the drive while achieving additional energy and cost savings.

Benefits:

- Maximized energy savings (by reduced motor speed)
- Low motor starting current
- Simple installation



Other drives we can build:

» Chain Driven Drives

A chain driven drive refers to the connection between the output shaft of the reducer and the input shaft of the pulley using chains and sprockets to achieve gear reduction. It's the narrowest of the drives we offer and can be moved completely intact, making it an attractive option for those looking for lowered installation costs.

» Shaft Mounted Reducer Belt Driven Drives

This type of drive uses a shaft mounted reducer, such as Dodge or Falk, attached to the input pulley shaft with a tapered bushing. The motor is connected to the reducer input shaft by way of a v-belt or cog belt. It shares similar features with an alignment-free unit, but is commonly used for 150HP drives and lower.

All West River belt drives are available in any desired belt width and HP/voltage required for your mining operation.

BELTING & STRUCTURE

West River Conveyors + Machinery Co. partners with quality vendors to offer competitively-priced belting and structure alongside our own new conveyor systems.

Inclusion of belting and structure options for both floor and roof mount operations (underground or above-ground) helps create a pain-free purchasing experience for customers — they can buy a total conveyor package all under one roof!

We offer quality products from Depreux, a division of Cobra. For information about the products they offer, please visit www.cobra-cs.com.

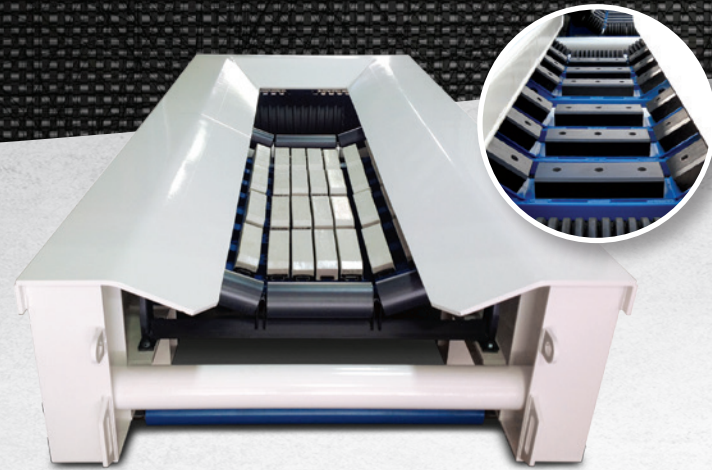
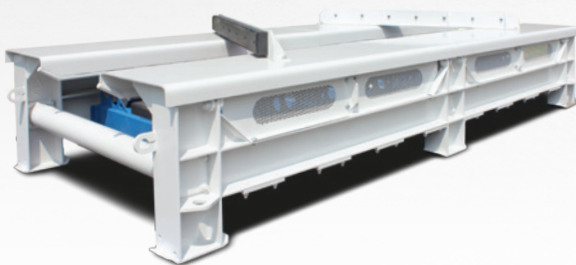


TAIL SECTIONS

West River Conveyors + Machinery Co. has built an impressive and growing total of more than 1,500 tail sections in numerous configurations. Among those, we have manufactured various designs, sizes, and types to suit a variety of conveyor needs.



A heavy-duty structural design, our tail sections are field-proven to provide maximum performance in the harshest mining conditions. Available in various heights and belt widths from 36" to 96", our designs incorporate structural steel frames, spiral or wing tailed pulleys, specially designed glide beds, and sturdy, durable MSHA-approved impact beds.



» Tail Section

Tail sections are an essential component to the functional performance of any conveyor system. We can design many different types of tail sections for various conveyor requirements including conveyor length and horsepower. West River tail sections are built to maximize performance and simplify maintenance.

Benefits:

- Proven heavy-duty structural design
- Ability to provide a quick turnaround if needed
- Ability to custom-design a tail section to fit your unique application

The most popular tail section designs include Glide Bar, Impact Bed, Impact Idler, Feed Thru, and AR Plate.

ELECTRIC WINCHES

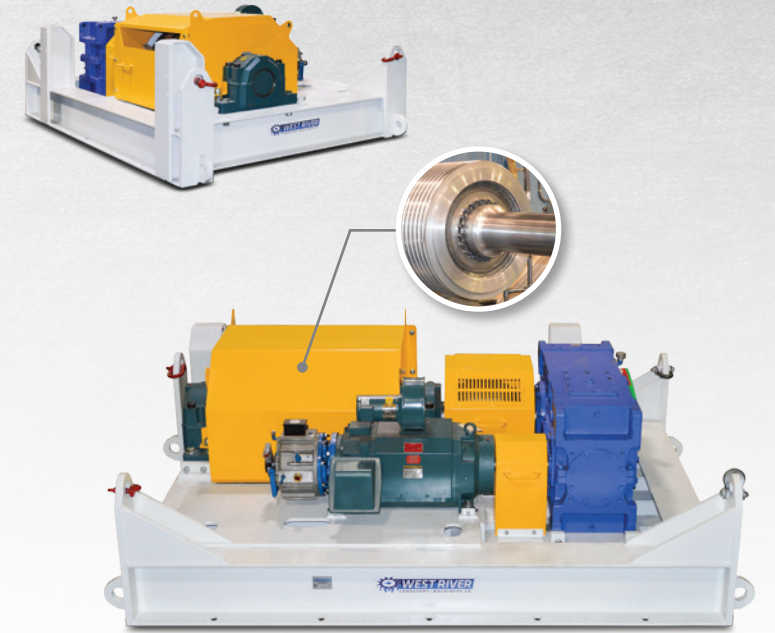
West River Conveyors + Machinery Co. Constant tension winches are used as an alternative to cylinder designed take-ups. They offer a quicker response time, varying amounts of line pull, and greater belt storage capacity. By providing constant tension under dynamic loads, they relieve motor overload by peaking torque prior to start-up, regardless of belt speed.

» 150HP Constant Tension Winch

This Constant Tension Winch was built to handle demanding loads carried by lengthy, high-capacity conveyors. When you need longer take-up travel for high tension applications, electric constant tension winches are your solution.

Benefits:

- Quicker response time
- Improves conveyor operation
- Minimal installation
- Provides constant tension under dynamic loads to relieve motor overload — regardless of belt speed
- Better option for longer take-up travel for high tension applications
- Varying amounts of line pull and greater belt storage capacity



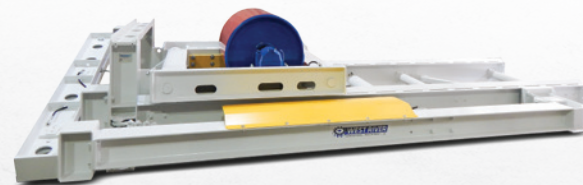
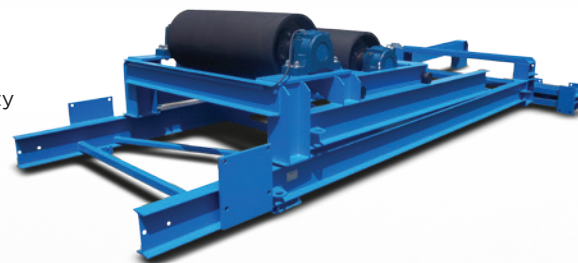
HYDRAULIC TAKE-UP UNITS

West River Conveyors + Machinery Co. builds new hydraulic take-up units in a variety of sizes. As conveyor systems lengthen, maintaining stable belt tension is necessary. Installing take-up units at multiple locations along the conveyor belt helps to maintain stable belt tension and prevent excessive belt sag.

The 20/40 hydraulic take-up is the most common, but we often recommend lengths based on your needs. We build take-ups with a variety of options including cylinder selection and travel length/belt storage features in any desired belt width.

Benefits:

- Extends the life of conveyor belts
- Assists smooth start-up of unit by decreasing slippage
- Useful belt storage feature allows for ease of belt splicing (as needed)
- West River's take-up units are built with heavy-duty shafts, pulleys and split-house bearings



Our in-house manufacturing and fabrication resources allow us to provide high quality inspected and functionally tested tail sections.

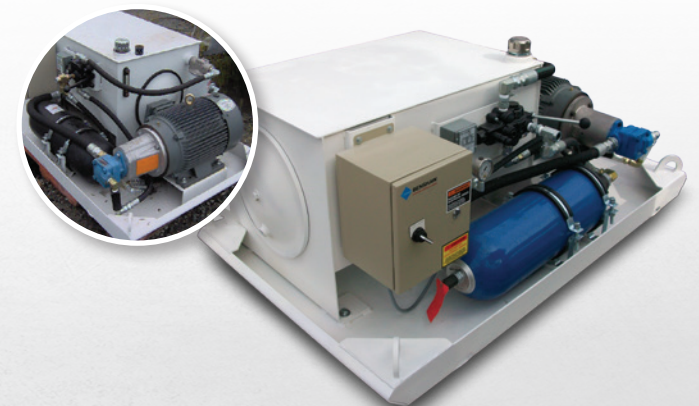
HYDRAULIC POWER PACKS

West River Conveyors + Machinery Co. carries a variety of hydraulic power packs for use with our take-up units and electric winches. In stock we have standard t-frame motors including 5, 7.5, and 20 HP units. Our engineers have also successfully manufactured custom hydraulic power packs for many different take-up styles and sizes.

» Power Packs

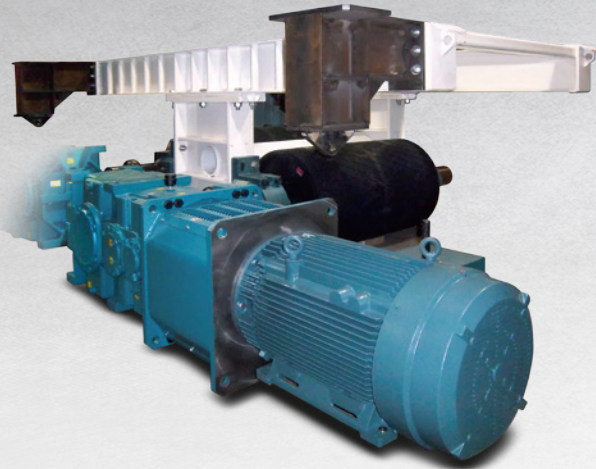
Power packs are the motive source of any size take-up unit. Its primary function is to provide the necessary hydraulic/oil flow in gallons per minute to properly power a take-up. The power pack serves as a reservoir to store oil for the pump. The flow of oil in the power pack determines how fast the carriage travels to the take-up unit. The pressure created by the power pack is the determining factor in the strength of pull the take-up unit achieves.

Take-up units must have a power pack in order to function properly.



SPECIAL DESIGN & CUSTOM FABRICATION

West River Conveyors + Machinery Co. can construct conveyor equipment to accommodate any unique application. We have built a variety of exclusive items including special-designed tail sections, drives built for slope-designed belts, and take-up units built specific for certain industries. All equipment is constructed from heavy-duty steel, made to withstand the most demanding, rugged operations.

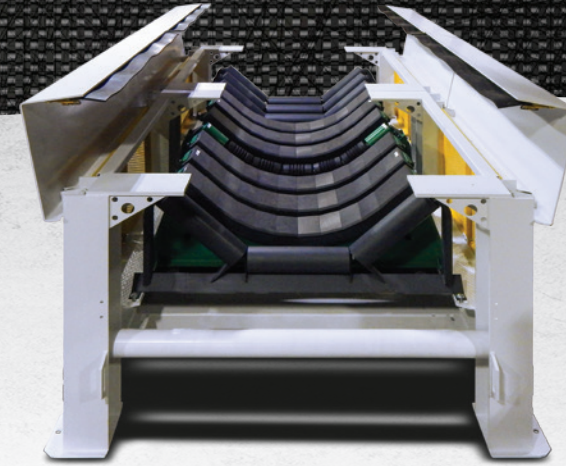


» Roof/“Back” Mount Triple 300HP VFD Belt Drive

This West River project was designed to be “back” mounted — bolting to the roof of the mine instead of the floor — using heavy-duty structural steel. It has three alignment-free power bases with heavy-duty detachable low speed coupling guards and extended shaft guards as required by the customer.

» Roof/“Back” Mount Winch + Safety Guarding

Per request, this winch it was set up for roof/“back” mount. Vertical beams attached to the winch support it from the ceiling, allowing for proper connection to a take-up unit. Added metal safety guarding surrounding the drive and frame is an extra measure to protect workers from moving parts.



» 72” BW x 17’ Custom Impact Bed Modular Loading Section Assembly

West River engineers designed a 72” belt width single pulley hydraulic take-up assembly with an impact bed modular loading section. This design, extremely custom to a coal operation in the Western United States, was fabricated with heavy-duty structural steel, a fabricated in-line cylinder mounting assembly, perimeter area guarding in a simple design easy for handling and installation. The unit was designed in collaboration with an engineer at the mine who had specific requirements for their operation.

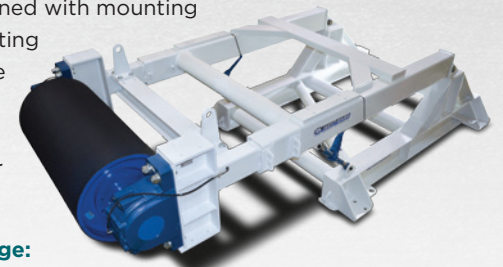
West River products are fully customizable down to the last bolt placement.

» Remote Discharges

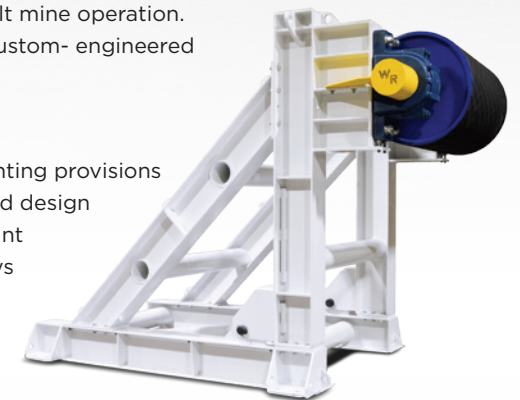
Remote Discharges are designed to transfer materials to the conveyor belt. Our engineers can design many different styles of Remote Discharge Booms and Transfer Stations to exact customer specifications.

West River’s heavy-duty structural steel design can accommodate many options including belt cleaner mounting provisions, floor or roof mount design, engineered pulleys, adjustable or fixed booms, and more.

54” Remote Discharge: This unit was designed with adjustable angular boom jacks that give it the ability to extend four feet. The frame was designed with mounting pads to allow for bolting to the mine floor. The discharge pulley was equipped with area safety guarding prior to shipment.



48” Remote Discharge: This 48” belt width, adjustable remote discharge boom was built specifically for a salt mine operation. It has a 34” x 57” custom- engineered flat face pulley.



Options:

- Belt cleaner mounting provisions
- Adjustable or fixed design
- Floor or roof mount
- Engineered pulleys

NEW & USED INVENTORY

West River Conveyors + Machinery Co. has sold new and used equipment in nearly all 50 states and more than 10 different countries. We stock more used speed reducers than anyone in the United States, and have reducer components including housing, gearing, and shafting.

Our 50+ acre property and 30,000+ square foot warehouse are stocked with an inventory new and used parts ready to sell in a pinch. Our goal is to limit your downtime by replacing the part you need as quickly as possible. The West River team is dedicated to providing superior customer service 24/7 and will strive to minimize your loss of production time.

We provide:

- 24/7 delivery as needed
- Exceptional customer service
- Quality parts at a competitive price
- Large in-stock inventory
- Unique components available



We have a variety of top brands including Falk, Link Belt, Hansen, Dodge, Foote Jones, Browning, REX and many more.

ADDITIONAL SERVICES

West River Conveyors + Machinery Co. offers expertise and other services for:

Shaft Alignment

West River offers a computerized shaft alignment service that assures your drive is aligned properly to prevent untimely catastrophic drive malfunction. Belt drive misalignment is one of the most common causes of premature drive failure. West River technicians can detect and align drives to prevent this type of failure from occurring.

Belt Surveys

West River has used belt surveys to really cater to customers’ needs. West River representatives have gone underground on many occasions to perform belt surveys, a way of assessing underground conveyor equipment and making recommendations on cost-saving methods such a minimizing costly spare units and standardizing conveyor equipment.

Installation & Start-Up

West River technicians can be onsite to supervise installation and start-up, another way we’re able to customize products to suit your needs. By having a technician onsite, they’re able to see first-hand ways to improve packaging, delivery, and handling.

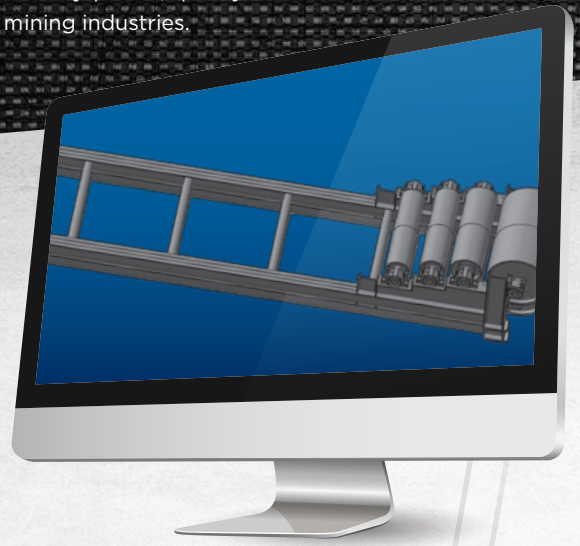
THE WEST RIVER ADVANTAGE

West River Conveyors + Machinery Co. has been a leader in custom-designed, custom-built belt drives and complete conveyor packages for more than 30 years. Our focus is to supply competitively-priced, quality equipment for the sand and gravel, coal, potash, salt, trona, and precious minerals mining industries.

Custom-Designed, Custom-Built Equipment

West River specializes in building and tailoring new equipment to a customer's specific operational needs. Our engineers utilize advanced design programs to create *belt drives, tail sections, take-up units, starters, power packs, and much more* for a wide variety of underground and above-ground mining applications.

All West River products are constructed from carefully selected, industry leading materials to provide a stronger and more rigid, mine-duty frame that doesn't distort during installation or use. We also use heavier steel than most other companies — resulting in a product that surpasses the basic requirements for the most demanding bulk material handling operations.



Design Process

Our design process offers flexibility for a customer to participate in the production of their customized equipment to ensure that it's correct right down to the last bolt. Superior products, in combination with our excellent customer service, makes working with **West River Conveyors + Machinery Co.** a favorable investment.

Learn more about our commitment to excellent customer service and a pain-free purchasing experience by visiting us at westriverconveyors.com.



*Belt Drives
Take-Up Units
Custom Design
Tail Sections
Starters
Transfer Stations
Discharge Booms
Belt & Structure
Winches*



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