Link-Belt® Underground Solutions
From coal to copper, potash, trona, iron ore and salt, the blueprint for success in today’s mining industry calls for innovative technology, creative ingenuity and teamwork.

At FMC Technologies, we’re up to the challenge. For more than 100 years, our line of Link-Belt Conveying Equipment has proven itself on the job around the clock, and around the globe in harsh environments.

Today, Link-Belt conveying equipment features the most significant technical advances in the industry in over 40 years. We’ll help you make capacity in tough environments, no matter what your requirements may be. If our broad portfolio of products and services doesn’t offer exactly what you need, we’ll work together to engineer a solution. FMC Technologies - conveying solutions for mining.

www.fmctechnologies.com/materialhandling
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BELT CLEANERS
Link-Belt® Idler Rolls

At FMC Technologies, we know idlers. We understand that when it comes to idler rolls, “one model fits all” is not the solution. We carry a full range of Link-Belt conveyor idler rolls for every type of mining environment, and we’ll assist you in selecting the right one for your specific application. We have a long history of engineering expertise, with innovation and continuous improvement at the heart of it. When you purchase FMC Link-Belt Idler Rolls, you are not only purchasing the roll, but also the history, technology and quality that has gone into producing what we believe to be the best idler rolls available.

Link-Belt® Ball Bearing Idler Rolls
Radically different, technically superior. . .

**FMC Link-Belt ball bearing idler rolls** have been completely redesigned to incorporate significant advancements in roller technology by FMC design engineers. Link-Belt Ball Bearing Idler Rolls are available in CEMA C, D and E models; all models exceed CEMA load ratings.

**Pressed Head Design & Optimum Bearing Placement**

Each Link-Belt ball bearing idler roll features FMC’s radically different, performance proven interference pressed head design, which delivers the **lowest T.I.R. (Total Indicator Run Out) values in the industry.**
This non-welded design maintains roll integrity while eliminating problems such as distortion, misalignment, and poor weld quality. The pressed head design incorporates a ductile iron cast head which is precision machined for accurate bearing/shaft alignment.
Bearings are placed closer to the support to minimize shaft deflection and extend bearing life.

**Advanced Sealing System**

Link-Belt ball bearing idler rolls also feature factory lubricated, “sealed for life” advanced sealing technology. FMC’s new sealing system incorporates a multi-step defense to prevent contaminants from entering the bearing cavity. While the sealing system components vary depending on the roll model, all models have factory-installed contact seals on both sides of the factory-lubricated and sealed ball bearings to provide the ultimate in contaminant protection.

**Maximum Corrosion Protection**

Each roller is equipped with a solid carbon steel shaft for minimum deflection under load, resulting in increased service life. Rollers are protected from corrosion by a powder coating baked on at high temperatures to provide resistance to abrasive elements. Assembly hardware is electro-zinc plated to ensure extended service.
Link-Belt C2000 Ball Bearing Rolls

Link-Belt® C2000 rolls feature 20 mm ball bearings, FMC’s proprietary interference-fit pressed heads, and a single lip nitrile rubber inner seal with contact seals on both sides of the bearings. C2000 rolls are designed to handle light to medium-weight materials at medium capacities and belt speeds, and are available for belt widths from 24 to 48 inches, and 7° and 35° troughed belt idlers, 35° troughed belt training idlers, return belt and return belt training idlers in five- and six-inch diameters. Metric roll diameters are available; call the factory for technical specifications.

Link-Belt D2000 Ball Bearing Rolls

Link-Belt® D2000 rolls feature 30 mm ball bearings, FMC’s proprietary interference-fit pressed heads, and a quad horizontal labyrinth outer seal, a delrin outer labyrinth member, a dual lip nitrile rubber inner seal and contact seals on both sides of the bearings. D2000 rolls are designed for harsh, medium to heavy-weight applications and are available for belt widths from 18 to 72 inches, and 20°, 35° and 45° troughed belt idlers (including rubber lagged impact picking and feeding, and variable trough), troughed belt training idlers, flat belt idlers, return belt and return belt training idlers in five- and six-inch diameters. Metric roll diameters are available; call the factory for technical specifications.

Link-Belt E2000 Ball Bearing Rolls

Link-Belt® E2000 rolls are designed for the rugged, maximum capacity and continuous handling requirements of heavy, coarse and abrasive materials such as coal, iron ore, copper, large stone and overburden. Featuring an exceptionally robust seal design and 40 mm ball bearings, E2000 rolls are available for belt widths from 36 to 96 inches, and 20°, 35° and 45° troughed belt idlers (including rubber cushion and variable trough), troughed belt training idlers, flat belt idlers, return belt idlers and return belt training idlers in six and seven-inch diameters. Metric roll diameters are available; call the factory for technical specifications.
Link-Belt® Tapered Bearing Idler Rolls

Sealed for life roll design ensures extended, trouble-free service life for CEMA Series D, E and F models.

Link-Belt Tapered Bearing Idler Rolls are perfectly suited for continuous material handling operations moving massive volumes of tough, abrasive materials such as coal, iron ore, and rock products. Boasting load ratings that exceed CEMA requirements, this rugged line is available in CEMA D, E and F series models.

Link-Belt sealed for life tapered roller bearing idlers feature factory-lubricated and sealed for life rolls which eliminates relubrication maintenance costs. In the CEMA E and F series rolls, bearing life is extended by using solid, cold drawn steel shafts to minimize deflection and increase load ratings. Link-Belt D-7000 rolls feature stub shaft technology, discussed in detail on the following page.

Link-Belt CEMA E and F series rolls are designed to handle the heaviest, most abrasive materials. They feature a premium quality Delrin triple horizontal labyrinth outer seal that protects the precision tapered roller bearings in several ways. The outer deflector cap (flinger) features a 90˚ contoured lip to deflect material away from the roll end. Triple horizontal, grease-filled labyrinths and contact primary seals, along with rear non-contact seals, ensure against the ingress of performance-inhibiting contaminants. Outer adjusting nuts are zinc-plated machined steel to minimize corrosion.

Link-Belt rolls are protected from corrosion by a polymeric powder coating baked on at high temperatures to provide resistance to abrasive elements. Assembly hardware is electro-zinc plated to ensure extended service. In-line and off-set configurations available.

**E4000**

Boasting significantly higher load ratings and impact capabilities than competitive belt idlers.

**F5000**

Recessed die formed heads are continuously welded inside shell ends.

Triple labyrinth outer seal uses close tolerances and grease-filled clearances to trap abrasive contaminants.

Solid shaft minimizes deflection and increases bearing life

Primary seal is a nitrile rubber, triple lip contact member

High-capacity precision tapered roller bearings for increased life with minimum roll resistance

Ductile iron interference Press-fit head

Grease-filled triple labyrinth outer seal with contact primary seal

Solid shaft minimizes deflection and increases bearing life

High-capacity precision tapered roller bearings for increased life with minimum roll resistance

Non-contact, metallic rear seal.
First introduced in 2002, the patented Link-Belt D7000 SST™ stub shaft tapered bearing idler roll represented the first significant advancement in roll technology in more than 40 years. In 2004, FMC engineers released the next generation in this revolutionary series, the SST II™. The SST II delivers significantly longer service life without compromising the significant technology advancements of the original design.

In addition to proprietary pressed head technology, the SST II features a new, proprietary quad tapered roller bearing (developed exclusively for the SST II) that delivers a 20 percent longer service life than commercially available bearings.

A new, advanced sealed forever sealing system has also been incorporated to repel contaminants, extend bearing life and eliminate the need for relubrication. FMC’s engineers redesigned the seal to decrease the amount of friction introduced into the roll, resulting in a new, triple-lip contact seal with lower torque and less drag. The lips of the seal rub against the shaft, taking full advantage of the near zero TIR (total indicator runout).

Ratings exceed CEMA D standards in all sizes and are constant for all belt widths, decreasing only by the weight of the roll. Because shaft slope through the bearings is minimized, the quad bearing / stub shaft design improves service life over thru-shaft designs with no reduction of bearing life under applied loads.
Link-Belt® Mine-Duty Conveyor Idlers

Rigid Idlers

FMC Technologies’ patented **Link-Belt® Truss Frame Idler** is the most advanced truss frame idler in the industry. Dimensionally interchangeable with CEMA C/D series rolls, FMC’s truss frame comes standard with FMC’s proprietary Link-Belt D7000 SST II™ tapered bearing idler rolls. Other roller models may be specified.

Link-Belt Truss Idlers feature an ergonomic light-weight frame that not only makes assembly and installation a snap, but also delivers an increased load rating of up to 40% as compared to conventional CEMA D inverted angle frames.

Another feature of the Link-Belt Truss Frame Idler is a 0.25 mm roll gap that is 36% lower than the limit set by the Rubber Manufacturers Association (RMA = 10 mm (39 in)) to prevent junction failure. The design of the truss frame with its rounded surfaces, coupled with the lowest roll gap available, ensures against costly material buildup that could impede production.

To address the requirements of harsh and caustic environments, the Link-Belt Truss Frame Idler is available in a variety of materials including #304SS, #316SS and carbon steel.

Available in belt widths from 36 to 96 inches*, the Link-Belt Truss frame idler features FMC’s patented CEMA D Link-Belt SST II™ idler rolls. (Note: other rolls may be specified.) For corrosive and caustic material handling environments such as harsh chemicals, salts and acids, premium HDPE polyethylene rolls are available.

The 35˚ trough angle design is available in truss frame (inline) or box frame (offset or single angle) construction. Formed steel end brackets welded to frames ensure accurate roll alignment and roll support.

Durable polymeric powder coating provides superior protection from corrosion. Electro-zinc plated mounting accessories complete the corrosion resistance package.

*For belt widths greater than 60 inches, call FMC Technologies for application assistance.
Truss frame

**Truss Frame Idler**

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For belt widths greater than 60 inches, call FMC Technologies for application assistance.

NOTE: Complete part number includes the belt width designator; Example: 1742-795-AB. Wire rope clamps are standard. For channel clamps, add .C to the part number, as in 1742-795-AB.C.

5-inch rolls have 9 ga. shells. 6-inch rolls have 8 ga. shells. Other gauges and belt widths are available; call your FMC Technologies Customer Service Representative for assistance.
Box Frame Idler

For belt widths greater than 60 inches, call FMC Technologies for application assistance.

NOTE: Complete part number includes the belt width designator; Example: 1742-795-AB. Wire rope clamps are standard. For channel clamps, add .C to the part number, as in 1742-795-AB.C.

5-inch rolls have 9 ga. shells. 6-inch rolls have 8 ga. shells. Other gauges and belt widths are available; call your FMC Technologies Customer Service Representative for assistance.
Catenary Idlers
Superior performance at loading and transfer points. . .

Link-Belt® Series 40,000 and 70,000 Catenary Belt Idlers combine the proven capabilities of the Link-Belt roll design with the benefits of a catenary suspension to form a smooth, natural trough and ideal load conveying surface.

Designed to withstand heavy impact at loading and transfer points for wide belt widths, Link-belt Catenary Idlers feature rugged roll construction, exclusive labyrinth seal design and high-capacity “sealed for life” tapered roller bearings. Especially suited to loading areas or transfer points in reclaiming installations where high impact loads must be absorbed, Link-Belt catenary Idlers are designed to adjust to varying load conditions.

Link-Belt Series 40,000 Catenary Idlers feature an exclusive outboard primary seal, a triple labyrinth seal, and grease-filled clearances. This seal design makes Link-Belt catenary idlers impervious to moisture and contaminants, extending idler life. When load carrying requirements exceed standard limitations, Link-Belt Series 70,000 Catenary Idlers provide more than double the capacity of Series 40,000 rolls.

The complete line of Link-Belt Catenary Idlers includes 35˚ 3-roll troughing idlers, 55˚ 5-roll impact idlers, and 10˚ & 15˚ 2-roll V-return idlers. V-return idlers are supplied with steel rolls. Link-Belt idler rolls feature a baked on polymeric powder coated finish (corvel gray) to provide superior corrosion protection.

Catenary Connecting Devices

Link-Belt Catenary Connecting Devices are available to accommodate most support structure designs. Heavy-duty chain links on each end of the Catenary Idler Suspension Assembly compensate for variable distances between support structures.
## Link-Belt® Series 40,000 Catenary Idlers

### Catenary Series 40,000 3-Roll Troughing Idlers 35°

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### Catenary Series 40,000 5-Roll Impact Idlers 55°

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## Link-Belt® Series 70,000 Catenary Idlers

### Catenary Series 70,000 3-Roll Troughing Idlers 45°

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### Catenary Series 70,000 5-Roll Impact Idlers 55°

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<th>Part No.</th>
<th>Belt Width</th>
<th>Idler Weight (lbs)</th>
<th>A (Inches)</th>
<th>B (Inches)</th>
<th>C (Inches)</th>
<th>D (Inches)</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 in</td>
<td>7 in</td>
<td>Inches</td>
<td>6 in</td>
<td>7 in</td>
<td>6 &amp; 7 in</td>
<td>6 in</td>
</tr>
<tr>
<td>70656-48</td>
<td>70657-48</td>
<td>48</td>
<td>160</td>
<td>173</td>
<td>58.25</td>
<td>54.56</td>
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<tr>
<td>70656-54</td>
<td>70657-54</td>
<td>54</td>
<td>176</td>
<td>191</td>
<td>64.06</td>
<td>60.31</td>
</tr>
<tr>
<td>70656-60</td>
<td>70657-60</td>
<td>60</td>
<td>192</td>
<td>209</td>
<td>69.88</td>
<td>66.12</td>
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<tr>
<td>70656-72</td>
<td>70657-72</td>
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<td>244</td>
<td>81.44</td>
<td>77.75</td>
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<td>84</td>
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<td>279</td>
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<tr>
<td>70656-96</td>
<td>70657-96</td>
<td>96</td>
<td>290</td>
<td>314</td>
<td>104.62</td>
<td>100.94</td>
</tr>
</tbody>
</table>
Belt Structure

**Rigid Conveyors for high-tonnage operations**
Larger volumes of tonnage being produced by improved mining techniques created a need for heavier conveyor construction to handle these loads, while maintaining flexibility and short move-up times. Link-Belt® rigid channel construction fulfills these requirements. Rigid stringer construction can be furnished using 3", 4" or 5" channels as required. Both floor mounting and roof mounting are available.

**Catenary Conveyors with POSILOK™ convenience**
Catenary Mine-Duty Rigid Conveyors have become the accepted standard for longwall conveyors. The high tonnage and frequent moves associated with longwall mining demand rugged conveyor construction and minimum move time. Link-Belt® idler rolls and exclusive patented POSILOK support system meet the challenge. The Posilok design features modular assembly and disassembly with no tools required. Round tubing is used for the side frames and the support stands. Belt widths from 36" to 72" are available. Heavy-duty telescopic floor stands permit variable height adjustment to conform to the terrain. Roof mounting is also available.

**Wire Rope Conveyors for low cost flexibility**
Wire rope conveyors are used where flexibility and low initial cost are paramount. Link-Belt® wire rope conveyor structure is available for belt widths from 36" to 60" wide. Troughed idlers are available in conventional offset roll (box frame) or FMC's truss frame design. Heavy-duty telescopic floor stands permit variable height adjustment to conform to the terrain.

* Bolted structure available - call the factory for assistance.
### Roof mounted rigid supports

<table>
<thead>
<tr>
<th>Channel Size</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>Drop</th>
</tr>
</thead>
<tbody>
<tr>
<td>C3 x 4.1</td>
<td>10'-0&quot;</td>
<td>2'-6&quot;</td>
<td>5'-0&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>12'-0&quot;</td>
<td>2'-0&quot;</td>
<td>2 spaces at 4'-0&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C4 x 5.4</td>
<td>10'-0&quot;</td>
<td>2'-6&quot;</td>
<td>5'-0&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>12'-0&quot;</td>
<td>2'-0&quot;</td>
<td>2 spaces at 4'-0&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C5 x 6.7</td>
<td>10'-0&quot;</td>
<td>2'-6&quot;</td>
<td>5'-0&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>12'-0&quot;</td>
<td>2'-0&quot;</td>
<td>2 spaces at 4'-0&quot;</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

To suit roof height: 9" or 12" or 15"

**Wide variety of brackets available; call the factory for assistance.**

### Rigid return idler assembly

<table>
<thead>
<tr>
<th>Belt Width</th>
<th>A</th>
<th>DROP</th>
</tr>
</thead>
<tbody>
<tr>
<td>36&quot;</td>
<td>44.62</td>
<td></td>
</tr>
<tr>
<td>42&quot;</td>
<td>50.62</td>
<td>9&quot;</td>
</tr>
<tr>
<td>48&quot;</td>
<td>56.62</td>
<td>12&quot;</td>
</tr>
<tr>
<td>54&quot;</td>
<td>62.62</td>
<td>or</td>
</tr>
<tr>
<td>60&quot;</td>
<td>68.62</td>
<td>15&quot;</td>
</tr>
</tbody>
</table>

Extra Clearance Drop Bracket*

*Belt Width + 12"

6" or 7"
**Floor Mount**

![Diagram of floor mount structure]

**Floor mounted rigid supports**

<table>
<thead>
<tr>
<th>Channel Size</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>Drop</th>
</tr>
</thead>
<tbody>
<tr>
<td>C3 x 4.1</td>
<td>10'-0&quot;</td>
<td>2'-6&quot;</td>
<td>5'-0&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C4 x 5.4</td>
<td>12'-0&quot;</td>
<td>2'-0&quot;</td>
<td>5'-0&quot;</td>
<td>2 spaces at 4'-0&quot;</td>
<td></td>
</tr>
<tr>
<td>C5 x 6.7</td>
<td>10'-0&quot;</td>
<td>2'-6&quot;</td>
<td>5'-0&quot;</td>
<td>2 spaces at 4'-0&quot;</td>
<td></td>
</tr>
</tbody>
</table>

See floor stand dimensions for height adjustment. 9" required at 12" or 15".

*Other sizes and lengths available. Call the factory for assistance.*

Also available in Catenary and Wire Rope

**Rigid Channel**

<table>
<thead>
<tr>
<th>Channel Size</th>
<th>3 x 4.1</th>
<th>4 x 5.4</th>
<th>5 x 6.7</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>3&quot;</td>
<td>4&quot;</td>
<td>5&quot;</td>
</tr>
<tr>
<td>10'-0&quot; Nominal</td>
<td>5081-053-001</td>
<td>5081-053-002</td>
<td>5081-053-003</td>
</tr>
</tbody>
</table>

**Channel Floor Stand**

Also available in Catenary and Wire Rope

**Channel Crossmember**

Also available in Catenary and Wire Rope

Expando structure available. Call factory for details.
Terminal Equipment

Link-Belt® terminal equipment provides key anchorage points of belt conveyor systems. FMC Technologies designs and manufactures a full line of terminal equipment including:

- Discharge sections
- Drives
- Electrical controls
- Belt storage
- Take-ups
- Winches
- Tail sections
- Belt winders
- Loading sections
- Belt cleaners
- Pulleys

Link-Belt terminal equipment is custom designed to meet your specific application requirements. If you are looking for continuous, low maintenance, reliable terminal equipment that will last for the life of the mine, FMC Technologies has the solution.

Typical Conveying System Components
Discharge Sections

Link-Belt® remote discharge units are an integral part of an effective conveying system, providing a discharge or transfer point at the “head end” of the conveyor belt, to another belt, stockpile or bin. Discharge units can be floor or roof mounted, and are available in a variety of configurations, from simple one-to-one in-line transfers to complex, multi-belt transfer points. They can also be custom engineered to match any transfer angle - this type of integrated design helps reduce installation time and cost.

Discharge units are equipped with a head pulley to change directions of the conveyor belt as well as to provide a discharge point for the conveyed material on the carry side of the belt. They can also be equipped with a snub pulley to control the elevation of the return belt and to allow for the installation of an integrated belt cleaner system. Discharge units can also be fitted with impact idlers or impact slider beds (in the case of in-line transfers).

FMC Technologies has years of experience designing discharge units, with a huge portfolio of completed designs. Contact us for assistance with your application.
Drives

Link-Belt® drives provide the energy needed to move a loaded conveyor belt throughout the length of the system. Drives consist of pulley skids, power modules and electric controls. Power modules are modular in construction such that one, two, three or four modules can be attached to the ends of the drive pulleys depending on the total horsepower requirements of the conveyor drive.

FMC Technologies provides many types of drive configurations that can be combined with innovative control design. The most common type of pulley skid has two drive pulleys attached to a welded frame or skid. Other common pulley skids are configured for one to four pulleys.

Adjustable boom drives provide portability for temporary installations. Booster drives are used on long conveyors to add power along the length of the conveyor while keeping the belt tensions within required parameters.

Remote conveyor drives keep production moving in permanent installations with features such as the latest alignment-free and parallel shaft reducers combined with drive options, including variable frequency AC, DC drives and fluid couplings. Tripper Drives are available with load cell feedback systems that can be integrated with your mine control information network.

Link-Belt drive systems are custom engineered. Each component is carefully selected and evaluated to meet specific application requirements. Over the years, we’ve designed drives and terminal equipment for mines all over the world. Chances are we’ve already designed a drive system that will meet your requirements. Contact us to discuss your application.
2-Pulley Drive with Right-Angle, Base-Mounted Power Modules

2-Pulley Parallel Shaft Base-Mounted Dual Drive

2-Pulley Alignment-Free Drive

Roof-Mount 2-Pulley Alignment-Free Drive
VFD Drive Systems

Because power transmission affects the performance, cost and reliability of conveying systems, FMC pairs Link-Belt® drives with state-of-the-art controls to deliver outstanding control and reliability for starting, running and stopping conveyor belts. Each control system is custom designed to meet specific operating requirements/environments.

Link-Belt controls provide value through technology. Whether the requirements are a simple control system, or a complex automated information system, we’ll provide a custom solution to meet your needs.

VFD Drive products include:

- Electric Controls
- Switch Locators
- Belt Work Stations
- Electric Power Packs
- VFD Enclosures
- Electric Winch/Storage Units
- ElectroCenters
- Control Panels
- Fiber-Optic Panels
Loading Sections

FMC Technologies provides loading sections in a variety of designs and configurations. Link-Belt® loading sections can be configured for your application and may be fitted to a variety of belt profiles.

All FMC Loading Sections are supplied with Link-Belt impact idlers as standard. High impact slider beds are available as an option. Link-Belt loading sections can be installed and removed from the conveyor system without the need to “break the belt.” This results in increased up time and eliminates the need for expensive and time-consuming belt splicing.

Tail Sections

The tail section, located at the opposite end from the discharge end of the belt conveyor system, is an essential part of every conveyor system. Link-Belt® tail sections consist of an A-frame tail piece equipped with a pulley mounted onto a frame. Most also have a belt plow mounted to the frame to prevent fugitive material on the return belt from being trapped between the belt and the pulley. The A-frame tail piece must be accompanied by an intermediate loading section.

Tail Loading Sections

A tail loading section has the same features as the tail section plus the addition of an integral loading section. FMC manufactures a variety of Link-Belt® electric tail loading sections, as well as specialty hydraulic boom tail loading sections.

Intermediate Loading Sections

FMC offers Link-Belt® intermediate loading sections for all transition angles, with associated chute and skirt arrangements.
Belt Tensioning/Accessories

Link-Belt® Take-Up Units

Link-Belt® Take-Ups provide critical belt tensioning during startup, loading and conveying to prevent drive pulleys from slipping. Take-ups absorb belt stretch while maintaining proper design tension to the belt as the conveyor is unloaded, partially loaded or fully loaded.

Link-Belt Take-Ups are offered with AC electric winches or traditional hydraulic cylinder winches. Hydraulic cylinder winches are available in travel distances from zero to 40 feet, and electric winches are available in travel distances from 40 to 500 feet. Call the factory for assistance.
Belt Storage

Belt Storage Units

FMC Technologies offers Link-Belt® belt storage units in two major configurations using the same frame component design, with Link-Belt hydraulic or electric constant tension winch systems. Single or multiple lap configurations are available. Link-Belt storage units are supplied with positive deploy drop carriages.

Belt Winders

Link-Belt® Belt Winders are used to dispense or receive conveyor belting from the belt conveying system. Most often used in conjunction with belt storage units for belt conveyors that are lengthened or shortened on a regular basis, the belt winder reels the conveyor belt into a roll or spool so that it can be moved, stored and reused at a later date.

Belt winders can be mobile or used in conjunction with splice stations where mechanical splices can be installed or removed from a length of conveyor belting located near the belt storage unit.

Belt Winding workstations are available in any belt width. These systems are designed and manufactured to integrate with your storage units and belt take-ups. Guarding must be used - customized guarding can be supplied by FMC.
Electric Winches

Link-Belt® Winches are designed to work in conjunction with our belt storage and take-up units. Winch design incorporates load capacities, line dimensions, and maximum line speed under load. FMC’s electric winch is offered as our premier top-of-the-line system without the premium price. Features include:

- Active carriage position annunciation (load cell feedback system optional)
- Single motor direct drive design
- Fail-safe electric brake with manual release
- Customized control integration with conveyor drive system

AC-Constant Tension Winch
15 HP to 300 HP
1000 lb to 100,000 lb
Belt Cleaners

Residual carryback of fines and dust adhering to conveyor belts presents a sticky challenge. Expensive maintenance and safety problems created by carryback are so prevalent that CEMA recommends the installation of at least one belt cleaner at each conveyor discharge point.

**Link-Belt® Scavenger Belt Cleaners** effectively eliminate carryback before it causes expensive maintenance and safety hazards and reduce costs associated with maintenance as well as blade and conveyor belt replacement.

The potential for cost savings to operators is integral to the Scavenger design. The heart of the technology is a patented parallelogram design that ensures consistent blade-to-belt contact, pressure and angle across the full width of the conveyor belt. The entire belt is cleaned equally, with the Scavenger automatically adjusting for load to achieve consistency as the blades endure wear.

Enhanced belt life is also addressed through the Scavenger’s modular parallelogram units which form multiple blunt blade arrangements that exploit the flexible properties of the rubber belt, squeezing rather than scraping embedded material from the belt. The squeezing action eliminates abrasive material before it passes over the blade, thus preserving and extending both belt and blade life. In addition, the blunt, wear-resistant tungsten-tipped blades produce a low-friction, favorable wear relationship between the belt and blades which contributes to longer service life for the blades.

Link-Belt Scavenger Belt Cleaners require no mechanical adjustment between blade changes. Consistent pressure is maintained through a pressurized air bladder which supports all parallelogram modules in the cleaning unit. The pressure gauge provides a visual indication of blade-to-belt pressure which can be adjusted remotely as required.

Both primary and secondary models are offered. Features include:

- Precise pressure control to maximize belt and blade life
- Pre-determined blade to belt angle remains constant
- Remote pressure monitoring
- No mechanical adjustment of blades between blade changes
- Modular components for cost-effective maintenance and easy exchange
- Fully compatible with reversible belt systems

Optional accessories include a no-load device to de-activate the cleaner when there is no material on the belt, and a clip avoidance system which detects mechanical joints and momentarily reduces pressure in the air bladder to allow the joint to pass over the blades with a minimum of resistance and interference.

Call the factory for assistance in belt cleaner selection.