Conveying Equipment | Drag Conveyors
Rexnord Conveying Equipment

For more than 100 years, Rexnord has been a primary source for power transmission and conveying products for industries around the world. Rexnord has been designing drag conveyors for over 60 years. With our experience and know-how, we have what it takes to get the job done however big or small.

Rexnord heavy duty drag conveyors are designed specifically for critical applications handling dusty, abrasive, and hot materials commonly found in heavy industries such as cement and fertilizer.

It is important to note that Rexnord designs and manufactures all critical wear components and power transmission components used in Rexnord drag conveyors unlike the competition that purchases all of the components. This includes the drag chain, gear reducer, segmental sprockets, bearings, drive chain, and coupling. This assures single source control and responsibility for manufacturing and service support for the entire drag conveyor.

Rexnord Drag Conveyors

Drag conveyors have one or more endless strands of heavy duty chain that drags a bed of bulk material through a trough or enclosed casing. The chain moves the material due to the high internal friction of the material such as cement clinker and fertilizer products. Drag conveyors typically move the material over the bottom of the casing over the hardened wear blocks or smooth hardened plate depending on the specific material and incline.
Applications

Rexnord drag conveyors are well suited for applications that require multiple loading or discharge points, such as feed from in line storage silos. A drag conveyor is also used when dust control is critical and a totally enclosed casing is required.

Design Parameters

• Designed for 10 - 300 STPH (9-272 MTPH) of material. Capable of handling a range of materials from dust to 6 inch (150 mm) lumps.

• A 15 degree incline is the maximum for clinker. A 12 degree incline will be the general rule of thumb for other materials.

• Material that is 800°F (427°C) or greater, the chain must be derated since it’s embedded in the material it is carrying. Please consult Rexnord Conveying Equipment.

• Design up to 200 ft (61 m). If greater center distances, please contact Rexnord Conveying Equipment.

• Material commonly handled: clinker, limestone, gypsum, coal, crushed stone, hot lime, cement, fertilizer products.

• Applications that handle fine materials and applications with steep inclines require the use of a V flight heavy duty drag chain.

Information Required to Quote

<table>
<thead>
<tr>
<th>Material</th>
<th>PCF/ KG/m³</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum Material Density</td>
<td>PCF/ KG/m³</td>
</tr>
<tr>
<td>Maximum Material Density</td>
<td>PCF/ KG/m³</td>
</tr>
<tr>
<td>Temperature</td>
<td>F/ C degrees</td>
</tr>
<tr>
<td>Lump Size</td>
<td>in/ mm</td>
</tr>
<tr>
<td>Percentage of Moisture</td>
<td>%</td>
</tr>
<tr>
<td>Abrasiveness</td>
<td></td>
</tr>
<tr>
<td>Capacity</td>
<td>STPH/ MTPH</td>
</tr>
<tr>
<td>Conveyor Shaft Centers</td>
<td>Feet/ Meters</td>
</tr>
<tr>
<td>No. of Discharge Points</td>
<td></td>
</tr>
<tr>
<td>Horizontal or Incline Degrees</td>
<td></td>
</tr>
<tr>
<td>Casing Size (Retrofit)</td>
<td></td>
</tr>
</tbody>
</table>
1. Heavy Duty Rexnord® WHX drag chain
2. Hardened steel segmental sprocket with body secured to headshaft - Allows for easy maintenance and replacement.
3. Rexnord or Falk gear reducer
4. AISI C-1045 CFS Headshaft
5. Hinged inspection doors
6. Return roller
7. Return roller bearing and packing
8. ¼" (6 mm) steel casing construction
9. Rexnord® Octagonal tail wheel with guide lugs
10. Rexnord® ZHT heavy duty screw take-up bearings
11. Motion Indicator probe mounted at tail section
12. AISI C-1045 CFS Tailshaft
13. AR Liner plates
14. Rexnord wear blocks on the bottom of the casing
15. Slide gates for multiple discharge (Option)
16. Rexnord® or Link-Belt® heavy duty spherical roller bearings
17. ¼” (6 mm) discharge flange
Rexnord® Heavy Duty Drag Chain made in the USA

Reduce maintenance and downtime with Rexnord heavy duty welded drag chain while increasing your conveying efficiency!

This premium performance drag chain features:

- Hardface welding on both of the chain's sliding surfaces as standard. A typical weld hardness of 58 Rc and a heavy weld bead give this chain excellent wear resistance in cold clinker applications.

- Interference fit between the pin and chain sidebar dramatically improves chain strength and joint life over that of typical drag chain. No loose pins to move around the chain joint.

- An Induction Hardened pin gives the best of two worlds – a 60 Rc typical case and tough, impact resistant material in the balance of the pin. The result: wear resistance coupled with impact resistance.

- Square edges on the wing and sidebar or welded drag chain conveys more efficiently than rounded cast chain edges and moves a deeper bed of material with each revolution of the chain.

- Heat treated and fabricated steel components eliminate the failures that cast chains experience from casting porosity and inclusions.

<table>
<thead>
<tr>
<th>Chain Number</th>
<th>Pitch</th>
<th>A</th>
<th>Sidebars</th>
<th>Pins</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>T</td>
<td>F</td>
</tr>
<tr>
<td>WHX5157</td>
<td>6.05</td>
<td>154</td>
<td>0.63</td>
<td>2.50</td>
</tr>
<tr>
<td>WHX6067</td>
<td>9.00</td>
<td>229</td>
<td>1.13</td>
<td>2.50</td>
</tr>
<tr>
<td>WHX5121*</td>
<td>9.00</td>
<td>229</td>
<td>254</td>
<td>762</td>
</tr>
<tr>
<td>WHX6121*</td>
<td>9.00</td>
<td>229</td>
<td>254</td>
<td>762</td>
</tr>
</tbody>
</table>

*WHX 5121 is dimensionally the same as WHX 6121 except it runs closed end forward.

TH: Thru-hardened  CIH: Circumferential Induction Hardened after thru-hardening  CARB: Carburized

Dimensions shown are in inches and working load in pounds. Red dimensions are millimeters and Newtons.

Dimensions are subject to change. Certified drawings are available upon request.
Fabricated Steel Sprockets and Octagonal Tail Wheels for HEAVY DUTY WELDED STEEL DRAG CHAINS

Octagonal Tail Wheels

Octagonal tail wheels offer several advantages over conventional sprockets. Chain/tail wheel forces are transmitted directly between sidebars and the octagon surfaces, eliminating barrel and sprocket tooth wear. Side guide lugs are provided to keep the chain centralized on the tail wheel.

Octagon plates and guide lugs are made of hardened steel. Sidebar contact surfaces can be hard faced for maximum wear resistance.

<table>
<thead>
<tr>
<th>Rex Chain Number</th>
<th>Bottom Flat “B”</th>
<th>Width “W”</th>
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</thead>
<tbody>
<tr>
<td>WHX5157</td>
<td>11.85”</td>
<td>6.50”</td>
</tr>
<tr>
<td></td>
<td>301mm</td>
<td>165mm</td>
</tr>
<tr>
<td>WHX6067</td>
<td>18.88”</td>
<td>7.50”</td>
</tr>
<tr>
<td></td>
<td>480mm</td>
<td>191mm</td>
</tr>
<tr>
<td>WHX5121 / WHX6121</td>
<td>18.88”</td>
<td>9.00”</td>
</tr>
<tr>
<td></td>
<td>480mm</td>
<td>239mm</td>
</tr>
</tbody>
</table>

B-Loc Bore Range

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<table>
<thead>
<tr>
<th></th>
<th></th>
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<tbody>
<tr>
<td>0 to 3.937”</td>
<td></td>
</tr>
<tr>
<td>0 to 100mm</td>
<td></td>
</tr>
<tr>
<td>4 to 4.937”</td>
<td></td>
</tr>
<tr>
<td>102 to 125mm</td>
<td></td>
</tr>
<tr>
<td>5 to 5.937”</td>
<td></td>
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<tr>
<td>127 to 151mm</td>
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</table>
Conveyor and Elevator System Solutions

- **Rexnord® Heavy Duty Drag Chain made in the USA**
- Retrofits of existing installations (Quality, productivity, capacity)
- Solutions yield larger capacities, fewer components and longer wear life and maintenance intervals, resulting in a lower total cost of ownership

Quality, Reputation and Reliability

- 100+ years of experience
- 6600 Installations worldwide
- World class support
- Rexnord professionals available for worldwide support
- Six Sigma quality standards
- Kaizen methodology and lean tools drive process improvement

Rexnord can help retrofit your existing drag conveyors, pan conveyors, apron feeders, and belt elevators into a reliable piece of equipment. Rexnord has the staff to support your plant with local Account Executives, Customer Service Professionals, Product Specialists, Applications Engineers, and Field Service Engineers ready to help your plant out. Please contact your local distributor.

Please contact Rexnord Conveying Equipment at 414-643-2805

After Sale Customer Support

- Rexnord Technical Service (RTS) – Problem Investigation, and Product Testing
- Preventative maintenance training
- Field service support and preventative maintenance assistance
- Chain wear analysis program
- Extended warranties available

WORLDWIDE CUSTOMER SERVICE

**AUSTRALIA**
Rexnord Australia Pty Ltd.
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