

# Power Transmission Products & Solutions for Cement Processing



# Choose Rexnord to help you produce tomorrow's cement today.

From specification and installation to field monitoring and service, Rexnord helps maximize your uptime, productivity and profit with our full line of high-quality mission-critical products.





### **Cement processing expertise.**

Work with a true partner who understands your applications, specifies the right equipment and adds value at every step. Rexnord has kept materials moving through cement mills for more than a century. Mill operators, equipment manufacturers and consulting engineers turn to Rexnord for their power transmission solutions.

### **Rexnord is with you every step of the way.**

From specification and installation to testing, monitoring, repair and overhauls, Rexnord provides competitive lead times and outstanding customer service. Count on our superior product quality, on-the-spot field service and industry-leading technical support to prevent costly maintenance, repairs and shutdowns, maximizing your return over the system's lifecycle. With sales and service operations worldwide, and a vast network of distributor relationships, we deliver exactly what you need, when you need it.

### **Rexnord products, Rexnord reliability.**

Rexnord is a leading manufacturer of critical system components that perform under the most rigorous demands in your cement mill applications, including gear drives, bearings, bucket elevator chain, couplings and torque limiters. With safety in mind, our products are engineered to meet cost and performance criteria to ensure the most efficient solution for specific applications.



**LIMESTONE QUARRY**

C J L M O Q  
R S T

**BELT CONVEYORS**

A B D E F G H J K  
L M N O P Q R U V

**DRAG CONVEYOR**

A B D E F G H L T

Map shows a typical cement processing plant

**Bearings**

**Gear Drives**

**PT Drive Components**



**A** Rexnord® SAF-Style Bearings



**D** Falk V-Class™ Gear Drives



**G** Falk Ultramite® Gearmotors



**I** Stearns® Motor Mounted Brakes



**B** Rexnord SHURLOK® Adapter Mount Spherical Roller Bearings



**E** Falk® Quadrive® Shaft-Mounted Gear Drives



**H** Rexnord Planetgear™ Speed Reducers



**J** Autogard® Torque Limiters



**C** Rexnord Cylindrical and Spherical Roller Bearings



**F** Falk A-Plus® Gear Drives



**K** Falk True Hold® Low-Speed Backstops



**L** Tollok™ Keyless Locking Assemblies



### Couplings



**M** Falk Steelflex® Grid Couplings



**P** Falk True Torque® Fluid Couplings



**N** Falk Lifelign® Gear Couplings



**Q** Rexnord Omega® & Viva® Elastomeric Couplings



**O** Falk Orange Peel® Rotating Shaft Guards



**R** Falk Wrapflex® Elastomeric Couplings

### Industrial Chain & Conveying Components



**S** Link-Belt® & Rex® Roller Chain



**T** Link-Belt and Rex Engineered Steel Chain, Bucket Elevators and Conveyor Chain



**U** Rex Conveyor Idlers

### Services



**V** Rexnord Industrial Services™ and Falk Renew®

# Rotary Kiln and Cooling System

From hot clinker handling and grinding to high-volume air movement, Rexnord will help you determine the right power transmission products for your application. Our engineered products are designed for the rigorous demands of continuous operation to help avoid unplanned kiln outages and increase your uptime.



## Rexnord keeps your mills operating and your revenue rolling.

The one real measurement in a cement mill is maximizing your production rates. At the end of the day, it is our expertise and the reliability of our products that help keep your kiln and cooling systems running efficiently, and producing the most cement tonnage each day.

### Gear

Rexnord Planetgear Speed Reducers  
Falk Quadrive Shaft-Mounted Drives  
Falk V-Class Gear Drives

### Bearings

Rexnord SHURLOK Adapter Mount Spherical  
Link-Belt SAF Spherical Roller Bearings

### Industrial Chain & Conveying Components

Link-Belt and Rex Engineered Steel Chain  
Rex Classic Conveyor Idlers  
RexDura Conveyor Idlers

### Power Transmission Services

Rexnord Industrial Services

### Couplings

Falk Steelflex Grid Couplings  
Falk Lifelign Gear Couplings  
Falk Orange Peel Rotating Shaft Guards  
Falk True Torque Fixed-Fill Fluid Couplings  
Rexnord Omega and Viva Elastomeric Couplings  
Falk Wrapflex Elastomeric Couplings

### PT Drive Components

Autogard Torque Limiting Devices  
Falk True Hold Low-Speed Backstops  
Tollok Keyless Locking Assemblies

## Tollok Keyless Locking Assemblies

For more than 35 years, Tollok products have led the industry in locking assemblies. Our robust offering features a wide range of options, including internal locking assemblies, locking elements, shrink discs and rigid couplings. Our full line of products can be customized to fit ever-changing application needs and are ideal for use in heavy-duty and specially engineered environments.

- Quick installation time
- Equipment protection
- Increase life of system components
- Up to 1,500,000 Nm of torque capacity
- Up to 2,500,000 lbs-ft capacity



# Bulk Material Handling

Your plant faces a variety of transport challenges, such as moving raw limestone, hot clinker and finely processed materials. Rexnord understands these challenges and that one size does not fit all.

From heavy-duty elevator chain and gear drives to pan assembly rollers, bucket elevator components and more, we provide a wide range of solutions to help keep your mill running. Rely on our experts to help determine the ideal configuration and components for your bulk material handling needs.





## Rexnord is there from beginning to end.

Rexnord is your single source for bulk material handling solutions and support in cement mills. We design and manufacture the critical wear and power transmission components for drag conveyors, apron feeders, belt conveyors and chain bucket elevators, including chain, traction wheels, gear reducers, bearings, couplings and idlers. No matter what part of the conveying process your application is in, our products ensure efficient transport of material with minimal spillage.



### Heavy-Duty Elevator Chain

- Standard sizes are available for quick delivery
- Wide array of designs to suit specific applications and customer requirements
- Designed and produced from choice raw materials
- Superior heat treatment and hardness depth of all components
- Technically superior sidebar hole quality



### Pan Assembly Rollers

- Designed for bulk material applications
- Bearings protected by inner and outer seals
- Re-greasable or sealed for life
- Quick, simple 2-bolt mounting
- Easy to install and retrofit
- Extend system life and increase uptime
- Forged roller housing
- Press-fit sealing rings
- Double-shielded ball bearings



### Bucket Elevator Components

- Single source for all your elevator component needs
- Premium traction wheels and sprockets
- Heavy-duty reinforced buckets
- No-lube bearings
- Internal Gravity Take Up (IGTU)
- Shaft locking devices

## Additional Bulk Material Handling Solutions

Below are examples of key products for your applications.

### Falk V-Class Gear Drives

- 27 unit sizes, up to 3M in-lb (340 kNm) torque
- Up to 10,000 hp (7,500 kW)
- Parallel or right-angle configuration
- Solid or hollow output shaft
- Superior thermal performance

### Falk True Hold Low-Speed Backstops

- Accommodates torque ranges from 3,000 ft-lb to 747,000 ft-lb
- (4,068 to 1,013,000 Nm)
- Type NRT and NRT H available
- Bore sizes up to 20.0 in (510 mm)
- Overrunning speeds from 1 to 2,800 rpm
- Type NRT H used for higher speed applications
- Type NRT with roller ramp stopping mechanism
- Three year, heavy-duty warranty\*
- Single, tandem, or multiple drive arrangements are available
- Metric and standard bore availability
- Common stock bore sizes are available for quick delivery
- NRT backstops allow for placement on the shaft of a gearbox or head shaft of the conveyor
- External backstops allow for inspection and maintenance without the disassembly of other drive components

\* NRT H series provided with one year warranty

### Falk Steelflex Grid Couplings

- 25 sizes
- 11 models including high-speed, spacer, flywheel, brake and controlled torque
- Up to 20 in (508 mm) bore capacity
- Up to 8,250,000 in-lb (932,126 Nm) torque capacity
- Up to 10,000 rpm
- Five-year heavy-duty warranty when lubricated with Falk Long Term Grease (LTG)
- Extended maintenance periods
- Replace-in-place design eliminates need to move connected equipment
- Minimized changeover time

### Rex 6000 Series SHURLOK Adapter Mount Roller Bearings

- Full range of housing styles
- Shaft sizes up to 6 15/16 in (125 mm)
- Shaft attachment with SHURLOK Adapter Mount technology
- Four standard field interchangeable seals (Viton option available)
- 4 degrees (+/- 2 degrees) of dynamic and static misalignment
- Superfinished rollers and raceways
- Field-adjustable internal bearing clearance
- Proprietary Positive Locking System
- Accommodates commercial grade shafting



## Rexnord Solutions in Action

Rexnord strives to be a trusted advisor, providing efficient product and service solutions that result in a lower total cost of ownership through acquisition and installation savings, reduced downtime, less maintenance and longer product life.

### Rex Hard-Faced Welded Steel Chain saves more than \$236,000 for cement producer

A cement producer's drag conveyor chain needed to be replaced after only one year of service, costing tens of thousands of dollars in lost production and downtime. Rexnord provided its Rex Hard-Faced Welded Steel Chain as the solution. Since installing the chain, the customer has significantly **reduced maintenance costs, eliminated downtime and increased production.**

### SHURLOK bearings keep vibration and costs down for cement supplier

A cement and aggregate supplier was experiencing premature failure of bearings used on the shaft of a fan to cool red-hot clinker conveyed in its plant. Rexnord replaced the existing bearings with SHURLOK Adapter Mount Roller Bearings. As a result, the supplier has achieved **65 percent savings per year.**

### Cement producer saves more than \$43,000 with Rex Bucket Elevator Chain

A cement producer was struggling with premature chain failure on a cement clinker bucket elevator. The producer switched to using Rex Engineered Steel Bucket Elevator Chain and now expects a total performance life of four years and has significantly **reduced maintenance costs, eliminated downtime and increased production.**

Visit [www.rexnord.com/tco](http://www.rexnord.com/tco) to read the full version of these case studies.

From the rotary kiln and cooling system to bulk material handling for your cement mill applications, Rexnord is ready to help you with our extensive cement processing expertise and comprehensive line of mission-critical products.

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Contact Rexnord today to learn about our cement processing solutions that can help you increase your uptime, productivity and profit.

866-REXNORD/866-739-6673 (Within the U.S.) or +1 414-643-2366 (Outside the U.S.)

[www.rexnord.com](http://www.rexnord.com)

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## Why Choose Rexnord?

When it comes to providing highly engineered products that improve productivity and efficiency for industrial applications worldwide, Rexnord is the most reliable in the industry. Commitment to customer satisfaction and superior value extend across every business function.

### Delivering Lowest Total Cost of Ownership

The highest quality products are designed to help prevent equipment downtime and increase productivity and dependable operation.

### Valuable Expertise

An extensive product offering is accompanied by global sales specialists, customer service and maintenance support teams, available anytime.

### Solutions to Enhance Ease of Doing Business

Commitment to operational excellence ensures the right products at the right place at the right time.