

Power Transmission Products & Solutions for Refinery and Petrochemical Plants



When uptime and reliability are critical,
Rexnord is the logical choice.



Increasing mean time between repair and eliminating unscheduled downtime is paramount to the efficiency and profitability of your plant.

We help you maximize and sustain your uptime goals. From specification and installation to field monitoring and service, Rexnord helps maximize your uptime, productivity and profit. Keep your energy applications at peak production with our full line of high-quality, mission-critical products.

Refinery and petrochemical expertise.

Work with a true partner who understands your applications, specifies the right equipment and adds value at every step. From fluid, air and gas handling, to generators, cooling towers, and bulk material handling — plant operators, equipment manufacturers and consulting engineers turn to Rexnord for their power transmission solutions.

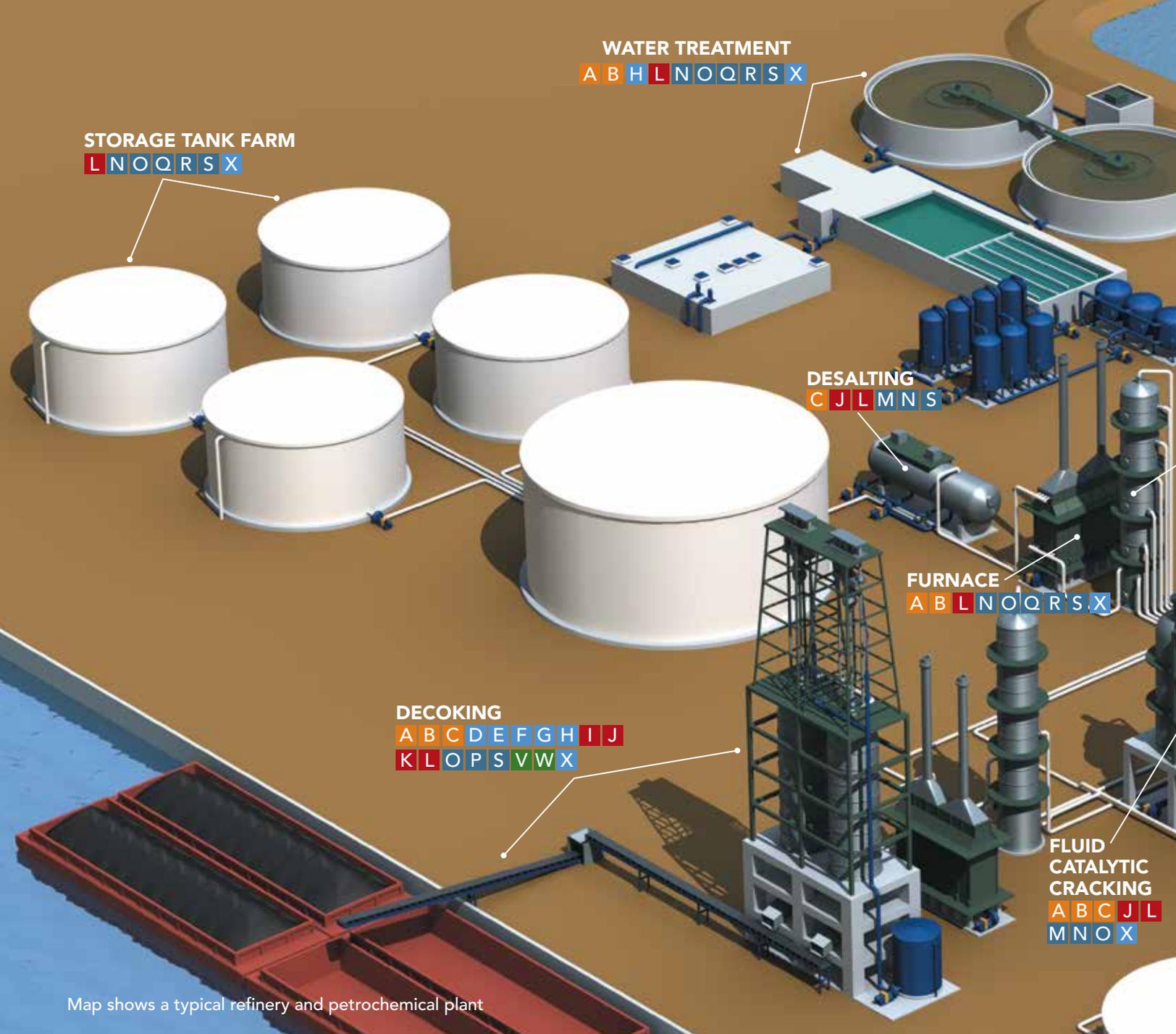
Rexnord is with you every step of the way.

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, which ultimately maximize your return over the product's total lifecycle. With sales and service operations at locations 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 energy applications, including gear drives, couplings, idlers, bearings, and torque limiters. With safety in mind, our products are engineered to meet cost and performance criteria to ensure the most efficient solution for your specific applications.





Map shows a typical refinery and petrochemical plant

Bearings



A Rexnord® SAF-Style Bearings



B Rexnord SHURLOK® Adapter Mount Spherical Roller Bearings



C Rexnord Cylindrical and Spherical Roller Bearings

Gear Drives



D Falk V-Class™ Gear Drives



E Falk® Quadrive® Shaft-Mounted Gear Drives



F Falk A-Plus® Gear Drives



G Falk Ultramite® Gearmotors



H Rexnord Planetgear™ Speed Reducers

PT Drive Components



I Stearns® Motor Mounted Brakes



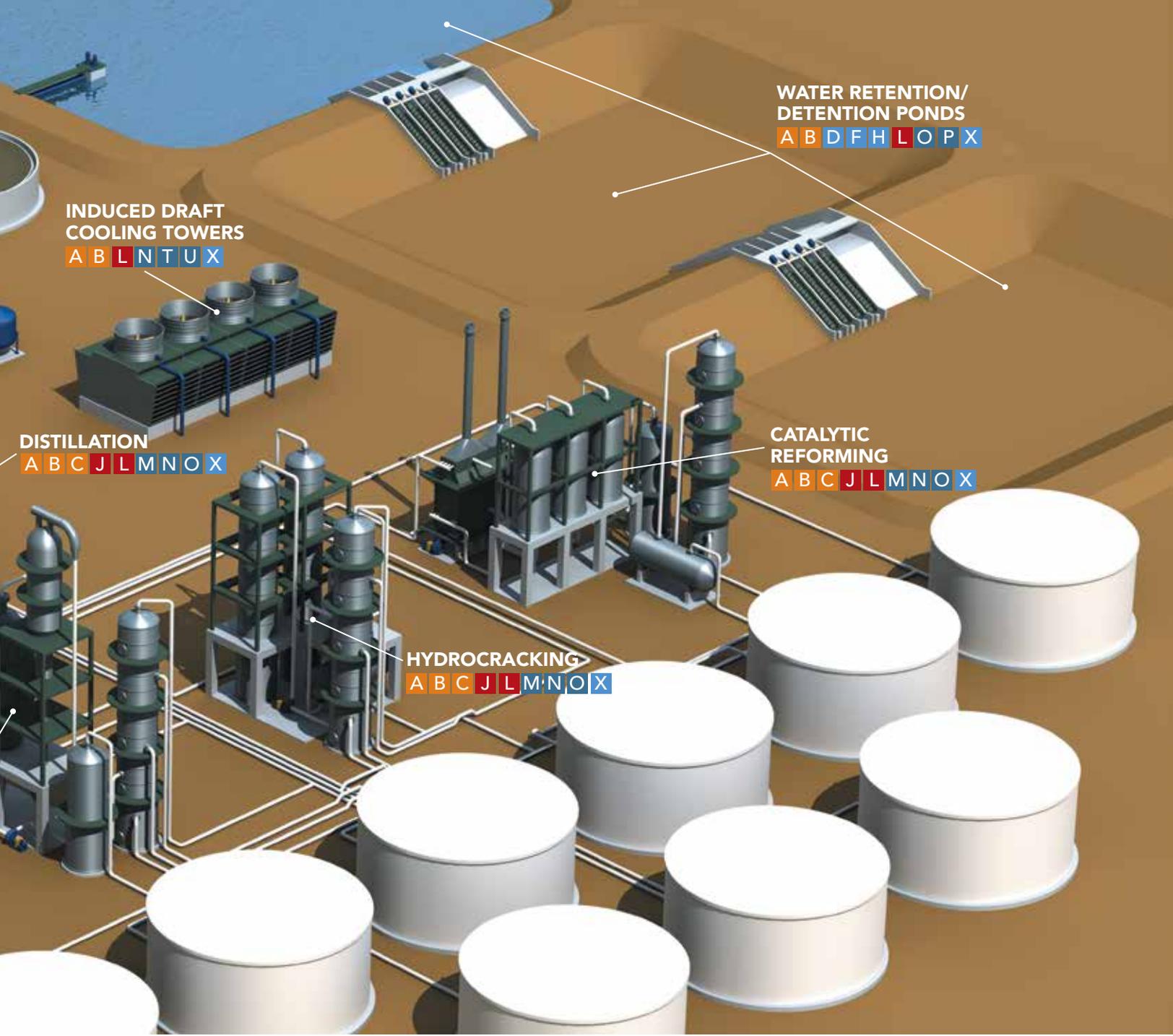
J Autogard® Torque Limiters



K Falk True Hold® Low-Speed Backstops



L Tollok™ Keyless Locking Assemblies



WATER RETENTION/
DETENTION PONDS

A B D F H L O P X

INDUCED DRAFT
COOLING TOWERS

A B L N T U X

DISTILLATION

A B C J L M N O X

CATALYTIC
REFORMING

A B C J L M N O X

HYDROCRACKING

A B C J L M N O X

Couplings



M Rexnord Euroflex™ Disc Couplings



P Falk Lifelign® Gear Couplings



S Falk Orange Peel® Rotating Shaft Guards



N Rexnord Thomas® Disc Couplings



Q Rexnord Omega® & Viva® Elastomeric Couplings



T Rexnord Addax® Composite Disc Couplings



O Falk Steelflex® Grid Couplings



R Falk Wrapflex® Elastomeric Couplings



U Rexnord Addax Cooling Tower Brakes

Industrial Chain & Conveying Equipment



V Rexnord Welded Steel Drag Chain



W Rex® Conveyor Idlers

Services



X Rexnord Industrial Services™ and Falk Renew®

Fluid Handling



Refineries and petrochemical processes require multiple fluid handling systems for the feedstock, distilled hydrocarbons, and process and effluent water throughout the plant.

In each instance, we apply industry standards such as API, ISO and ANSI, to ensure safe and reliable operation.

Rexnord — a broad coupling portfolio for your specific fluid handling needs.

Rexnord manufactures a complete line of flexible couplings for fluid handling systems, each of which have been designed with specific industry standards in mind. From engineered API compliant Rexnord Thomas Disc Couplings, to general purpose ANSI Rexnord Omega and Viva Elastomeric Couplings, our coupling product portfolio delivers reliable performance for every pump and fluid compressor application within the plant.

API-compliant couplings



Rexnord Thomas Disc Couplings

- More than 25 sizes
- 18 engagement, disconnect, brake and shear pin options
- Up to 15.5 in (394 mm) bore capacity
- Up to 3,390,000 in-lbs (383,019 Nm) torque capacity
- Up to 20,000 rpm
- Allows for visual inspection and easy replacement of disc packs and center members
- Features zero backlash, low-restoring forces, and electrically-insulated designs
- Meets API 671 or API 610 specifications
- ATEX certified

General purpose, ISO and ANSI-compliant couplings



Rexnord Omega, Omega HSU and Rexnord Viva Elastomeric Couplings

- 15 Omega sizes, 12 Viva sizes
- Up to 11 in (279 mm) bore capacity
- Up to 340,200 in-lbs (38,440 Nm) torque capacity
- Up to 7,500 rpm
- Split-in-half flex element design for efficient installation and replacement
- Mounting hole patterns allow for a wide range of shaft gaps: from 0.25 to 11.81 in (6 to 300 mm)
- Non lubricated and low maintenance
- Viva model features patented "V" notch design which provides uniform failure area for overload protection
- ATEX certified

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



Compressors, Blowers and Fans



Air and gas handling equipment are critical processes within refinery and petrochemical plants.

From furnace blowers used within the distillation and cracking process, to centrifugal and turbo compressors for wet gas and charge gas processes, air and gas handling applications depend on sophisticated power transmission components from Rexnord to ensure overall plant reliability and maximum.

Rexnord — premium quality couplings and bearings for your compressors, blowers and fans.

For more than 100 years Rex and Link-Belt Roller Bearings have been built to survive the toughest applications in the harshest environments. Our roller bearings feature superior sealing technology, precision-ground finished surfaces, high thrust and radial load capacities, as well as our patented SHURLOK mounting collar to improve maintenance efficiency. Rexnord Bearings and Falk Steelflex Grid Couplings are ideal for demanding fan and blower applications.

Rexnord Thomas and Euroflex Disc Couplings are specifically designed for sophisticated centrifugal, axial, reciprocating and turbo compressors used for catalytic cracking, delayed coking, hydrocracking and reforming applications while fully complying with industry standards, such as API and ISO.



Rexnord Euroflex High-Performance Disc Couplings

- Engineered and manufactured to meet specific requirements of the application
- Optimized design for high-speed and turbine-driven applications
- High torque and speed capacity with low-mass solution
- Peak torque capacity over 17 million in-lbs (2,000,000 Nm)
- Speeds in excess of 30,000 rpm
- Highly engineered components including bolts and disc packs
- Ideal for gas and steam turbine-driven, high-speed motor-driven and gas compression applications
- Torsionally tuned to fit your complete design
- Close partnership with industry-leading torque measuring and monitoring manufacturers
- Supports 120,000 hp (90 megawatts) and meets API 671, ISO 10441, ATEX, DNV, and ABS specifications



Rex 6000 Series SHURLOK Adapter Mount Roller Bearings

- Full range of housing styles: solid and split cap styles available
- 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



Induced Draft Cooling Towers



Cooling towers are one of the harshest environments for power transmission equipment.

Moisture, chemicals and minerals constantly attack equipment and induce corrosion. These conditions, coupled with frequent motor starts and stops, heavy inertia loads, and a propensity for high misalignment between the driver and driven equipment, demand the use of extremely durable and appropriately designed power transmission products from Rexnord.

Rexnord — superior composite couplings and brakes.

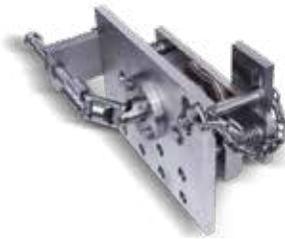
Rexnord Addax Composite Couplings are specifically designed for cooling tower applications. The composite material of the flexible disc and center section offers superior corrosion resistance and improved thermal expansion characteristics relative to steel alternatives. In addition to superior corrosion resistance, these couplings feature a significantly reduced weight for simplified installation and less overhung load on the driver and driven equipment compared to traditional stainless steel couplings. A mechanical brake is also available to dynamically stop and hold hazardous fan rotation during maintenance and lock-out, tag-out instances.



Rexnord Addax Composite Disc Couplings

Lightweight advanced composite materials used in Rexnord Addax Composite Disc Couplings increase the critical speed, reduce vibration and extend bearing life.

- 13 sizes
- Up to 5.06 in (130 mm) bore capacity
- Up to 36,200 in-lbs (4,090 Nm) torque capacity
- High-performance composite spacer with custom spacer lengths, up to 275 in (6,985 mm)
- Up to 500 hp
- Corrosion-resistant center member, flex element, hub, and hardware lower the cost of ownership and extend service life
- Patented unitized flex elements provide 1 degree of misalignment per element and eliminate fretting
- Ships in less than 24 hours if required



Rexnord Addax Cooling Tower Brakes

Keep plant personnel, fans, stacks, and motors safe with cross-pin locking, actuation, remote actuation, and optimal proximity sensor features.

- Cross-pin locking feature for fan lockout
- Actuation features safely stop fans
- Critical components made from 316 stainless steel offer corrosion resistance
- Remote actuation results in no guards or fan stacks required to stop fan
- Simple, low-maintenance design
- Universal mounting — brake mounting position at 3, 6 and 9 o'clock
- Optional proximity sensor for motor protection against locked rotor
- Naval brass fittings eliminate the potential for galvanic corrosion

Bulk Material Handling



Petroleum coke and finished petrochemical solids handling are key processes within all refinery and petrochemical facilities.

Rexnord understands that bulk material handling systems in these instances vary depending upon the plant site location. In many cases, bridge cranes, conveyors or elevators are used to transport bulk material for loading onto a barge, rail car or overland conveyors to deliver the product to an adjacent plant, facility or operation. An unscheduled shutdown in this critical process can result in a reduction of production or a complete plant shutdown.

Rexnord — a pioneering and long history of gear and conveying products.

Rexnord has long been associated with a reputation for delivering reliability and durability through the design and manufacture of our Falk Gear Drives and Couplings, Rex and Link-Belt Bearings, Autogard Torque Limiters, and Rexnord Chain and Idlers. Our diverse portfolio and application expertise will add significant operating benefits to any bulk material handling application where uptime is critical.

Here is a list of Rexnord products at work helping you produce tomorrow's energy today:

Bearings

Link-Belt Cylindrical Roller Bearings
Rex SHURLOK Adapter Mount Roller Bearings
SAF Style Bearings

PT Drive Components

Autogard Torque Limiters
Falk True Hold Low-Speed Backstops
Stearns Motor Mounted Brakes
Tollok Keyless Locking Assemblies

Couplings

Falk Steelflex Grid Couplings
Falk Lifelign Gear Couplings
Rexnord Thomas Disc Couplings
Rexnord Euroflex Disc Couplings
Rexnord Omega Elastomeric Couplings
Rexnord Viva Elastomeric Couplings
Rexnord Wrapflex Elastomeric Couplings
Rexnord Orange Peel Guards
Rexnord Addax Composite Disc Couplings
Rexnord Addax Cooling Tower Brakes

Gear Drives

Rexnord Planetgear Speed Reducers
Falk V-Class Gear Drives
Falk Ultramite Gear Drives
Falk A-Plus Gear Drives
Falk Quadrive Gear Drives

Rex Conveyor Idlers

Rex Classic Idlers
Rex Dura Idlers

Industrial Chain

Rexnord Welded Steel Chain

Services

Rexnord Industrial Services
Falk Renew



Falk V-Class Fast Facts

- Right angle or parallel shafts
- Solid or hollow output shafts
- Superior thermal performance
- Quiet drive train for noise-sensitive areas
- Exclusive Magnum no-leak seal design
- Internal backstops
- Optional Falk Reliability Package available for predictive maintenance



Water Treatment, Ponds & Fire Suppression



Refineries and petrochemical plants typically use one to two gallons of water for each gallon of product produced.

We understand these water treatment facilities, with various pumps and agitators, are important within the plant process, and many are comparable in size and scope to municipal facilities for community water consumption. Various environmental considerations also dictate a thorough handling and purification of the used process and storm run-off water. While retention ponds offer reserves for fire suppression, detention ponds hold and suppress storm water, with both using large gear-driven Archimedes screw pumps for quick and efficient water transfer and dissipation.

Rexnord — diverse power transmission products and technical services.

Our broad portfolio of gear, coupling and bearing products are exceptionally suited for water treatment pumping applications. Bundled with Rexnord Industrial Services (RIS), application expertise and combined with superior engineering and installation support, Rexnord is a trusted partner for your refinery and petrochemical facility. Contact Rexnord for help with asset management, rebuild services, or when a qualified power transmission engineer is required on-site.

Rexnord Industrial Services and Falk Renew

Regardless of the age or condition of your equipment, Falk Renew has the right solution

- Remanufactured gear drives
- Falk, Link-Belt and Rexnord service parts
- Drive exchange programs
- Falk and other OEM gear drives
- 11 global repair centers

Predictive Maintenance

- Vibration analysis
- Thermal analysis
- Lubrication analysis
- Bore scope check
- Noise analysis
- Running gear tooth contact check
- Data logging
- Strain gauging
- Systems assessment
- Remote monitoring

Repair and Rebuilds

- Upgrade and re-rate
- Logistics options
- Spares programs
- Failure analysis

Customized Programs

- Offsite/onsite service and repair contracts
- Asset management programs
- Asset efficiency
- Asset optimization

Universal Drive Shaft & Clutch Repair

- All major brands available from stock
- Same-day pricing and availability
- Standard or oversized steel tubing
- Special carbon fiber composite tubing
- Computerized selection program
- Expedited or emergency shipment program
- Precision balancing
- Repair and refurbishment of existing assemblies
- Special designs available – short-coupled, constant velocity, quick disconnect, and more

Aftermarket Gears & Parts

- Gears, pinions and shafts for Falk and Link-Belt drives
- Gearing elements for all makes of gear drives
- Bearings, seals, shims, and gearbox accessories
- Transportation and heavy equipment gearing
- Heavy equipment shafts and customer parts
- Reconditioned gear programs for emergency breakdowns
- Reverse engineered gear sets





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www.rexnord.com

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.