

Power Transmission Solutions for the Oil & Gas Market



REGAL REXNORD PROVIDES ADVANCED POWER TRANSMISSION SOLUTIONS FOR THE OIL AND GAS INDUSTRY

The well recognized brands of Regal Rexnord supply technically advanced clutches and brakes, speed reducers, couplings, sheaves, geared motors, controls and sensors for a wide range of oil and gas applications including drawworks, topdrives, winches, pump jacks, cranes, and mud pumps utilized on offshore and onshore E&P, FPSO, LNG and specialized support vessels, compressors and vehicles.

Oil and gas market OEMs and end users rely on the companies of Regal Rexnord for premier power transmission products that feature extraordinary performance and reliability, long life and outstanding value.



Regal Rexnord Brands Deliver Value Throughout the Drivetrain

With industry-leading brand names including, Ameridrives, Industrial Clutch, Lamiflex Couplings, Marland Clutch, Nuttall Gear, Stromag, Svendborg Brakes, Twiflex, and Wichita Clutch, Regal Rexnord is positioned to provide OEMs with exceptional drivetrain value by ensuring component compatibility and optimized performance combined with time-saving, single-source convenience.

Extensive Technical Experience in Oil and Gas Applications

Major OEMs routinely rely on the vast oil and gas application knowledge of Regal Rexnord's engineering teams that collaborate to thoroughly analyze specific customer applications and then apply the latest technologies in design, materials and manufacturing. Whether a modified standard product or a custom solution is required, Regal Rexnord provides complete sales and engineering support to customers around the world from the very first concept to the detailed planning, design variation phase and commissioning.

For more information about power transmission solutions for oil and gas applications from Regal Rexnord including case studies, literature, and service manuals, visit

www.regalrexnord.com

REGAL REXNORD PRODUCTS ARE HARD AT WORK IN THOUSANDS OF OIL AND GAS APPLICATIONS... WORLDWIDE



Clutches and Brakes

Regal Rexnord brands offer a wide range of proven caliper and plate braking solutions ideally suited for many types of oil and gas applications including winches, topdrives, cranes and drawworks. Designed to withstand the rigors of oil and gas operating environments, heavy duty brakes and clutches from Wichita, Svendborg, Twiflex, Stromag and Industrial Clutch are preferred by leading oil and gas OEMs. Marland, Formsprag and Stieber backstopping/overrunning clutches provide superior performance on lifeboat davit winch drives, pumps, and other applications. Electrically released brakes and clutches from Warner Electric can be found on pump jacks and specialized vehicle applications.

**Formsprag Clutch • Industrial Clutch • Marland Clutch • Stieber • Stromag
Svendborg Brakes • Twiflex • Warner Electric • Wichita Clutch**



Couplings and Drive Shafts

Pioneering many technological innovations to keep in step with demanding industry requirements, Regal Rexnord couplings (gear, elastomeric and disc types), and universal joints (drive shafts) have become preferred solutions in countless oil and gas applications including pump jacks, drawworks, top drives, mud pumps, various types of cranes, winches, hydraulic fracturing pumps, and compressor sets.

**Ameridrives • Bibby Turboflex • Guardian Couplings • Huco • Lamiflex Couplings
Stromag • TB Wood's**



Controls and Sensors

Reliable Stromag geared cam limit switches are widely used on cranes, and winches. Typically attached directly to the rope drum, limit switches provide protection for equipment and machinery by limiting drum rotation at the rope top and bottom cutoff points.

Stromag



Enclosed Gearing and Geared Motors

Custom Nuttall Gear and Delroyd gearboxes provide years of service on drawworks, pump jacks, gas compressors, mud pumps, mud agitators, and jack up climbing pinion drivetrains. Various speed reducers and drives from Boston Gear along with energy efficient Bauer geared motors provide unmatched reliability and versatility on a variety of oil and gas applications including cranes, winches, and agitators.

Bauer Gear Motor • Boston Gear • Delroyd Worm Gear • Nuttall Gear



Sheaves/Belted Drives

TB Wood's sheaves are found on a wide range of onshore and offshore applications. TB Wood's combines the widest range of belted drives, V-belt or synchronous, with unmatched made-to-order (MTO) capabilities to accommodate the oil and gas industry. Wood's belted drives are commonly used on pump jacks, progressive cavity pumps, mud pumps, charging pumps, blowers and more.

TB Wood's

Regal Rexnord brands supply a wide range of products used on all types of offshore exploration and production drilling platforms including floater/semi-submersible and jack-ups. All Regal Rexnord power transmission components are designed to provide years of dependable service in the harsh, corrosive conditions on offshore rigs. Svendborg Brakes, Wichita Clutch, Stromag, and Industrial Clutch can supply products that meet the following drilling and lifting equipment standards and specifications:

- ABS Lifting Appliances; ABS-CDS
- DNV 2.22 Lifting Appliances; DNV-OS-E101 DP
- API Spec 2C; API-7K SR2
- EN 13852-1, AOPS and MOPS



Cranes

Regal Rexnord brands supply a wide range of products used on offshore rig kingpost/pedestal, knuckle boom, and BOP winches, overhead cranes. Stromag thruster brakes, Svendborg hydraulic disc caliper brakes and hydraulic power units (HPUs) and Wichita and Industrial Clutch plate brakes are ideal for use in this harsh environment.

Guardian motor mounts and L-jaw couplings, along with Ameridrives and Bibby gear couplings, are also found on these cranes. A variety of Stromag limit switches provide protection for equipment and machinery by limiting drum rotation at the cable top and bottom cutoff points.

Warner Electric brakes, TB Wood's sheaves and Stieber backstopping/overrunning clutches along with Bauer geared motors provide years of reliable service on these types of applications.

Ameridrives Amerigear Gear Couplings

Bauer Gear Motors BF Series and BK Series Geared Motors

Bibby Turboflex Series III Gear Couplings

Guardian Couplings JF K45 Series Brake Disc Couplings

Industrial Clutch HBS Plate Brakes

Stieber DC and RSCI Clutches

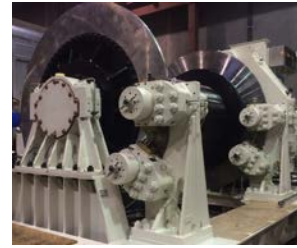
Stromag TDXB Thruster Disc Brakes; SHD Hydraulic Disc Brakes; Drum Brakes; NFF & HPB Series Motor Brakes; Brake Discs; CSH Hydraulic Power Units; Limit Switches

Svendborg Brakes Hydraulic Disc Brakes and HPUs

TB Wood's Sheaves

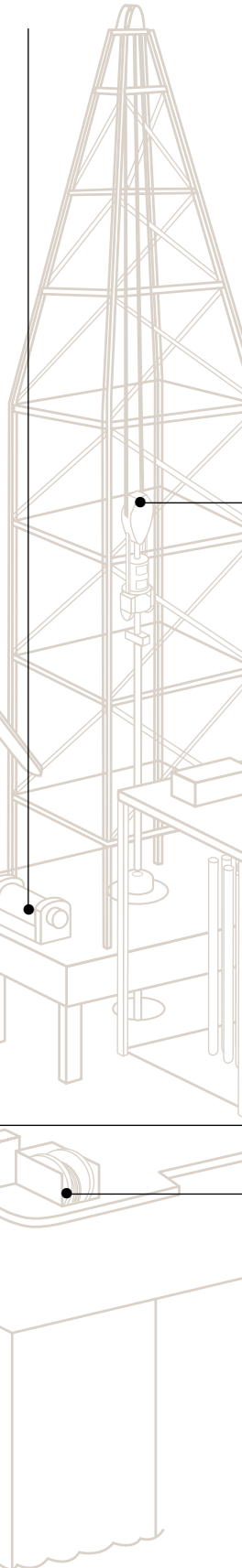
Twiflex Hydraulic Disc Brakes

Warner Electric ERD/ERDD VAR and ERD/ERDD Gen2 Electrically Released Brakes



Drawworks

A wide range of Regal Rexnord power transmission products are utilized on drawworks applications. See page 6 for more information.





Top Drives

Twiflex and Svendborg caliper brakes along with Wichita, Industrial Clutch and Stromag top drive plate brakes are designed to provide dynamic emergency stopping and static holding of the top drive during drilling operations. Ameridrives couplings along with gearing solutions from Nuttall are also used on these applications.

Ameridrives Amerigear Gear Couplings

Guardian Couplings JF K45 Series Brake Disc Couplings

Industrial Clutch LKB Brake; VMS Brake

Nuttall Gear Open Gearing and Parallel Shaft Gearboxes

Stromag Plate Clutch/Brake

Svendborg Brakes BSAB Series Caliper Brakes

Twiflex T Series Top Drive Caliper Brakes



Winches

Heavy-duty AquaMaKKs™ water cooled clutches and brakes are popular choices for use on offshore platform mooring winches and anchor winches. Stromag and Svendborg caliper brakes are also widely used on these types of winches as well as umbilical hose reels. Twiflex calipers are often fitted to traction and storage winches. Ameridrives gear couplings and Stromag limit switches are used on all types of platform deck winch applications.

Formsprag and Stieber clutches, used on lifeboat davit winch drives are specially-designed to withstand the corrosive effects of salt water environments in temperatures down to -40° F. Nuttall Moduline gearboxes are utilized on jack-up climbing pinions that raise and lower the platform. Huco air motors control tension on platform cable and hose reel sets.

Ameridrives Amerigear Gear Couplings

Bauer Gear Motors BF Series and BK Series Geared Motors

Formsprag Clutch FSO Clutches

Guardian Couplings JF K45 Series Brake Disc Couplings

Huco Air Motors

Nuttall Gear Moduline® gearboxes

Stieber DC, GFR, AL and RSCI Clutches

Stromag SH Caliper Brakes; Brake Discs; Limit Switches

Svendborg Brakes Caliper Brakes; HPUs

Twiflex GMX and GMR Caliper Brakes

Warner Electric ERD Electrically Released Brakes

Wichita Clutch AquaMakks Water Cooled Clutches & Brakes;
Vent Clutches



Drawworks

Heavy-duty, reliable Wichita Clutch products are preferred by many major drawworks OEMs. Units are designed to handle the extreme heat typically generated during an e-stop. They provide operational efficiency with less weight, a compact footprint and reduced noise and vibration. Industrial Clutch HC Clutches and Stromag eddy current brakes are also utilized on drawworks applications.

Svensborg caliper brakes, and Wichita LI-SSB and AirMakks plate brakes are popular solutions for AC-drawworks emergency stopping, standard parking, and controlled load transfer modes. Nuttall gearboxes are widely utilized on AC drawworks. Couplings from Ameridrives, Stromag, TB Wood's and Guardian can also be found on all types of drawworks worldwide. Svensborg, Stromag and Wichita Clutch products feature anti-corrosion protection and as an option, can meet API-7K and API-7K SR2 specifications.

Ameridrives Amerigear Gear Couplings

Guardian Couplings JF K45 Series Brake Disc Couplings;
Shaft Couplings

Industrial Clutch HC Clutch

Marland Clutch HBG Series Clutches

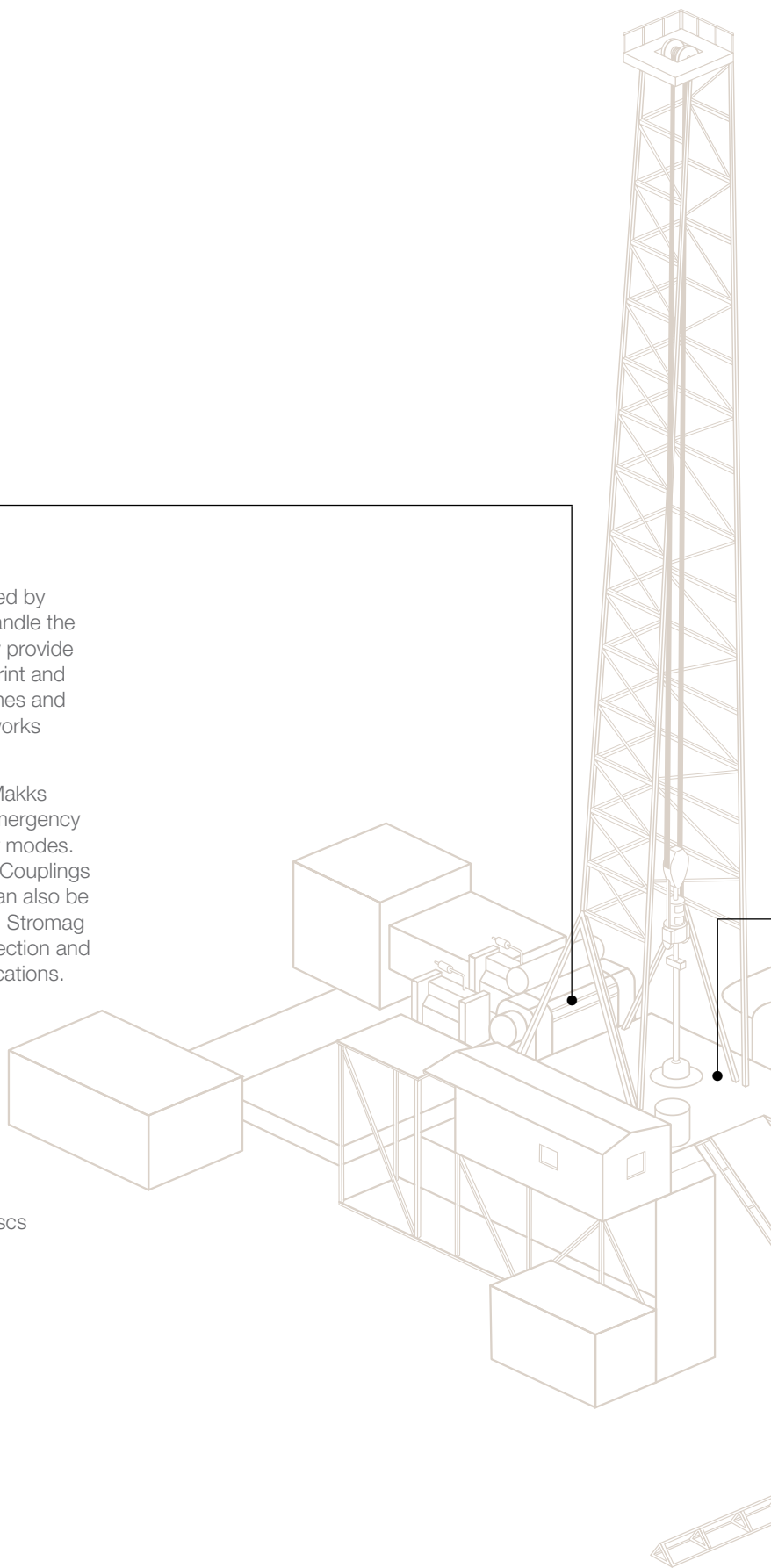
Nuttall Gear Custom Parallel Shaft Gearboxes

Stromag Caliper Brakes; Eddy Current Brakes; Brake Discs

Svensborg Brakes Caliper Brakes; HPUs

TB Wood's Form-Flex® Couplings

Wichita Clutch Kopper Kool Spring Set Clutches &
Brakes; wcbAM Brakes; LI-SSB Low
Inertia Brakes; AirMakks SSB Brakes





Pump Jacks

Warner Electric CMS clutches reduce excessive wear by allowing operators to restart pump jack engines without the load after maintenance is completed. Warner SF Series bell housing clutches allow pump jack PTOs to be engaged and disengaged remotely saving time and money.

Reliable TB Wood's V-Belt sheaves and belts are commonly found hard at work on pump jacks worldwide. Nuttall custom parallel shaft gearboxes are also utilized on pump jack drivetrains.

Guardian Couplings Cast Engine Housings; Couplings

Nuttall Gear Custom Parallel Shaft Gearboxes

Stromag Couplings

TB Wood's V-Belt Sheaves; Premium V-Belts; Sure-Grip® Bushings

Warner Electric CMS Clutch; SF Series Bell Housing Clutch



Mud Pumps

Various belted drive solutions including Offset Series MTO sheaves, bushings and belts, as well as couplings from TB Wood's and Ameridrives are widely used on mud pump drivetrains. Wichita PO and SV clutches, along with Stromag limit switches and couplings are also incorporated.

Boston Gear Series 2000 helical bevel gear drives and Bauer BG Series geared motors allow for fast and easy installation on mud pump agitators that are used to maintain uniform fluid/solid consistency.

Ameridrives Amerigear Gear Couplings

Bauer Gear Motor BG Series Geared Motors

Boston Gear Series CCC Centric Centrifugal Overload Clutches;
Series 2000 Helical Bevel Gear Drives; 800 Series Reducers;

Guardian Couplings Shaft and Flywheel Couplings

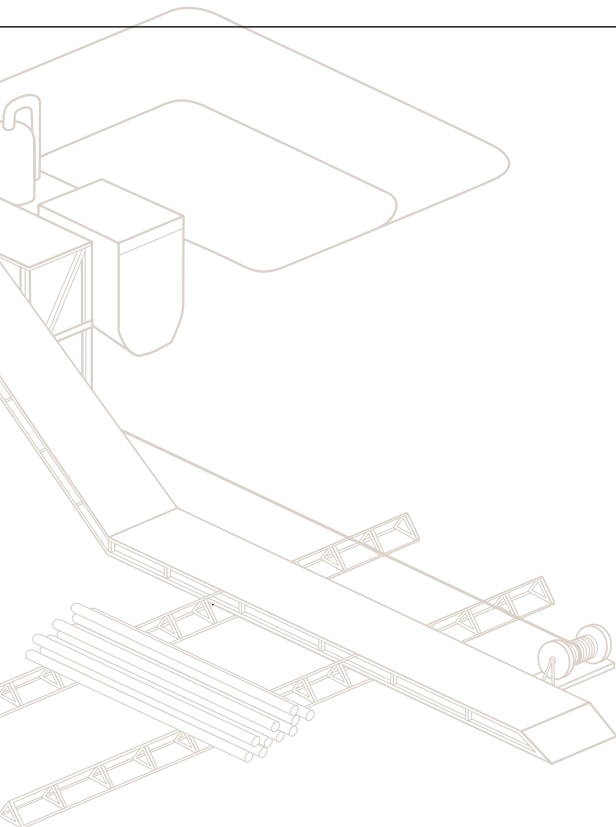
Marland Clutch CECON Clutches

Nuttall Gear Open Gearing

Stromag Couplings; Limit Switches

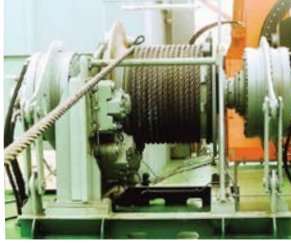
TB Wood's MTO and V-Belt Sheaves; Premium V-Belts; Sure-Grip® Bushings; Dura-Flex®, Sure-Flex Plus®, G-Flex Grid, L-Jaw, and TurboFlex GC Couplings

Wichita Clutch Standard Vent Clutches; PO Clutches



OSV, PSV & AHTS Vessels

Wichita Clutch Kopper Kool clutches are used on large winch drives onboard (AHTS) anchor handling tug supply vessels that tow and anchor semi-submersible drilling platforms. Svendborg disc brakes calipers are also utilized for e-stop and parking brake functionality.



Winches

Regal Rexnord products are utilized on all types of deck-mounted winches found on a wide variety of oil and gas vessels. Heavy-duty Wichita clutches and brakes are popular choices for use on mooring and anchor winches. Stromag, Twiflex, and Svendborg caliper brakes are also widely used on deck winches as well as seismic winches. Bibby and Ameridrives gear couplings, Stromag limit switches and Stieber backstopping/overrunning clutches are used on all types of platform deck winch applications.

Ameridrives Amerigear Gear Couplings

Bauer Gear Motors BF Series and BK Series Geared Motors

Bibby Turboflex Series III Gear Couplings

Guardian Couplings JF K45 Series Brake Disc Couplings

Stieber RSCI, GFR and AL Clutches

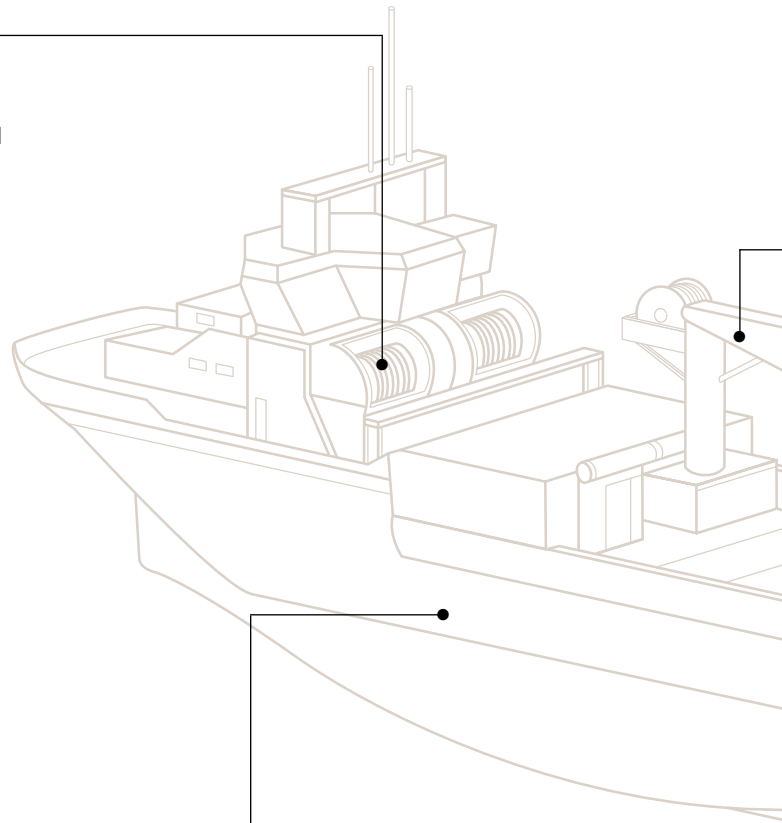
Stromag Caliper Brakes; Brake Discs; Limit Switches

Svendborg Brakes Caliper Brakes; HPUs

Twiflex Caliper Brakes

Warner Electric ERD Electrically Released Brakes

Wichita Clutch Kopper Kool Spring Set Clutches & Brakes;
Standard Vent Clutch



Propulsion Shafts

The Twiflex (TLB) Turning, Locking, Braking System is used to set and lock a ship's propulsion shaft to prevent undesired rotation when a ship is underway or moored for an extended period of time. Industrial Clutch oil-immersed clutches are also used on a wide range of propulsion drivetrains. Stromag clutches and couplings along with Svendborg caliper brakes are also utilized on propulsion shafts.

Industrial Clutch Model HC Oil-immersed Clutches

Stromag KMS Hydraulic Disc Clutches; Brake Discs; TRI-R Couplings

Svendborg Brakes Caliper Brakes

Twiflex TLB Turning, Locking, Braking System





FPSO & FLNG Ships

Bibby Torsiflex couplings are used on LNG ship reciprocating compressors. Turboflex HF couplings are utilized for topside sea water injection pump packages on FPSO ships.



Knuckle Boom Cranes

Many types of specialized oil and gas vessels feature compact, deck-mounted knuckle boom cranes. The cranes lift equipment on the deck as well as over the side of the vessel. Stromag hydraulic disc caliper brakes along with Warner Electric electromagnetic brakes provide reliable stopping and holding functionality on knuckle boom crane luffing and hoisting winches. Ameridrives and Bibby gear couplings, as well as Guardian couplings and motor mounts are also utilized on these drivetrains. Stromag limit switches are often installed to monitor hook position. Crane OEMs often incorporate popular Bauer geared motors for enhanced performance.

Ameridrives Amerigear Gear Couplings

Bauer Gear Motors BF Series and BK Series Geared Motors

Bibby Turboflex Series III Gear Couplings

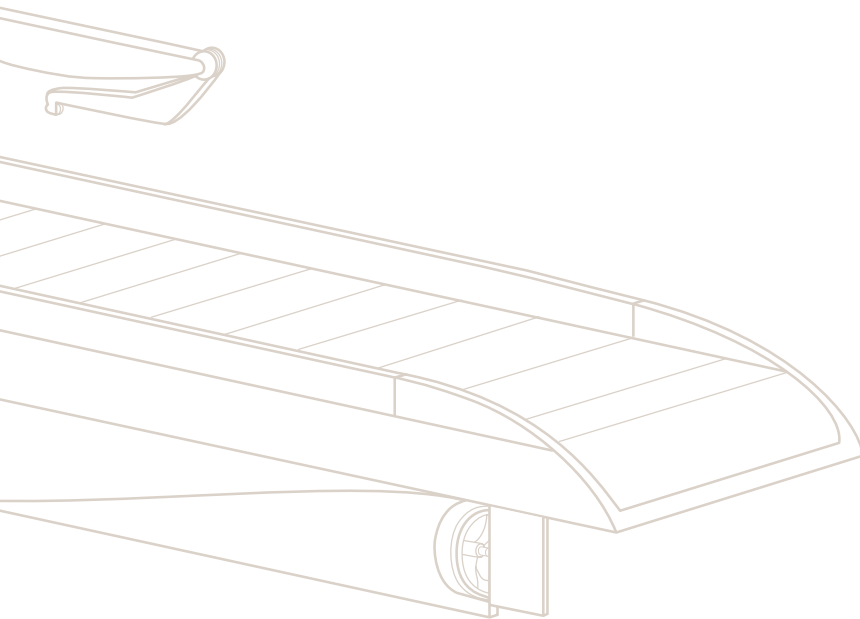
Guardian Couplings Curved Jaw Couplings; E Series & G Series Mounts

Stieber DC and RSCI Clutches

Stromag TDXB Thruster Disc and Drum Brakes; SHD5A Hydraulic Disc Brakes; Brake Discs; CSH Hydraulic Power Units; Limit Switches; NFF & HPB Series Motor Brakes

TB Wood's Sheaves

Warner Electric ERD/ERDD VAR and ERD/ERDD Gen2 Electrically Released Brakes



Diving Support Vessels

Wichita Clutch AquaMaKKs LI-SSB brakes are used on 4-point mooring winches that hold the ship in position during inspection and maintenance dives. Svendborg and Twiflex caliper disc brakes are used on the ship's ROV (Remote Operating Vehicles) winches.

VEHICLES, COMPRESSORS & REFINERIES



Truck-Mounted Hydraulic Fracturing Pumps

Ameridrives' unique J-Series universal joints (drive shafts) were developed specifically for pump drives on fracking trucks. Models are available with either a DIN flange or a fitting yoke. All units feature a strong, torque-dense wing bearing design that allows for fast and easy drop-in replacement in the event of a failure.

TB Wood's and Stromag elastomeric couplings are used on the cooling fan drive for the diesel engine that powers the high pressure pumps. Amerigear gear couplings are utilized on truck-mounted pumps that are driven by energy efficient electric motors instead of traditional diesel engines. The coupling is installed between the motor and the pump allowing the pump to be disconnected from the drive motor to prevent drivetrain damage during vehicle transport.

Hydraulic pump mounts from Guardian can also be incorporated into these pump drivetrains.

Ameridrives J-Series Universal Joints; Amerigear Gear Couplings; Hubs

Guardian Couplings Hydraulic Pump Mounts

Stromag Elastomeric Couplings

TB Wood's L-Jaw Couplings



Logging/Wireline Trucks

Geophysical logging (or wireline) trucks carry a sophisticated scanner tool which is lowered into oil and gas bore holes. Warner Electric tooth clutches are positioned between a slow-moving gear motor and the vehicle's winch drive. The clutch allows for controlled movement and positioning of the scanner tool/probe inside the bore holes during the measurement of bore characteristics. Twiflex caliper disc brakes also provide accurate control on these winches.

Twiflex Caliper Disc Brakes

Warner Electric E320 VAR-04 Tooth Clutch



Gas Compressors

Regal Rexnord engineered elastomeric and flexible disc couplings along with V-belt sheaves are used on rotary, reciprocating and screw compressors as well as generator sets and cooling drives for compressor sets.

Lamiflex Couplings PWH Series Couplings

Stromag Periflex® VN Couplings

TB Wood's Torsiflex-i and Form-Flex Couplings; V-Belt Sheaves; Premium V-Belts



Refineries

Marland CECON clutches, with a disconnect design that meets OSHA lockout/tagout requirements, are widely used on cracking process cooling fans that have dual drives such as a steam turbine and an electric motor. Lamiflex supplies bearing isolators and coupling guards for refinery applications. TB Wood's elastomeric couplings are often used on low speed ANSI pumps. Stromag also provides reliable coupling solutions for refinery use.

Marland Clutch CECON Clutches

Lamiflex Couplings Bearing Isolators; Coupling Guards

Stieber ALG Clutches

Stromag Periflex® VN Couplings

TB Wood's Sure-Flex Plus®, Dura-Flex® G-Flex Grid, L-Jaw and Torsiflex-i Couplings

Visit regalrexnord.com for information about additional Regal Rexnord high performance coupling solutions designed for use on compressor and pump applications.

Premier Industrial Company Leading Brands

OTHER PRODUCT SOLUTIONS FROM **REGAL REXNORD**

Our comprehensive product offerings include various types of clutches and brakes, overrunning clutches, engineered bearing assemblies, gearing and gear motors along with linear motion products, belted drives, couplings, limit switches, precision motors, drives & controls, and miniature motors. With thousands of product solutions available, Regal Rexnord provides true single source convenience while meeting specific customer requirements. Many major OEMs and end users prefer Regal Rexnord products as their No. 1 choice for performance and reliability.

WWW.REGALREXNORD.COM



Electric Clutches & Brakes

Stromag
Warner Electric



Precision Motors & Automation

Kollmorgen



Heavy Duty Clutches & Brakes

Industrial Clutch
Stromag
Svendborg Brakes
Twiflex
Wichita Clutch



Miniature Motors

Portescap



Overrunning Clutches

Formsprag Clutch
Marland Clutch
Stieber



Linear Systems

Thomson



Engineered Couplings & Universal Joints

Ameridrives
Bibby Turboflex
Guardian Couplings
Huco
Lamiflex Couplings
Stromag
TB Wood's



Specialty Components

Kilian
Stromag
TB Wood's



Gear Drives & Gear Motors

Bauer Gear Motor
Boston Gear
Delroyd Worm Gear
Nuttall Gear



Scan to see all
the brands of
Regal Rexnord

