

General Products Brochure Torque Transmission



RENOLD

Superior Technology

www.renoldajax.com

Introduction

Leading Edge Technology

Renold provides practical cost effective solutions, with a commitment to value through quality. This is achieved by continuous investment in people, process technology and manufacturing.

Consistent Reliability

Renold has more than 125 years of experience in the design and manufacture of power transmission products, to the highest specifications, with proven performance in diverse industries world-wide. This underwrites our guaranteed quality and assurance of reliability.

Service Excellence and Care

Renold offers a unique level of service excellence and customer care. Our experienced Applications Engineers will select the optimum solution with the aid of the latest computer and design technology. Renold is the name for service, care and peace of mind.

Special Solutions and Innovation

Renold is recognized throughout the industry for its capability to create specific solutions to customers' unique requirements.

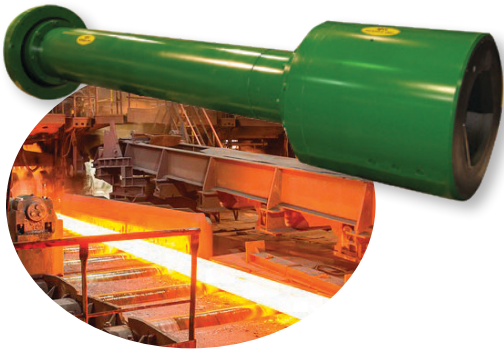
International and domestic industries from steel to food processing to escalators to textile machinery have chosen Renold to solve their problems.

Applications

Diverse applications , within diverse industries, Renold products can be found in applications ranging from Amusement Parks to Water Treatment.

- Escalators
- Mining Processing
- Elevators
- Power Generation
- Machine Tools
- Water Treatment
- Material Handling
- Amusement Parks
- Transportation
- Metal Processing
- Rubber Processing





Gear Spindles

- Nitrided & Carburized Designs
- Crowned & Barrelled Teeth with Tooth Tip Piloting
- High Power Density
- Optional Roll End Piloting
- Tight Fitting Spline Connections
- Long Service Life
- Custom Engineered for Each Application



Gear Couplings

- AGMA Interchangeability
- Crowned & Barrelled Teeth with Tooth Tip Piloting
- High Misalignment Version Available up to 6°
- Optional Case Hardened Gear Teeth
- Custom Designs



Pin & Bush

- Cushions Vibration/Shock
- Maintenance Free Design
- Simple to Install, Maintain and Align
- Shear Pin and Brake Drum Designs Available
- Urethane & Neoprene Bronze Bushings Available



Universal Joints

- High Shock and Overload Capacity
- Long Life
- Heat Treated Alloy Steel Components
- Minimal Lubrication Required
- Virtually Backlash-Free
- Misalignment Angles up to 30°
- Custom Designs

Hi-Tec Couplings

PM Range

This range of couplings is specifically designed for heavy industrial applications providing exceptional protection against severe shock loads and vibration. Max. Torque 4,350,000 ft.lb.

Applications

- Metal Manufacture
- Mining
- Pumps, Fans and Compressors
- Cranes and Hoists
- Power Generation
- Pulp and Paper Industry
- General Heavy Duty Industrial Applications

HTB Range

The HTB coupling is a high temperature blind assembly coupling for mounting inside bell housings.

Applications

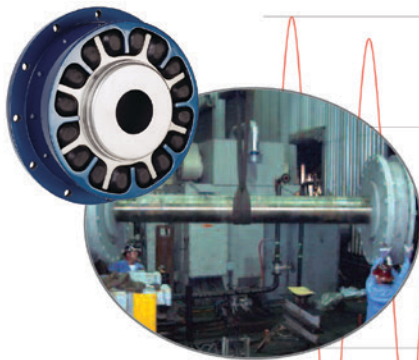
- Marine Propulsion
- Generator and Pump Sets
- Compressors
- Rail Traction

RB Range

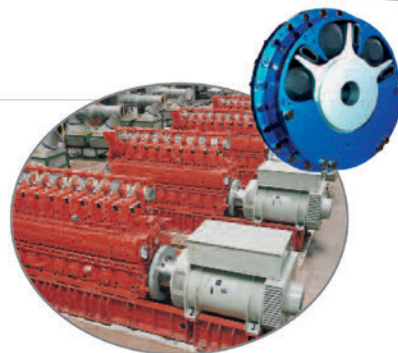
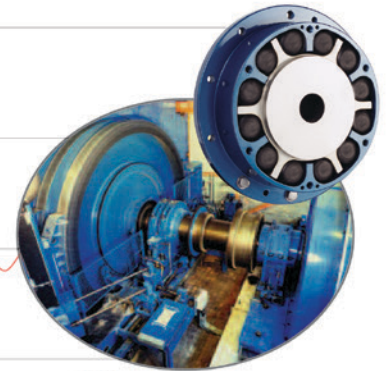
General purpose, cost effective range available in either shaft to shaft or flywheel to shaft configuration with a maximum torque of 30,240 ft.lb.

Applications

- Generator and Pump Sets
- Compressors
- Metal Manufacture
- Bulk Handling
- Pulp and Paper Industry
- General Industrial Applications



- Zero maintenance
- Intrinsically fail safe
- High misalignment capability
- Torsional tuning & vibration damping
- High temperature capability
- High technical support
- Exceedingly long life



RBI Range

The RBI coupling is a maintenance-free industrial range coupling used for general purpose applications.

Applications

- Mining
- Metals Industry
- Rubber Processing
- Paper Mills
- Pumps
- Crane Drives

DCB-GS Range

The DCB-GS coupling is ideally suited for marine propulsion, power generation and reciprocating compressor applications where control of resonant torsional vibration and long life are essential.

Applications

- Marine Propulsion
- High Power Generator Sets
- Compressors

Couplings & Clutches



SO SX Series

- Torque capacity - 275-560,000 lb ft
- Bore range is .750-20.00 inches
- Clutches can be oil or greased lubricated



DM

- Designed to fit in enclosed housings
- Bore range is .500-4.00 inches
- The shaft of the unit acts like the inner race for the clutch
- DM units are lubricated by the oil found in the housing



Spiderflex

- Torsionally flexible
- Interchangeable to other spider couplings
- Maintenance free
- Cost effective
- Blind assembly



Chainflex

- Easy installation
- Hardened teeth for long life
- All metal design



Tyreflex

- High misalignment capabilities
- Shock absorbing
- Maintenance free
- Standard fire retardant elements
- Interchangeable with other suppliers
- Pump spacer option



Hydrastart

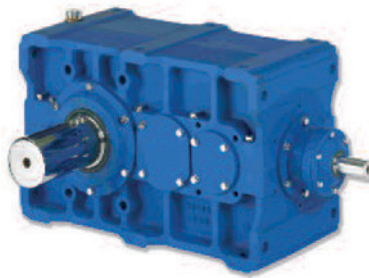
- High inertia-controlled torque to 938HP
- Soft start allows for reduced motor size
- Overload protection built in
- Dampens vibration
- Automatically matches load and speed on multi drives

Gear Units



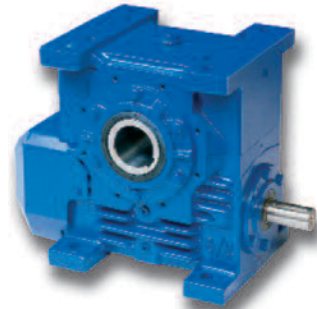
jPM

Worm gear units with sizes from 1.125" to 3.0" center distance and power capacities up to 9HP.



H Series

H Series gear units are available in parallel shaft helical units and right angle shaft bevel/helical units in double, triple and quadruple reduction gear stages having a maximum output torque of up to 162,000 Nm.



WM Series

Worm gear units are available with imperial 4" - 9" centers and metric 100mm - 200mm centers with power capacities up to 154HP. Available with ratios of 5:1 to 70:1 as a single reduction unit and 75:1 to 4900:1 as a double reduction.



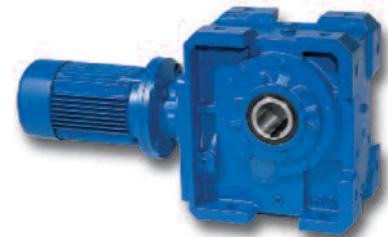
TW Series

Worm gear unit for arduous applications with 10" to 28" center distances. Power capacities up to 2010HP.



SMX^{tra}

Shaft mount helical gear units available with a hollow output bore, in 12 sizes with 5 ratio options per size. Power capacities up to 315HP.



PM Series

This series of gear units is available as a:

- Single worm unit - type PW
- Helical/worm unit - type PH
- Helical/bevel/helical unit - type PB

The range offers the ultimate in versatility and durability with a modern compact design which allows direct mounting of standard IEC and NEMA motors.

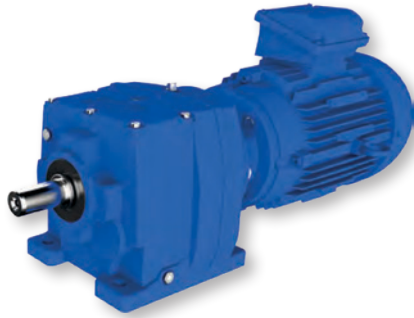


Worm Gear Sets

Renold is expert in producing high quality custom made worms and wormwheels to either commercial or precision grades for a wide variety of applications.

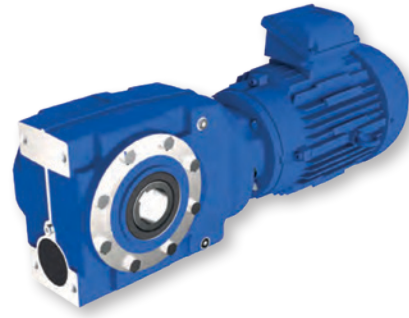
- Reduced backlash worm gears using dual lead technology
- Made to order worm gears to customer's dimensions
- Unique high efficiency Holroyd gear profile

Gear Motor Units



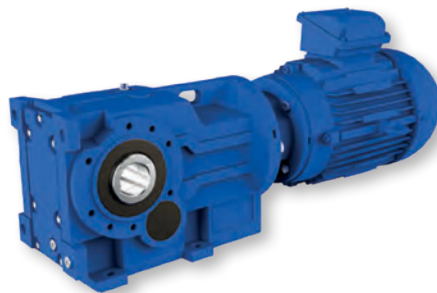
R Series Inline Helical Gear Unit

- Power up to 215 HP, ratios up to 58:1 in two stage, up to 16,200:1 in combined
- Output torque: up to 177,000 in lbs
- Interchangeable Euro dimensions
- Accepts standard IEC / NEMA motors
- Oil-tight gear head keeps motor replacement free from oil spills
- Cast iron case with epoxy-polyester powder-coated finish for strength and durability



S Series Helical Worm Gear Unit

- Power up to 60 HP, ratios up to 250:1 in two stage, up to 60,000:1 in combined
- Output torque: up to 88,500 in lbs
- Interchangeable Euro dimensions
- Accepts standard IEC / NEMA motors
- Oil-tight gear head keeps motor replacement free from oil spills
- Cast iron case with epoxy-polyester powder-coated finish for strength and durability



K Series Bevel Helical Gear Unit

- Power up to 215 HP, ratios up to 160:1 in three stage, up to 35,000:1 in combined
- Output torque: up to 292,000 in lbs
- Interchangeable Euro dimensions
- Accepts standard IEC / NEMA motors
- Oil-tight gear head keeps motor replacement free from oil spills
- Cast iron case with epoxy-polyester powder-coated finish for strength and durability

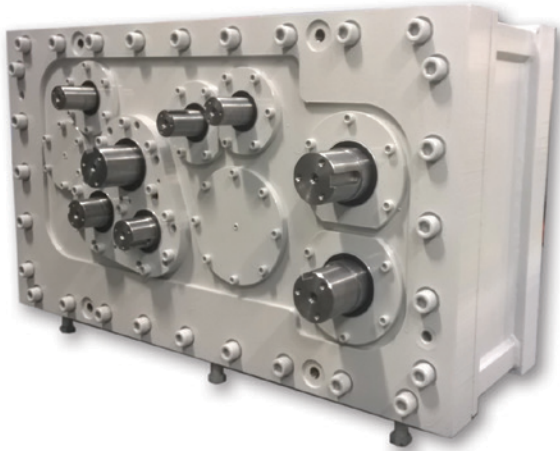
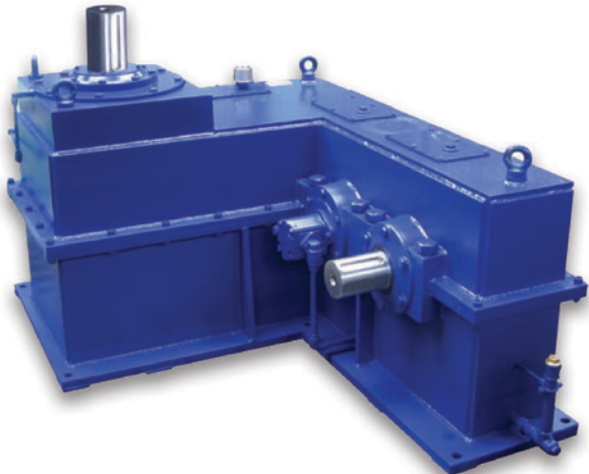
Custom Gearing and Replacement Solutions



Renold is a global engineering group with over 130 years of experience in the design and manufacture of high-quality power transmission products and application-specific solutions.

Application knowledge and engineering expertise, together with global manufacturing and service, ensures that Renold is your ideal partner – whatever your industry need. It is this unique industry experience gained in demanding global environments that makes the vital difference.

Our skilled engineers work closely with customers to provide a wide range of solutions for critical, real-life applications. Solutions that are proven to stand the test of time – that is why we believe in the principle: 'Engineering for Life'.



Gearbox and Spindle Service and Refurbishment

- Renold undertakes repair with the same exacting standards of all makes and types of industrial gearboxes: helical, bevel helical and worm gear.
- Only Renold has instant access to historical records enabling us to save you time and money by quickly identifying and replacing worn out or damaged components. Dedicated internal sales staff ensure a fast and personal service.
- Planned maintenance downtime with pre-manufactured custom made gearing components.
- Reverse engineering of non Renold components ensures correct specification components are fitted without compromising quality.



Processing Equipment/Material Handling



Bulk Bag, Box and/or Drum Filling Stations

- Fill, weigh, densify and lift simultaneously
- Densification allows for more material in each container
- Complete systems available



Flexible Screw Conveyor

- Multiple screw lengths, diameters and profiles available
- Easy disassembly for cleaning and maintenance
- Portable models available by request



Bulk Bag Unloaders

- Forklift or electric hoist loading
- De-weighting with load cells available
- Discharge accessories include screw or vibratory conveyor



Bulk Bag Conditioners

- Breaks up material in bulk bags which may have settled due to humidity, stacking or settling during transportation
- Multiple hydraulic ram profiles
- Optional accessories include scissor lift and rotary table

Processing Equipment/Material Handling



Vibratory Feeders

- Introduces bulk materials from hoppers, bins, silos or bags
- Provides steady, even product flow
- Custom designed to meet specific needs



Vibratory Conveyors

- For use in transferring many types of granular and bulk materials
- Custom designed for specific applications
- Can be modified to screen, scalp, dewater, dry, cool or grade



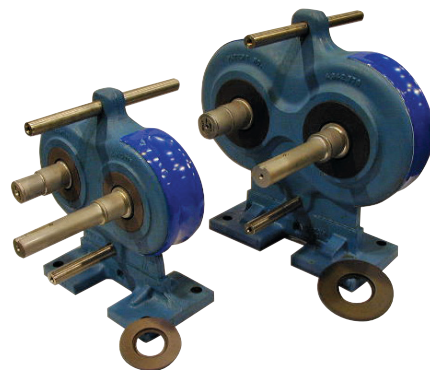
Rotary Electric Vibrators

- 900, 1200, 1800 and 3600 units available
- Continuous duty
- Inverter duty rated
- Fully adjustable weight to dial in required force output
- Stainless steel units available



Vibratory Shaker Drives

- Long life, low maintenance
- Totally enclosed gear driven eccentrics
- Multiple sizes available



Quadra-Eccentric Vibrators

- Lubrication free gearset is attractive to food/ pharmaceutical applications
- Changeable eccentricity
- Quiet operation

Renold Torque Transmission

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