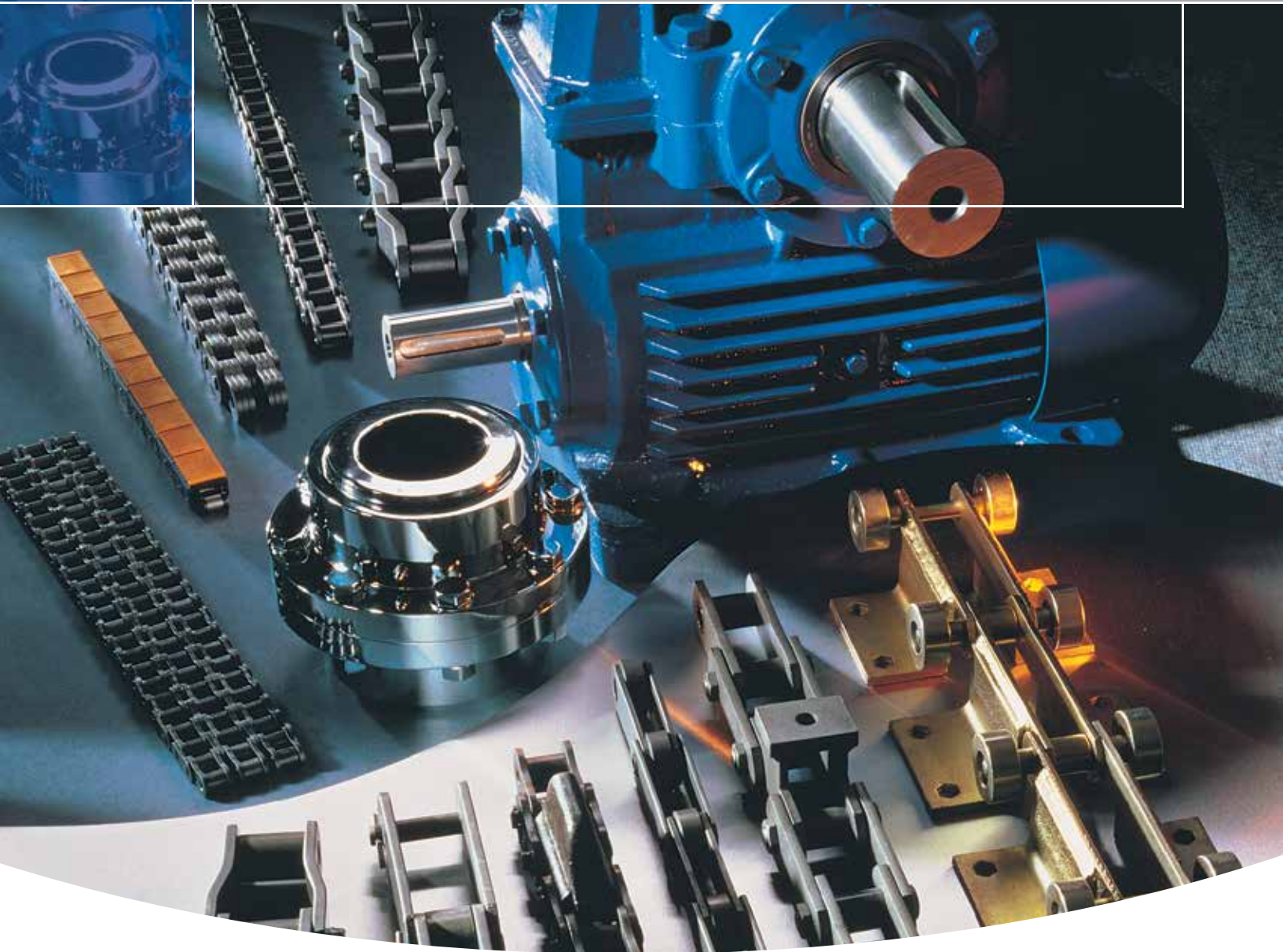


General products brochure



RENOLD
Canada

Renold products

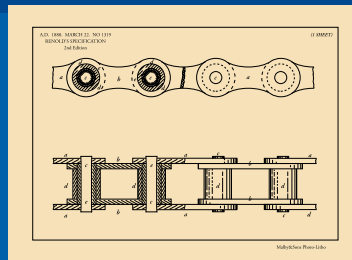
Unique quality and performance

Leading edge technology

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

Consistant reliability

Renold's 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 worldwide, which underwrites the guaranteed quality and the assurance of reliability.



*Original patent drawing
1880 for bush roller chain*

Package solutions

One stop for your drive systems, including roller and conveyor chain, gears, motors, couplings, variators and fabricated bases.

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.



“ Behind every conceivable industry and application environment; heavy or light duty, indoor or outdoor, clean or contaminated, high or low temperature, Renold is hard at work delivering performance and increasing productivity. ”



Special solutions and innovations

Renold is recognised throughout industry for its ability to create specific solutions to customers' unique requirements. International companies and industries from steel to food processing to escalators to textile machinery have chosen Renold to solve their problems.



Local and international availability

The Renold organisation stretches world-wide.

- More than 20 National Sales Companies
- Nearly 100 Overseas Distributors offering the comprehensive Renold range of power transmission products, directly or through local distributor networks.

Approvals and quality assurance

Renold's chain factories have ISO 9001:2000 certification. The roller chain manufacturing sites also have ISO 14001:2004 certification.

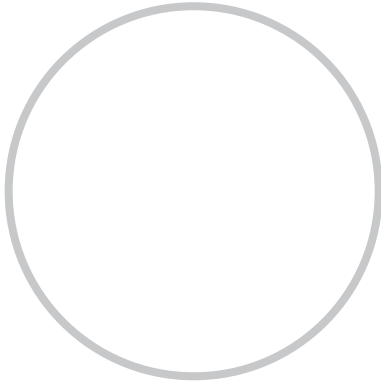
The UK gear and coupling sites have ISO9001: 2008 accreditation.

We also manufacture to the specifications required by API and BAe.



Roller Chain

Standard Range



Renold ANSI

Renold roller chain is the world's best and has led the development of chain technology for decades, introducing new features and benefits that have brought significant improvements to applications worldwide.

- Solid roller and bushing
- "Spin" riveted, end-softened pins
- Wide waisted GP plate shape
- Reduced downtime and maintenance

ANSI Heavy Series

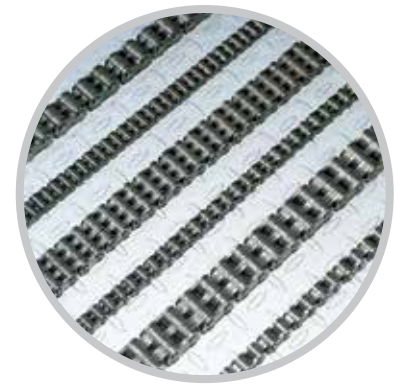
ANSI Xtra chain is designed with all the skill you expect from a Renold chain. The extra features incorporated into this range of chain are classified by:

- Thicker side plates denoted by 'H'. These plates are approximately 20% thicker than standard ANSI chain
- Through-hardened pins, denoted by 'V'
- HV Series combines the features of both the H and V Series to obtain over 30% in increased working load

Renold SD

For a good quality product from a reliable supplier for "standard duty" chain applications, look to Renold SD for consistent reliability.

- Standard Duty Roller Chain
- The economy chain with the engineering experience of Renold
- This ensures consistent reliability



Attachment chain

The most comprehensive range available

- Many attachments available from stock
- Dedicated production facilities to meet customer demands
- Extensive experience and flexibility

Oilfield Chain

- Manufactured to API specification 7F-0008
- Proven longer life in offshore environments
- Supreme performance at high speed and shock loads
- Excellent return on investment
- All chains are proof loaded before packing in durable containers
- Other cotter styles optional

Leaf Chain

Renold has more than 100 years experience in the operation and maintenance of lifting chain. Involvement with designers, manufacturers and users of all types of equipment has enabled Renold to develop comprehensive ranges used worldwide for safety-critical lifting applications.

Roller Chain

Solution Range



Synergy

Offering unbeatable wear resistance and fatigue performance capabilities, Renold Synergy is designed to maximise productivity and minimise downtime

- Superior wear and fatigue resistance
- Up to six times longer working life than any other standard chain
- Virtually dry-to-the-touch for easier handling and installation
- Distinctive platinum coloured connecting link for easy identification



Syno

Renold Syno chain sets a new benchmark for chain performance with little or no lubrication. The range includes two sintered bush versions and a totally unique, lubricant-free polymer bush version.

- Dry-to-the-touch
- Food industry-approved lubricant within the sintered bush
- Excellent corrosion resistance
- Ideal for hygiene sensitive applications



Hydro-Service

With a superior corrosion resistant coating, Renold Hydro-Service is an alternative choice to stainless steel.

- Hexavalent chrome-free – ensuring it is safe and environmentally friendly
- 30 times more corrosion resistant than conventional surface treatments
- Will not chip or peel
- Same working load capability as standard steel chain



Stainless steel

Renold Stainless Steel chain is designed for environments where corrosion resistance is paramount.

- Ideal for acidic or alkaline conditions
- Suitable for wet environments
- Solid stainless steel roller
- High and low temperature capability



Sovereign

Suitable for dirty, dusty and abrasive environments, Renold Sovereign offers high levels of endurance in harsh environments.

- Superior abrasion resistance
- Up to three times longer wear life than standard chain in harsh environments
- Suitable for high speed or heavy load applications
- Reduced pin wear



Specialty chain

Renold's range of roller chain is extensive and the most popular products are featured here.

However, Renold are committed to providing exactly what customers need and have an additional range of tailor-made, specialist chain to suit every application.

From hollow pin to side bow, straight side plate to double pitch chain, Renold has the chain to meet any requirement.

Engineering Chain

The Range



Steel Pin bush roller chain

Manufactured to international standards; BS British Standard, STR Steel Thimble Roller to USA designs and ISO to European design. Within the range are numerous pitch alternatives with breaking loads ranging from 3,000 - 200,000 lbf as standard. Various attachment styles can be supplied with the chain to suit many different applications.



Steel knuckle chain

A USA-designed range of heavy duty, robust, detachable elevator bush chains fitted with integral K type attachments. Breaking loads on the most common types range from 145,000 - 400,000 lbf. The majority of chains are available with a sealed joint feature to extend chain life.



Drive Chain

Renold drive chains represent the highest quality in chain construction. Renold Drive Chains are constructed with a variety of metals and heat treatments to suit the most demanding drive and operating requirements.

Renold manufactures the most diverse selection of drive chains for construction, drum drive, elevating and other heavy duty applications.



Rivetless / Barloop

Exceptional strength per unit of weight makes Rivetless/Cat Dog Chains ideal for long-length conveyors in which chain weight plays a factor. Simple construction allows Rivetless Chains to be easily assembled and disassembled by hand.

Barloop Chains provide long-lasting operation in sliding conveyor applications where service is severe.



Escalator

Manufactured to specific customer designs the range is separated into two categories for light duty retail store use and heavy duty public transport applications. Certain types are assembled in an integral step axle construction. Bearing rollers are fitted to the majority of chains. Renolube polymer inserts have been designed to suit the majority of applications to eliminate the need for lubrication.



Customised engineering chain

Covering a wide range of products to suit specialised applications these solutions often using a mix of high specification materials and treatment processes to meet the demands of the particular application. These chains are normally designed by close collaboration between the customer and a team of experienced Renold application and design engineers.

Engineering Chain

The Industries



Forestry

81X chains are designed for lumber applications, transfer conveyors and also kiln drying ovens.

- Solid bushing and roller
- Quad staked rivets

Type W Welded Steel chains for drives and conveyors and Type WD for drag and scraper applications. Both are normally the offset sidebar design with precision welded barrels.



Cement Mill

Bucket elevators are used in various processes in industries like cement to raise materials.

Chains assembled with pins staggered in pairs.

- Pins and bushes induction hardened and ground
- High specification alloy steels
- Closely controlled tolerances



Theme park

Renold manufacture chains to the highest specification for both water and roller coaster applications. Our chain design developments have exceeded the increasing demands for higher payloads and greater speeds.



Wastewater Treatment

Renold provides the broadest selection of chains and components to the wastewater / environmental industry for servicing rectangular clarifiers, grit collectors, bar and travelling water screens and multiple drive applications.

- Manufacture steel, Non-metallic, Stainless steel and Cast Chains
- Provider of UHMW, Nylon, Steel, Cast Sprockets and Jaw Clutches
- Related components, Fiberglass and Wooden Flights, Wear Shoes, Wear Strips



Meat Packing / Dairy

Polymer Bushed Roller Conveyor Chains are ideal for meat packing and food processing operations. These dependable chains are built to handle wet and washdown conditions for reliable, long-lasting performance.

These heavy-duty, multi-flex, in-floor Dairy Case conveyor chains can make several turns in a single run, saving transfer points and floor space with a compact layout.



Mining

Renold mining chains are built to last in a wide selection of demanding applications, including shuttle cars, feeder breakers, bridge conveyors, wash boxes and ram drives.

Gears

Standard Range of Gearboxes



jPM

Wormgear units with sizes from 1.125" to 3.0" centre distance, up to 7.5HP capacity.

- Available as worm or helical/worm options up to 300:1 ratio
- Motorised and speed reducer types available
- Variable mounting options allow design flexibility
- Unique Holroyd tooth form profile for high efficiency and long life



WM series

WM Series is available with imperial 4" - 9" centres and metric 100mm - 200mm centres, with ratios of 5:1 to 70:1 as a single reduction unit and 75:1 to 4900:1 as a double reduction. Foot, flange and shaft mounted types available.

- Heavy duty version for demanding applications



TW series

Rugged gear unit for arduous application 10" to 28" (nominal 254mm to 710mm) centre distance available as single and double reduction units with power supply to 500KW (670HP).

- Variety of unit types enables flexibility in design mounting
- Unique Holroyd tooth form provides high efficiency and long product life
- Foot, flange and shaft mounted versions for all mounting options



PM series

This series of gear units is available as a single worm unit - type PW, helical/worm unit - type PH and a helical/bevel/helical unit - type PB.

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

- Variable mounting options allows design flexibility
- Optional protection for hostile environments



SMXtra

A range of Shaft Mount Helical Gear Units available with a parallel hollow output shaft, or the unique Renold quick release bush which enables very easy installation and removal of the positive key drive.

Options include integral hold backs, motor mounting platforms and parallel shaft sleeve diameter reducing bushes.

Also available are options of input and output shaft enhanced sealing.

- Interchangeable, allowing fast and easy replacement
- Parallel and taper bore options, easy removal for repair



HC series

State of the art heavy duty helical and bevel/helical units using case hardened and ground gears throughout, 14 sizes to 1000KW (1340HP).

- Motorised and speed reducer types for all applications
- Wide ratio range gives speeds to match the design demand

Gears

Solutions and Packaged Drives



Loose gears

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

- Reduced backlash wormgears using dual lead technology
- Made to order wormgears to customers dimensions
- Unique high efficiency Holroyd gear profile



HL Series – Elevator Drives

Renold has the unique capability to not only offer a comprehensive standard range of elevator drive sets, but also application specific units including both adapted 'standards' and made-to-order assemblies.

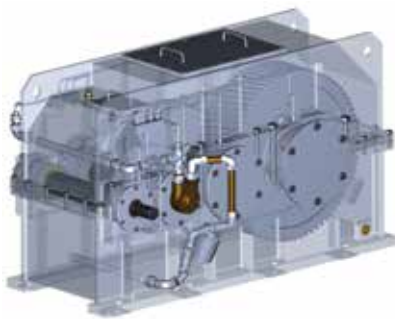
This could include, for example, extended output shafts, bespoke drives for basement drive applications, as well as small passenger and large goods lifts.



Carter gear

Hydrostatic variable speed drive units up to 50HP.

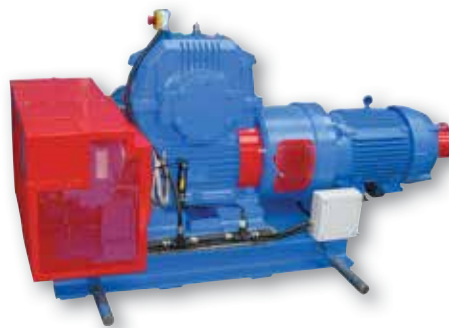
- Proven reliability in hazardous environments
- Electronic pneumatic and manual controls allowing design flexibility
- 27:1 stepless speed range with high speed holding accuracies
- Accurate speed holding



Custom – Engineered Gearing

A comprehensive range of spiral bevel/helical gear reducers, 100% designed and built in Canada.

- Powers up to 2000HP
- Foot mounted and shaft mounted styles
- Units to customers exact requirements
- Rated to AGMA standards
- 1,2,3,4 & 5 stages
- Standard units or "drop-in" replacements
- Ratios up to 1500:1



Package Drives

Complete power transmission solutions comprising the integration of the latest motors, brakes, electronic controls, couplings, fabricated mounting plates, cooling systems and enhanced lubrication.



Repair

Renold undertakes with the same exacting standards repairs of all makes and types of industrial gearboxes; Helical, bevel helical and worm gear.

Every repair undertaken by Renold is built and tested with the same exacting quality controls as a new gearbox. This includes pressure testing and load testing, if required, and is supported with the same warranty as a new unit.

Couplings

Flexible Metal and Elastomeric Couplings

Flexible heavy duty gear couplings



Gearflex

Single and double arrangement, standard and heavy duty series types up to 60,000KW (80,000HP) capacity.

- AGMA standard - interchangeable and cost effective
- Crowned and barrelled teeth for optimum contact and long life
- Mill motor, sheer pin and telescopic designs available giving design suitability for all demanding applications



Ajax Spindle

Renold Ajax is the industry leader in design and manufacturing of custom gear spindles and gear couplings.

Our success in the primary metals industry can be attributed to design innovations like continuous oil lubrication, roll end piloting and compound tooth curvature.

Continuing research and development, including finite element analysis and solid modelling design for each customers specification.



Renoldflex

A new range of couplings that utilise a stainless steel spring disc pack to provide a positive 'backlash free' drive, up to 68kW capacity.

- Zero backlash
- Torsional stiffness
- Maintenance free
- ATEX Certification available
- Long life



Ajax Pin & Bush Couplings

Ajax Pin and Bush Flexible Couplings are usually applied on equipment when misalignment does not exceed $\pm 1/2^\circ$.

Modified and special couplings are also available for unusual applications and can be designed to your details.



Spiderwrap Coupling

A medium power, torsionally flexible coupling combining shock absorbing and misalignment capacity, used in the widest range of industries and applications.



RENOLD
Hi-Tec Couplings

RB & PM couplings

Heavy duty industrial couplings providing exceptional protection against severe shock load and vibration

- Intrinsically fail-safe ensuring continuous operation of the driveline
- Control of resonant torsional vibration achieving low vibratory loads in the driveline with optimum stiffness characteristics
- Zero backlash eliminating torque amplification through pre-compression of the rubber elements

Couplings

Sprag and Fluid Clutches



Sprag Clutches

- Enhanced performance from optimised sprag design
- No backlash giving positive action
- Compact designs enabling high torque
- Backstop, over running and indexing designs available
- Long life resulting in low maintenance costs



Large Holdbacks

Renold Sprag clutch Holdbacks with Central Torque Arms are self contained units ready for mounting on the headshafts, or other suitable driving shafts, of inclined conveyors or elevators to prevent run back.



Trapped Roller Freewheel

Available in a number of design types suitable for all backstop, indexing and over-running applications.

- Totally interchangeable. Needs no re-engineering
- Backstop types preventing drive reversals



Hydrastart

Fluid soft start couplings available in many sizes and types up to 700KW (950HP) capacity.

- Flexible couplings and vee pulley designs as standard for design flexibility
- Soft start allowing the motor to accelerate unloaded
- Reduces motor size and drive package cost
- Delay fill version – extending acceleration time and further reducing start-up torque



Rotary electric vibrators

- Factory support engineering
- More value and quality per pound of force output
- Continuous duty
- Inverter duty rated
- Applications from flow aids, densifying and metering



Ajax shaker drives

- Mechanically driven shaker
- Provides straight line vibratory forces by means of rotating tow opposite weights
- Used to power conveyors, feeders and screens at speeds from 500 to 900 rpm
- Available in a variety of sizes with force output from 70 to 12,500 lbs

*For more information
or to contact your
local sales team go to*

www.renoldcanada.com

Montreal and Toronto

Tel: (800) 265-9970

Email: inquiry@renoldcanada.com

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Ref: RENS / CAN / 06.13

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