

# Power Transmission Solutions. *Keeping your world turning*



Specialists in **chain, gears** and **couplings**

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

**RENOLD**

*Superior Technology*

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# Renold products

## Unique quality and performance



“ 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. ”

### 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.

### Consistent 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.

### Package solutions

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

### 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 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.

### Approvals and Quality Assurance

Our manufacturing sites for Chain, Gears and Couplings are certified to ISO 9001:2008. Our roller chain manufacturing sites are certified to ISO 14001:2004.

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

### 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.



# Applications



## Food & Drink

Reliable machinery is critically important for high volume production lines where downtime can cost many thousands of pounds per hour. Renold has supplied every part of the food processing sector with products that deliver maximum working life and deal with the challenges of continuous production, temperature, moisture, hygiene and strict regulation.

## Environmental

Industries such as waste water treatment rely heavily on manufacturers like Renold that understand the need to operate 24/7. Renold has over 100 years' experience in the manufacture of chain, gearboxes and couplings for waste water treatment, delivering reliability, safety and excellent performance to waste water treatment and environmental facilities worldwide.

## Materials Handling

Renold supplies a complete range of chain, gears, couplings and freewheels for material handling. Whenever materials need to be moved, loaded and unloaded, Renold product ensures high efficiency and maximum safety.

## Construction Machinery

Machinery involved in construction requires heavy-duty, fail-safe products to ensure optimum efficiency and the safety of its operators. Renold designs and manufactures chain, gears, couplings and freewheels for all types of construction machinery such as dump trucks, excavators, loaders and fork lifts.

## Manufactured Products

Renold products can be found in all parts of the manufacturing process in applications such as conveyors, cranes, hot and cold rolling mills, rotary tables and tyre manufacture. In all industries from metal processing and machine tool to rubber and cement; Renold can provide the optimum solution for your application.

## Energy

Renold has vast experience in the Energy sector. Committed to servicing the power generation industry, Renold provides a complete range of products including; gearboxes, chain, couplings, holdbacks and worm gears. Our skilled engineers will work closely with you to ensure a perfect solution to your specific application.



# Transmission Chain

## Solution range overview

**RENOLD**  
**Syno™**



### 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.



### Hydro-Service™ >>

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



### Nickel plated >>

Ensuring extended working life for mildly corrosive environments nickel plated chain made to Renold specifications is specified for applications worldwide.



### Stainless steel >>

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



### Specialist chain >>

Renold's range of roller chain is extensive and the most popular products are featured here. Renold also offer tailor-made, specialist chain to suit every application.

### Synergy™ >>

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

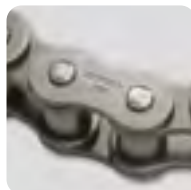
**RENOLD**  
**Synergy**

## Standard chain and accessories



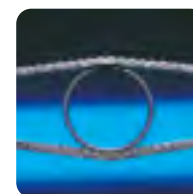
### Renold >>

Renold roller chain is highly fatigue resistant, giving up to four times the life of other leading competitor chains.



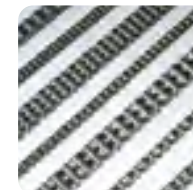
### Renold SD >>

If you are looking for a good quality product from a reliable supplier for “standard duty” chain applications, look to Renold SD for consistent reliability.



### Roll-Ring >>

The innovative, award-winning Roll-Ring chain tensioner is based on new principles and represents a major advance in chain tensioning technology.



### 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.

### Attachment chain >>

The most comprehensive range available. Many attachments available from stock with dedicated production facilities to meet customer demands whilst offering extensive experience and flexibility.



# Conveyor Chain

## Range overview



### Standard Conveyor 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 13 to 900 kN as std.

### Welded steel and drag chain >>

There are two main types of chain, Type W for drives and conveyors and Type WD for drag and scraper applications.



### 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.



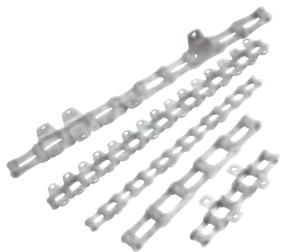
### Customised engineering chain >>

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.



### Agricultural roller chain >>

Produced to ISO/DIN standard and also a range of Works Standard chains used mainly on agricultural harvesting equipment. The standard range consists of eight chain types with pitches ranging from 1.15 inch (29.21mm) to 2.609 inch (66.27mm).



### Steel knuckle chain >>

A USA-designed range of heavy duty, robust, detachable elevator bush chains fitted with integral K type attachments.

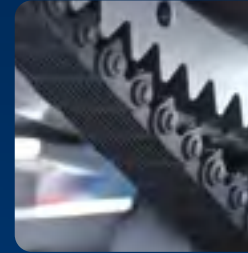


# Tooth Chain

## Function, Quality, Efficiency

Renold produces a wide range of Inverted Tooth Chain for Drives and Conveying applications.

We strive to make our products and systems exceed the rising demand for higher production speeds and longer services lives for ultimate cost-effectiveness. Renold inverted Tooth Chains surpass today's requirements and are a sound investment in technology with unique advantages that will increase your productivity levels.



### [Inverted Tooth Chain Drives >>](#)

Our Inverted Tooth Chain Drives make the grade when it comes to precise, fast and silent drives.



### [Inverted Tooth Conveyor Chain >>](#)

Inverted Tooth Conveyor Chain from Renold will help you to significantly increase the service life of your systems.

### [Chain Drive Applications >>](#)

The spectrum of possible applications for Renold Inverted Tooth Chain is vast and varied.



### [Conveyor Chain Applications >>](#)

The use of Inverted Tooth Chains in transport systems offers decisive advantages.



# Gears & Drives

## Standard Solutions

### Geared Motors

The Geared motor range from Renold Gears features interchangeable Euro dimensions for ease of replacement.



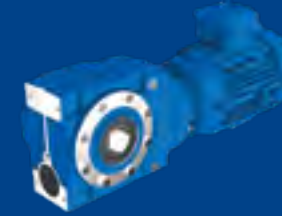
**R Series**  
Inline Helical Gear Unit >>

Power: Up to 160 kW  
Ratios: Up to 58:1 in 2 stage;  
up to 16,200:1 in combined  
form



**F Series**  
Shaft Mounted Gear Unit >>

Power: Up to 110 kW  
Ratios: 5:1 to 100:1 double  
reduction; up to 5,600:1 in  
combined form



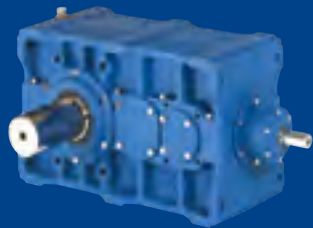
**S Series**  
Helical Worm Gear Unit >>

Power: Up to 45 kW  
Ratios: Up to 250:1 in 2 stage;  
up to 60,000:1 in combined  
form



**K Series**  
Bevel Helical Gear Unit >>

Power: Up to 160 kW  
Ratios: Up to 160:1 in 3 stage;  
up to 35,000:1 in combined  
form



**H Series Helical & Bevel**  
Helical Gear Units >>

Power: Up to 1860 kW  
Ratios: Up to 315:1 in multi  
stage; up to 70,000:1 in  
combined form



**TW Series**  
Worm Gear Units >>

Power: Up to 1459 kW  
Ratios: 5:1 to 70:1 single  
reduction; 75:1 to 4,900:1  
double reduction



**WM Series**  
Worm Gear Units >>

Power: Up to 115 kW  
Ratios: 5:1 to 70:1 single  
reduction; 75:1 to 4,900:1  
double reduction



**jPM Series**  
Worm gear Units >>

Power: Up to 6.66 kW  
Ratios: 5:1 to 70:1



**SMX Series**  
Shaft Mount Helical >>

Power: Up to 235 kW  
Ratios: 5:1 as single reduction;  
13:1, 20:1, 25:1 as double  
reduction



## Custom Solutions

Renold Gears offers a unique design and manufacturing service supported by full project management to ensure the best engineering solution to every unique application.

- Package Drives
- Custom Design
- Replacement Units
- Critical Applications



## Service Solutions

Renold Gears offers a complete industrial gearbox refurbishment service. Our expertise is based on over 130 years of gearbox design and manufacture, and is supported by our dedicated Service Team.

We offer a Rapid Response Service to ensure minimum disruption and downtime.

- Refurbishment
- Service Exchange Programme
- Drop-in Replacements
- Commissioning & Installation Support
- Condition Monitoring
- Training



### Carter gear >>

The Carter Hydrostatic Variator is totally enclosed and self-contained for use in unfavourable environmental conditions; dusty, dirty or wet areas, hot or cold ambient temperatures and hazardous atmospheres.

It is infinitely adjustable with the drive running or stationary and has in-built dynamic braking, important for many processes and essential where heavy inertia loads require controlled acceleration and/or deceleration.

It has an infinitely variable output speed over a 27:1 range and close speed holding characteristics even under varying load conditions.

## Loose Gears

### Worm Gear Sets >>

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



# Couplings

## Industrial Shaft Couplings



**Gearflex >>**

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



**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.



**Hydrastart Fluid coupling >>**

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



**Sprag Clutch Central Torque Arm Backstop >>**

A critical requirement for inclined conveyors to eliminate reverse rotation. Shaft sizes up to 500mm. Maximum holding torque 759 KNm.



Crown pin

Pinflex

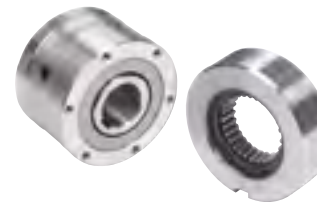
**Pin & buffer style >>**

Comprehensive range of shaft couplings including pin and buffer, spider, tyre, disc, chain and gear types available - the widest range from a single source.



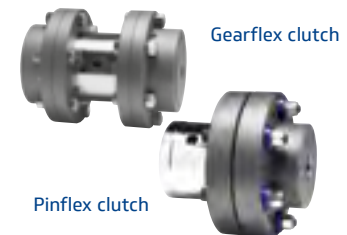
**Trapped Roller >>**

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



**Sprag Clutches >>**

Enhanced performance from the optimised, compact sprag design enabling high torque, zero backlash, long life and low maintenance costs.



Gearflex clutch

Pinflex clutch

**Sprag clutch couplings >>**

Two versions available using Pinflex and Gearflex couplings for total flexibility on shaft-to-shaft transmission drives.

# Engineered Couplings

Torsionally flexible and mass transit



## VF couplings >>

The highly flexible VF coupling has been designed for diesel engines that are mounted separately from the marine gear and which can be placed on flexible mounts.

These flexible mounts provide optimum isolation of the vibrations of the diesel engine from the hull.



## DCB GS >>

The DCB-GS flexible couplings are designed to couple medium speed diesel and gas engines to alternators, pumps and compressors.

DCB-GS couplings have low weight and hence low inertia yet retain the unrivalled quality and endurance features of the standard DCB.



## Mass transit couplings >>

Renold Ajax is the leading North American manufacturer of Traction Couplings for Subway Rail Cars, having produced more than 20,000 units over the past 35 years for use in many cities in the US, Singapore, Malaysia, Brazil, and Korea.



## RB & PM couplings >>

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



## Steel Mill spindles >>

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

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

For more information or to contact your local sales team go to [www.renold.com](http://www.renold.com)

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