

# *Bakery Chain*



**RENOLD**

*Superior Chain Technology*

# Renold Ultimate Specification Bakery Chains

Renold have been producing high performance, quality chain for the bakery industry for over 50 years and were the first to provide chains for this type of application. A thorough technical knowledge and experience has been gained from working with major OEMs and bakeries. We offer Bespoke designs to suit customers' unique requirements, accompanied by Renold's unrivalled after sale service.

- Correct chain selection is essential for optimum performance. Renold's experienced sales, production and design staff are always available to advise on specific products and applications
- Close control of material tolerances ensures excellent resistance to high shock loads
- Breaking loads exceed the minimum international standards
- Unparalleled pitch accuracy ensures smooth operation and low noise

## Options include:

- Deep case hardened rollers for even longer life
- Flatted pins and bushes for enhanced torsional security
- Bespoke chain designs for extreme high temperature applications
- Specially formulated, heat resilient lubricants for oven chains
- Specially coated Oven and prover chain pins, bushes and rollers to enhance the lubricants effectiveness
- Sprockets, which can be manufactured with cast, flame or machine cut teeth and can be surface hardened
- Shaft assemblies
- All chains can be supplied with matching and tagging in pairs



## Functions - Bakery Chain

### Renold chains are used on:

- Dough-hoist conveyors (inclined dough-lift)
- First provers
- Final prover
- Baking ovens
- Bread coolers
- Ancillary conveyors
- Various adapted transmission chain for auxiliary processes

### We also provide:

- Shafts and sprockets relating to bakery machines
- Numerous power transmission systems

## Renold Ultimate Specification

The Renold specification, meticulously designed over several years, aims to achieve optimal product performance through rigorous development and testing processes.

### We strictly control:

- Materials
- Processes
- Attachment assembly
- Heat treatment
- Fits
- Lubrication

Exact control of bush projection through the chain side plate maintains precise clearances between the chain's inner and outer links. This feature reduces the risk of wear during operation, allows space for lubricant penetration, and greatly reduces the possibility of chain seizure in dusty/abrasive environments.

Fatigue life is improved by maintaining precise fits and tolerances between the pins, bushes and side plates. Chain and sprocket life are optimised by the rigid control of pitch accuracy, resulting in excellent gearing, lower friction, reduced wear and a reduction in noise levels during operation.



Bush and roller life are maximised by controlling the concentricity of these components and careful selection and control of the heat treatment process.

Down time in hostile environments is minimised by strict control of inner and outer plate clearances, ensuring effective lubricant penetration to the bearing surfaces.

# For your production efficiencies

## *At Renold, we understand your priorities*

- Maximising Production Time
- Hygiene
- Ensuring the integrity of your application
- No lubrication contamination
- Production line speed
- Temperature considerations

### **Attachment Chain**

Our 24hour dispatch service covers half-inch (08B) to one-inch pitch (16B) transmission chain with standard K attachments, M attachments and extended pins for standard carbon steel BS chain.



**Hot**



**Cold**



**Food**



**Fast**



**Corrosion**



**Abrasion**

Renold specialise in chain to run in challenging production environments. We can offer a range of heat and surface treatments and lubricants suited to your specific production environment (-60°C to 500°C).

We can also pair to a tolerance of 0.01% for applications using chains in parallel.

## Transmission chain solutions for ranges for the baking industry

### **RENOLD**

- Spin riveted pins
- High waist plate shape gives better stress distribution
- Hardened and shot peened plates
- Solid roller and solid bush



### **RENOLD Synergy™**

- Profiled components and special pin surface coating enhance wear resistance
- Pre-stressed surfaces increase fatigue resistance
- Triple punch holing ensures controlled positional location of pin



### **RENOLD Syno™**

- Food industry-approved lubricant within the sintered bush
- No lubrication normally required
- Outside of chain totally dry-to-the-touch



### **RENOLD Sovereign**

- Resilient, durable components
- Up to 3 times longer wear life than standard chain in harsh environments
- Suitable for high speed or heavy load applications



### **RENOLD Hydro Service**

- 350 hours corrosion protection during salt spray tests to DIN 50021
- Lasts as much as 30 times longer than standard carbon steel in corrosive environments



### **RENOLD Stainless Steel**

- All components made from austenitic rust-proof steel
- All components receive surface finishing to remove stress raisers





### 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 145 years of experience in the design and manufacture of power transmission products, to the highest specifications, with proven performance in diverse industries worldwide, underwrites the guaranteed quality and the 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 innovations

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



### Approvals and Quality Assurance

Renold's chain factories have ISO 9001: 2015 certification, as well as ISO 14001:2015 and ISO 45001:2018 certifications.

### For all enquiries contact:

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