US Style High Speed Baking

Pages 3-10 highlight the versatile American style proof and bake system used to bake almost all types of products that can be produced in a tin, in a pan or on a frame. This system is now the exclusive choice for burger bun production. John King manufacture all the principal Proofer and Oven chains employed within this system.

Baking European Style

Pages 11-14 illustrate a variety of chains employed in European tunnel style baking system. This is not exhaustive and John King technical and commercial departments are available to assist with any additional styles and constructions required.
BELTS FOR FREEZING AND COOLING PROCESSES
BELTS FOR FREEZING AND COOLING PROCESSES

Conveyor belts with forked chain edges are widely used in the food industry. Their main function is within the cooling towers for a wide range of products.

The main feature of these types of belt is found in its versatility by alternating straight and curved sections.

The material used for the production of these belts is the AISI 304 / 18-8 / 1.4301. As austenitic stainless steel this material has excellent resistance to breakage and oxidation, it can function whilst retaining all of its main properties.

UNIKING can also produce these types of conveyors with other materials upon request.
Advantages

Choice of 5, 7, or 9 gauge rods
Available for 45°, 90° or 180° turns
Flat, uniform surface for gentle product handling
High-strength wire resists stretching and reduces downtime
Positive sprocket drive
Smooth edges for easy travel around curves
U-bar filler rods available for more product support
Welded rod for internal stabilization available
Light weight, open design
Meets stringent sanitation requirements
Easy access for maintenance

Technical Specs

Widths up to 48” (1220mm)
Speeds up to 50fpm (15.2mpm)
Materials: T304SS, HCS, Galv.
Balanced weave belts are suitable for very heavy as well as very light products.

**Applications/features**

The balanced weave belt is the ‘mother of all metal belts’ and has a virtually infinite number of versions and applications, from super-strong (for heavy loads over large widths or very hot products) to very dense weaves for small products, unsorted goods or products requiring stable support. The belts have a perfectly round end, even with a small radius, for a good product transfer to the following stage of the process. From transport in glass furnaces and kilns to decorative dividers in architecture, balanced weave belts provide a solution for the most complex applications.

**Versions**

Balanced weave belts can be divided into three main groups:
- Without pins
- With corrugated pins
- With straight pins

**Side finishing**

- With looped edges (can easily be made endless)
- Or welded (small links that cannot be bent)
- Fitted with chains

Balanced weave belts are available in a wide range of materials: not only ferrous metals but also non-ferrous and combinations in a single belt. Also available in various heat-resistant metal types.
Balanced Weave Belts

Basic forms
- Balanced weave belt woven on one side (type SP)
- Corrugated wirelink belt, alternately woven left and right for a straight run (type GS)
- Straight wirelink (type RS)
- ‘Rod reinforced’ structure specifically for applications at temperatures up to 1200 °C (type RR)
- ‘Compound belt’ with additional pins and spirals for a very densely woven belt (type CB)

Drives
The belt is driven by friction rollers over the entire width of the belt or positively with sprockets in the case of GS belts. The drive is perfectly suited to the application and belt used.

Options
Balanced weave belts can be equipped with edge plates and/or flights. The pins can be bent upwards in some types, resulting in a standing edge.
**MATERIALS**

UniFlex belts are available in a full metal version (300 Series Stainless Steel) and a hybrid version combining metal (300 Series Stainless Steel) with plastic modules. These plastic modules are available in Acetal (POM) or Nylon (PA6) Flame Retardant (Food Approved).

**VERSIONS**

- **UniFlex Full Metal**
  - Stainless Steel

- **UniFlex Hybrid**
  - Stainless Steel and modules of Acetal (POM)

**OPTIONS**

**GUARD EDGES**

Guard edges are available in 12.5 mm and 25 mm height above the belt surface.

- **UniFlex with guard edges**
FlexGrid Belting

FlexGrid belting is ideal for breading, cooking, battering, coating or almost any processing application from freezing up to +500F. It has a wide range of uses in processing meat, poultry, seafood, baked goods, cereal, candy and electronic P.C. board cleaning.

Features:

• USDA Approved
• Easy to Clean - the flow through design allows for unrestricted wash down and inspection.
• Light weight, easy to handle
• Quick to install
• Belts can be made without seams

Since FlexGrid belting is sprocket driven, it provides positive drive and consistent tracking. Sprockets are available in various sizes to meet your needs.

FlexGrid belting is designed to articulate around small diameter drive and tail rolls for tight transfers. This ensures gentle handling and constant positioning of the product.

Edgewise Belting

Why use Edgewise belting instead of the typical single loop edge?

Advantages:

• Standard or Double Edge
• Longer Edges - closes the opening to dramatically reduce belt snagging
• Bend down Edges - allows for a closed edge without restricting flexibility
• Bent in edges - Safety Feature! Keeps sharp wire burrs from protruding out the edge of the belt
• Smallest reverse bend - design allows for the smallest reverse bend available
• Easy to Splice - easy as our standard belt to splice and repair
• Economical - same price as our already low cost standard belt
A complete range of Modular Belts for best-in-bakery performance

Whether it’s bread, croissants, biscuits, pizza, rolls, snacks or other baked items, the Bakery Industry produces an irreplaceable part of our daily diet. This means that industrial bakery lines must keep moving, no matter what.

Food safety, product quality, process efficiency, energy costs, maintenance – in all these areas, the Modular Belts can help make a real difference.

Our long history with the Bakery Industry has given us a thorough understanding of industry needs, and provided us with inspiration for innovative solutions. From closed belts with non-stick profiles for easy dough handling to large open-surface flexing belts for more effective spiral cooling, our modular range brings unique qualities to the baking line. For delicate item transfers, we have specialized small belts; for heavy-duty tray and basket handling, we have robust flat belts.

Plastic belts reduce product catch points and pan abrasion without sacrificing strength or reliability. What’s more, a low friction surface ensures smooth product transfer, and plastic pins mean that whole sections of the belts can be taken off or put back on quickly, easily and simply. Modular Belts are low-noise, long-wearing, easy to clean and, like all our solutions, they are supported by an outstanding global service network, with local maintenance experts available around the clock.
Better for Business

- Highly reliable, long lifetime, quick and easy maintenance
- Employee-friendly – noise reduction from plastic material and decreased eye fatigue thanks to non-glare blue surface make the Modular Belts the popular choice on the line
- Greener, lighter and sturdier – lower energy costs and longer work-life means saving resources while saving money

### Bakery Process Issues

<table>
<thead>
<tr>
<th>Bakery Process Issues</th>
<th>Recommended Solutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mixing and Handling</td>
<td>uni M-QNB NS</td>
</tr>
<tr>
<td>- Sticky dough</td>
<td>· Excellent release properties</td>
</tr>
<tr>
<td>- Hygiene control</td>
<td>· Easy to clean</td>
</tr>
<tr>
<td>- Belt tracking</td>
<td>· Positive drive</td>
</tr>
<tr>
<td>Proofing</td>
<td>uni Flex ASB/L-ASB</td>
</tr>
<tr>
<td>- Stable conveying</td>
<td>· No-transfers</td>
</tr>
<tr>
<td>- Even temperature</td>
<td>· – no vibrations</td>
</tr>
<tr>
<td>- Space requirements</td>
<td>· Open belt surfaces</td>
</tr>
<tr>
<td></td>
<td>· Spiral space efficiency</td>
</tr>
<tr>
<td>Conveying</td>
<td>uni M-TTB CS</td>
</tr>
<tr>
<td>- Impact &amp; heat</td>
<td>· Wear &amp; heat resistant</td>
</tr>
<tr>
<td>- Product damage</td>
<td>· Smaller pitch, smooth transfers</td>
</tr>
<tr>
<td>- Condensation</td>
<td>· Curved surface</td>
</tr>
<tr>
<td>/contamination</td>
<td>· min. product contact</td>
</tr>
<tr>
<td>Cooling</td>
<td>uni Flex OSB/L-OSB</td>
</tr>
<tr>
<td>- Uniform air flow</td>
<td>· Lightweight &amp; high strength</td>
</tr>
<tr>
<td>- Condensation</td>
<td>· Wide open belts</td>
</tr>
<tr>
<td>- Energy costs</td>
<td>· Minimum product contact</td>
</tr>
<tr>
<td>Packaging</td>
<td>uni NTB</td>
</tr>
<tr>
<td>- Tight transfer points</td>
<td>· Smallest pitch</td>
</tr>
<tr>
<td>- Bag snagging</td>
<td>· Closed surface</td>
</tr>
<tr>
<td>- Tracking</td>
<td>· Self-tracking</td>
</tr>
</tbody>
</table>

**Food Grade belts comply with EC 1935/2004 and FDA standards**

**Ammeraal Beltech member European Hygienic Engineering & Design Group**

### Food Grade

Cleanliness and food safety are the two main reasons for the popularity of plastic modular belts in baking. Our uni-chains range of Modular Belts for bakeries are quick and easy to clean, saving time while ensuring high standards of hygiene. Our Food Grade EC/FDA approved blue belts make impurities easier to spot. In addition, because oxidation doesn’t take place with plastic belts, there is never any fear of rust smear.

**Designed to Protect your Product Quality**

Innovations in the open design of the Modular Belts translate into superior products for our bakery customers. When a bakery product is cooled correctly, it will last longer and taste better. Our breakthrough Modular Belt designs deliver maximum cooling power and cut down on condensation.
Reduced power consumption

- The uni Flex series are the ideal solution for combining straight and radius applications in one belt.
- Large open belt surfaces for optimum process heat transfer and energy saving.
- Advanced food safe polymers improves non-stick characteristics, reduces friction and lowers power consumption.

A complete line of Modular Belts

Our Modular Belt range brings unique qualities to bakery processing lines, from closed belts with non-stick properties for easy dough handling to large open-surface flexing belts for more effective cooling.

uni Nano Transfer Belt NTB
- ideal packaging area belt
- smallest pitch, for tight transfer points
- closed surface, no snagging of packaging
- self-tracking, positive sprocket driven

uni Flex ASB and L-ASB
- for curved and straight conveyors
- suitable for spiral and linear proofers, coolers and freezers
- 43% open belt surface
- high load

uni Flex OSB and L-OSB
- the ultimate process solution belt
- unrestricted airflow, 65% open
- high strength but lightweight for energy saving
- minimum product contact, only 14% contact area
- extended collapse factor 2.2
Improved air circulation for an efficient consistent production

For cooling, chilling, freezing, proofing, steaming, pasteurizing or just inclined or declined conveying, long stretches of belt conveyors and thus production space are necessary. Spiral belt conveyors may be used to concentrate these applications in one location.

We manufacture uni-chains belts for spiral conveyors, offering improvements to your food safety, product quality, process efficiency, energy efficiency, and lower maintenance costs. Thorough understanding of industry needs and built-up valuable knowledge of spiral applications, spiral systems and spiral belts ensure that we can make a real difference.

We set new standards with uni-chains modular spiral belts and its belting technology. The unique patented belt designs provide extremely strong belts and enable the highest hygiene level to be obtained. uni-chains all-plastic modular spiral belts operate for many years and often exceed the life time of steel belts.

Uni-chains spiral belts are used to obtain the lowest cost of system ownership and maximum process efficiency. Good air circulation results in fast heat transfer rates and subsequent process energy savings. The all-plastic construction means low belt weight resulting in driving energy cost savings. Non-stick food safe belt materials, kind carrying surface profiles, and uniform heat transfer across the belt width all result in more consistent products.
### BAKERY INDUSTRY CHAINS

<table>
<thead>
<tr>
<th>Application</th>
<th>Recommended Solutions</th>
</tr>
</thead>
</table>
| Spiral coolers, Spiral freezers | uni Flex OSB & L-OSB  
- Excellent vertical airflow  
- Low surface contact  
- Uniform opening across width  
- No crumb retention  
- High beam strength |
| For optimum high efficiency |  
| Spiral coolers, Spiral freezers, Spiral proofers, Side-flexing conveyors, Compact, space saving spirals | uni Flex ASB & L-ASB  
- Robust construction  
- Optimum product support  
- Non-snag belt edges  
- Unique load sharing design |
| For products that need more base support | uni Flex ASB-CS  
- Non-stick curved belt surface for easy product release  
- Scraping of curved surface possible  
- Robust construction  
- Easy to clean  
- Non-snag belt edges |
| For products that stick to flatter belt surfaces | uni Flex SNB Hybrid  
- Robust spiral belt  
- Stainless steel tension members  
- High working capacity  
- Working temperature 100°C  
- Non-stick surface  
- High beam strength |
| Spiral pasteurizers, Spiral cookers, steamers, Spiral dryers | For more demanding production processes |

These are only some examples of Modular Spiral Belts strengthening production processes

Is your challenge not mentioned? Contact the Spiral Team for a solution

**Knowing your process**
Industry and product knowledge are the foundation of an innovative and service-oriented organisation

**All your belting needs**
We developed a wide range of belting and accessories to assist in improving hygiene levels to protect against food borne disease causing bacteria

**Just-in-time delivery**
World-wide distribution and large service network; skilled fitters are on call to repair and install belts using professional equipment, suitable for food plants

**NEW uni Flex OSB & L-OSB**
Most open belts on the market
Less Product Waste
Smart open area spiral belts allow good – even vertical – airflows and result in best heat transfer rates for uniform processing of products, better product consistency and reduced waste. The air circulation in open belts with low surface contact allows for evaporation of condensation moisture.

Food Safety
Metal belts running over support rails cause black wear debris contaminating the food products. uni modular spiral belts are completely made of plastic, which eliminates the chance of product contamination.

Food Grade and Hygiene
A uni modular spiral belt is easy to clean due to the improved hygienic design of the belt links. Belt designs, colours and food grade materials support your HACCP program. The curved surface of uni Flex ASB-CS forms a perfect circle which can be scraped. Food grade modular belts comply to EC1935/2004, EU 10/2001, and FDA.

Improved Process
Consistent heat transfer can be obtained across the full width of these advanced spiral belts ensuring the best process results. Non-stick polymer belt surfaces ensure gentle product handling and damage free exit transfers.

Lower Power Consumption
Compared to a steel belt, an all-plastic uni spiral belt will reduce belt weight and friction and consequently energy consumption. The open belt structure allows for easy air circulation and consequently reduced energy usage in vertical airflow machines.

Operational Safety
uni modular belts are strong and offer more operational safety. Using a 1” pitch belt instead of a 2” pitch allows for smaller transfers. Flexible nylon pins instead of stiff steel pins increase the performance of the belt.

Low Maintenance
The spiral belt is engineered to reduce crumb retention and to be easy to clean. Additionally, lower friction together with lower tension result in less wear of support strips and cage bars. This means a longer life and a decrease of necessary maintenance.
The replacement Monoflex (cooler) and Multiflex (conveyor) chain for Stewart style conveyors. To give you the highest tensile strength and longest wear life in the industry, the quality features add up to longer service life and lower over-all chain replacement costs.

<table>
<thead>
<tr>
<th>Chain</th>
<th>Frame</th>
<th>Width</th>
<th>Wire Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>MONOFLEX</td>
<td>22&quot;</td>
<td>20 5/8”</td>
<td>10”</td>
</tr>
<tr>
<td></td>
<td>26&quot;</td>
<td>24”</td>
<td>11 3/4”</td>
</tr>
<tr>
<td>MULTIFLEX</td>
<td>19&quot;</td>
<td>17 1/2”</td>
<td>8 1/4”</td>
</tr>
<tr>
<td></td>
<td>20&quot;</td>
<td>18 1/2”</td>
<td>8 3/4”</td>
</tr>
<tr>
<td></td>
<td>22&quot;</td>
<td>20 1/2”</td>
<td>9 3/4”</td>
</tr>
<tr>
<td></td>
<td>23&quot;</td>
<td>21 1/2”</td>
<td>10 1/4”</td>
</tr>
<tr>
<td></td>
<td>26&quot;</td>
<td>24 1/2”</td>
<td>11 3/4”</td>
</tr>
</tbody>
</table>

*Most common sizes, other size chain available on request.*

- **Seam-Oriented Bushings** assures uniform contact which reduces both initial wear and elongation.
- **Solid Rollers** smooth surface for longer wear life.
- **Oil ports** provide a reservoir for extra lubricant which reduces chain wear.
- **Stainless steel wires** are securely crimped into the attachment plates.
- **Through-hardened** attachment plates reduce wire wing looseness caused by plate wear.
- **Quad staking** pins to the attachment plates, produces higher push-off values.
- **Component plating** before assembly assures maximum corrosion resistance.
BAKERY INDUSTRY CHAINS

Side Flexing Chains

Pitch 19.1 mm (0.75 in)

uni 440 Tab
Strength: 1100 N (247 lbf)
Min radius: 175.0 mm (6.89 in)

Pitch 38.1 mm (1.50 in)

uni 879 Tab* I Tab R
Strength: 2250 N (506 lbf)
Min radius: 400.0 mm (15.75 in)*
200.0 mm (7.87 in)

uni 879 Tab Safety Finger
Strength: 2250 N (506 lbf)
Min radius: 200.0 mm (7.87 in)

uni 879 Tab Safety
Strength: 2250 N (506 lbf)
Min radius: 200.0 mm (7.87 in)

uni 879 Tab R G4
Strength: 2250 N (506 lbf)
Min radius: 200.0 mm (7.87 in)

Pitch 38.1 mm (1.50 in)

uni 880
Strength: 2250 N (506 lbf)
Min radius: 400.0 mm (15.75 in)

uni 880 Tab* I Tab R
Strength: 2250 N (506 lbf)
Min radius: 400.0 mm (15.75 in)*
200.0 mm (7.87 in)

uni 880 Tab RT
Strength: 2250 N (506 lbf)
Min radius: 200.0 mm (7.87 in)

uni 880 Super Flex
Strength: 2250 N (506 lbf)
Min radius: 457.0 mm (17.99 in)
610.0 mm (24.02 in)

Pitch 38.1 mm (1.50 in)

uni 882 Tab
Strength: 4000 N (899 lbf)
Min radius: 610.0 mm (24.02 in)
700.0 mm (27.56 in)

uni 882 Tab SC
Strength: 4000 N (899 lbf)
Min radius: 610 mm (24.02 in)

uni 882 Tab PRR
Strength: 4000 N (899 lbf)
Min radius: 610 mm (24.02 in)
# Bakery Industry Chains

## Side Flexing Chains

<table>
<thead>
<tr>
<th>Pitch</th>
<th>Chain</th>
<th>Strength SS</th>
<th>Strength Carbon</th>
<th>Min Radius</th>
</tr>
</thead>
<tbody>
<tr>
<td>12.7 mm (0.50 in)</td>
<td>uni 1843</td>
<td>1500 N (340 lbf)</td>
<td>2000 N (450 lbf)</td>
<td>254 mm (10.0 in)</td>
</tr>
<tr>
<td>19.1 mm (0.75 in)</td>
<td>uni 1873</td>
<td>2000 N (450 lbf)</td>
<td>4000 N (900 lbf)</td>
<td>356 mm (14.02 in)</td>
</tr>
<tr>
<td>19.1 mm (0.75 in)</td>
<td>uni 1873 Grip G3</td>
<td>2000 N (450 lbf)</td>
<td>4000 N (900 lbf)</td>
<td>356 mm (14.02 in)</td>
</tr>
<tr>
<td>19.1 mm (0.75 in)</td>
<td>uni 1873 Grip D</td>
<td>2000 N (450 lbf)</td>
<td>4000 N (900 lbf)</td>
<td>356 mm (14.02 in)</td>
</tr>
<tr>
<td>19.1 mm (0.75 in)</td>
<td>uni 3873</td>
<td>2000 N (450 lbf)</td>
<td>4000 N (900 lbf)</td>
<td>356 mm (14.02 in)</td>
</tr>
</tbody>
</table>

## Straight Running Chains

<table>
<thead>
<tr>
<th>Pitch</th>
<th>Chain</th>
<th>Strength SS</th>
<th>Strength Carbon</th>
<th>Min Radius</th>
</tr>
</thead>
<tbody>
<tr>
<td>12.7 mm (0.50 in)</td>
<td>uni 843 SK</td>
<td>1500 N (340 lbf)</td>
<td>2000 N (450 lbf)</td>
<td>254 mm (10.0 in)</td>
</tr>
<tr>
<td>19.1 mm (0.75 in)</td>
<td>uni 863 Tab</td>
<td>2700 N (600 lbf)</td>
<td>5500 N (1200 lbf)</td>
<td></td>
</tr>
<tr>
<td>19.1 mm (0.75 in)</td>
<td>uni 963</td>
<td>2000 N (450 lbf)</td>
<td>4000 N (900 lbf)</td>
<td></td>
</tr>
</tbody>
</table>

Permissible tensile strength in POM material.
# Classic Range

- Hardened carbon steel chains
- Ferritic stainless steel chains
- Austenitic stainless steel chains

<table>
<thead>
<tr>
<th>CLASSIC CHAINS RANGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>uni 800</td>
</tr>
<tr>
<td>Double hinge</td>
</tr>
<tr>
<td>Hardend carbon steel</td>
</tr>
<tr>
<td>uni 810</td>
</tr>
<tr>
<td>Single hinge</td>
</tr>
<tr>
<td>Hardend carbon steel</td>
</tr>
<tr>
<td>uni 881</td>
</tr>
<tr>
<td>Tab</td>
</tr>
<tr>
<td>Hardend carbon steel</td>
</tr>
<tr>
<td>uni 881</td>
</tr>
<tr>
<td>Bevel</td>
</tr>
<tr>
<td>Hardend carbon steel</td>
</tr>
<tr>
<td>uni 802</td>
</tr>
<tr>
<td>Double hinge</td>
</tr>
<tr>
<td>Ferritic stainless steel</td>
</tr>
<tr>
<td>uni 812</td>
</tr>
<tr>
<td>Single hinge</td>
</tr>
<tr>
<td>Ferritic stainless steel</td>
</tr>
<tr>
<td>uni 881</td>
</tr>
<tr>
<td>Tab</td>
</tr>
<tr>
<td>Ferritic stainless steel</td>
</tr>
<tr>
<td>uni 881</td>
</tr>
<tr>
<td>Bevel</td>
</tr>
<tr>
<td>Ferritic stainless steel</td>
</tr>
<tr>
<td>uni 805</td>
</tr>
<tr>
<td>Double hinge</td>
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<tr>
<td>Austenitic stainless steel</td>
</tr>
<tr>
<td>uni 815</td>
</tr>
<tr>
<td>Single hinge</td>
</tr>
<tr>
<td>Austenitic stainless steel</td>
</tr>
<tr>
<td>uni 881</td>
</tr>
<tr>
<td>Tab</td>
</tr>
<tr>
<td>Austenitic stainless steel</td>
</tr>
<tr>
<td>uni 881</td>
</tr>
<tr>
<td>Bevel</td>
</tr>
<tr>
<td>Austenitic stainless steel</td>
</tr>
</tbody>
</table>
**Plus+ Range**

- Harder stainless steel
- New surface finish
- Lower surface roughness

**Benefits**

- Lower sliding resistance
- For high speed production lines
- More stable container handling

### PLUS+ CHAINS RANGE

<table>
<thead>
<tr>
<th>815 Plus+</th>
<th>8811 Plus+</th>
<th>8811 Plus+</th>
<th>805 Plus+</th>
</tr>
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<tbody>
<tr>
<td><strong>Single Hinge</strong></td>
<td><strong>Magnetic</strong></td>
<td><strong>Tab</strong></td>
<td><strong>Double Hinge</strong></td>
</tr>
<tr>
<td>Special hard stainless steel</td>
<td>Special hard stainless steel</td>
<td>Special hard stainless steel</td>
<td>Special hard stainless steel</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>815 Plus+</th>
<th>8811 Plus+</th>
<th>8811 Plus+</th>
<th>8127 Plus+</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Single Hinge Optical</strong></td>
<td><strong>Magnetic Optical</strong></td>
<td><strong>Tab R</strong></td>
<td><strong>Single Hinge Wide</strong></td>
</tr>
<tr>
<td>Special hard stainless steel</td>
<td>Special hard stainless steel</td>
<td>Special hard stainless steel</td>
<td>Special hard stainless steel</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>512 Plus+</th>
<th>815 Plus+</th>
<th>8811 Plus+</th>
<th>8817 Plus+</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Single Hinge</strong></td>
<td><strong>Single Hinge Narrow</strong></td>
<td><strong>Bevel</strong></td>
<td><strong>Magnetic Wide</strong></td>
</tr>
<tr>
<td>Special hard stainless steel</td>
<td>Special hard stainless steel</td>
<td>Special hard stainless steel</td>
<td>Special hard stainless steel</td>
</tr>
</tbody>
</table>

*Chains with special hardened pin (HP) for additional wear resistance and higher corrosion strength are made to order.*

**Datasheet:** uni 815 Plus+ Single Hinge Optical

- Pitch: 38.1 mm (1.50 in)
- Backflex radius: 150.0 mm (5.91 in)
- Standard shipping lengths: coils of 80 in, 3.048 m (10 ft)

**Width (W) Weight Permissible**

<table>
<thead>
<tr>
<th>Material</th>
<th>Width (W)</th>
<th>Min. radius (R)</th>
<th>Weight Permissible</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crome-nickel</td>
<td>6.4</td>
<td>0.25</td>
<td>44.5</td>
</tr>
<tr>
<td>Stainless Steel</td>
<td>6.4</td>
<td>0.25</td>
<td>60.0</td>
</tr>
</tbody>
</table>

**Surface finishes**

- Special hard stainless steel
- Magnetic
- Special hardened material
- AISI 431
- Work hardened (Special Work hardened Stainless Steel)
- Crome-nickel
- Ferritic

**Roughness**

- Roughness: < 0.3 µm
- Hardness: 30 HRC

**Uniflex**

- Pin
- Tab
- Tab R
- STANDARDS
- STRAIGHT RUNNING
- PITCH 38.1 MM/1.50 IN

**BAKERY INDUSTRY CHAINS**

- TRAVEL
- Slat Top Stainless Steel Chain
- uni 8817 Series
- Type: Magnetic
- Pin
- Tab
- Tab R
- STANDARDS
- STRAIGHT RUNNING
- PITCH 38.1 MM/1.50 IN

**Datasheet:** uni 8811 Plus+ Bevel

- Pitch: 38.1 mm (1.50 in)
- Backflex radius: 76.2 mm (3.00 in)
- Standard shipping lengths: coils of 80 in, 3.048 m (10 ft)

**Width (W) Weight Permissible**

<table>
<thead>
<tr>
<th>Material</th>
<th>Width (W)</th>
<th>Min. radius (R)</th>
<th>Weight Permissible</th>
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<tbody>
<tr>
<td>Crome-nickel</td>
<td>6.4</td>
<td>0.25</td>
<td>60.0</td>
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<tr>
<td>Stainless Steel</td>
<td>6.4</td>
<td>0.25</td>
<td>82.5</td>
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</tbody>
</table>

**Roughness**

- Roughness: < 0.3 µm
- Hardness: 30 HRC

**Uniflex**

- Pin
- Tab
- Tab R
- STANDARDS
- STRAIGHT RUNNING
- PITCH 38.1 MM/1.50 IN
BAKERY INDUSTRY CHAINS

JKD 1269

The ‘Original’ style chain matches existing dimensions and material standards found in Proofer and Oven Systems producing high volume production of Bread and Rolls. Plated Proofer Chain and Hi-Temperature Oven Chain are 100% interchangeable with existing chains and used in Single, Double and Figure 8 layouts.
The ‘New Generation’ (New Gen) chains offer an uprated design on the ‘Original’ and are 100% interchangeable with existing chains found in Proofer and Oven Systems. Increased production output and a greater reliability while in use enhances chain life, available as a Plated Proofer chain or Hi-Temperate Oven Chain meeting all system requirements.
This ‘Double Knuckle’ Proofer and Oven Chain offers greater flexible plant layout in the production of high volume output on Bread and Roll Systems. Supplied as a Plated Proofer Chain or Hi-Temperature Oven Chain. Grids are mounted onto two vertical column posts giving greater rigidity in use and provide the end user with an overall improved product.
A ‘Double Knuckle’ Chain with several unique features including larger diameter Load and Guide wheel bearings together with Grids being directly mounted to the main load wheel casting. Supplied as a Plated Proofer Chain or Hi-Temperature Oven Chain. Dimensional and Material specifications match or exceed existing standards and are fully interchangeable within the production system.
### Pendants for Lanham

<table>
<thead>
<tr>
<th>Item Code</th>
<th>Description</th>
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<tbody>
<tr>
<td>72:D2414/SS</td>
<td>Stainless Steel – Short 63 mm Pendant</td>
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<tr>
<td>72:D2414/ZP</td>
<td>Zinc Plated – Short 63 mm Pendant</td>
</tr>
<tr>
<td>72:D3296/SS</td>
<td>Stainless Steel – Tall 68 mm Pendant</td>
</tr>
<tr>
<td>72:D3296/ZP</td>
<td>Zinc Plated – Tall 68 mm Pendant</td>
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### Lug Chains for all Series

LUG DRIVE CHAINS MANUFACTURED TO ORIGINAL STANDARD AND CUSTOMER SPECIFICATIONS
## Proofer Chains Hollow Pin

<table>
<thead>
<tr>
<th>Chain Number</th>
<th>P</th>
<th>Breaking Load</th>
<th>Average Weight</th>
<th>Rollers</th>
<th>Bushings</th>
<th>Between Sidebars</th>
<th>Sidebars</th>
<th>Hollow Pins</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>mm</td>
<td>kN</td>
<td>kN* kg/m</td>
<td>D2</td>
<td>D5</td>
<td>L S1 S2 H</td>
<td>D6</td>
<td>D7</td>
</tr>
<tr>
<td>HP55/100/P</td>
<td>100</td>
<td>55</td>
<td>110 9.5</td>
<td>47.5</td>
<td>23</td>
<td>24 5 5 40</td>
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<td>11</td>
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<tr>
<td>HP110/1524/R3/P</td>
<td>152.4</td>
<td>110</td>
<td>300 10.38</td>
<td>66.7</td>
<td>33</td>
<td>26 7 5 50</td>
<td>26.9</td>
<td>20.2</td>
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<tr>
<td>HP110/1778/P</td>
<td>177.8</td>
<td>110</td>
<td>300 9</td>
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<td>33</td>
<td>26 7 5 50</td>
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<td>110</td>
<td>300 8.5</td>
<td>66.7</td>
<td>33</td>
<td>26 7 5 50</td>
<td>26.9</td>
<td>20.2</td>
</tr>
<tr>
<td>HP110/2032/R3/P</td>
<td>203.2</td>
<td>110</td>
<td>300 9.2</td>
<td>76.2</td>
<td>33</td>
<td>26 7 5 50</td>
<td>26.9</td>
<td>20.2</td>
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<tr>
<td>HP160/1270/P</td>
<td>127</td>
<td>160</td>
<td>320 20.8</td>
<td>88.9</td>
<td>38</td>
<td>38 10 8 60</td>
<td>32 22.5</td>
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<td>160</td>
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<td>88.9</td>
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<td>38 10 8 60</td>
<td>32 22.5</td>
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<tr>
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<td>203.2</td>
<td>160</td>
<td>320 21.6</td>
<td>88.9</td>
<td>38</td>
<td>38 10 8 60</td>
<td>32 22.5</td>
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</tr>
</tbody>
</table>

Note: For BS Standard Chains – two Linkplate Sizes S1 & s2 – Inner & Outer
HP – Hollow Pin Chain Include D7
Oven Chains - Hollow Pins

<table>
<thead>
<tr>
<th>Chain Number</th>
<th>P</th>
<th>Breaking Load</th>
<th>Average Weight</th>
<th>Rollers</th>
<th>Bushings</th>
<th>Between Sidebars</th>
<th>Sidebars</th>
<th>Pins</th>
<th>D8</th>
<th>A</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>mm</td>
<td>kN</td>
<td>kN*</td>
<td>kg/m</td>
<td>D2</td>
<td>D4</td>
<td>Flange thickness</td>
<td>Outside Diameter</td>
<td>L</td>
<td>S</td>
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<tr>
<td>HP110/1524/C1X1/P</td>
<td>152.4</td>
<td>110</td>
<td>300</td>
<td>9.8</td>
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<td>33</td>
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<td>7</td>
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<td>152.4</td>
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<td>320</td>
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<td>88.9</td>
<td>114</td>
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<tr>
<td>HP160/1178/C1/AX1/P</td>
<td>177.8</td>
<td>160</td>
<td>320</td>
<td>18.6</td>
<td>88.9</td>
<td>114</td>
<td>10.5</td>
<td>38</td>
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<td>10</td>
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</tbody>
</table>

Inner plate with ______________ hole 22.2 X 90 on inside plates
WESTERN CANADA Sales Office

Calgary Tel: 780-242-0864

CENTRAL CANADA Sales Office

Winnipeg Tel: 431-334-8334

EASTERN CANADA Sales Office

Montreal Tel: 514-886-5270

Toronto Tel: 416-526-0352

* Chains with special hardened pin (HP) for additional wear resistance and higher corrosion strength are made to order.