

Ramsey Silent Chain®



For Industrial Power Transmission And Conveying Applications



WHO WE ARE

For 100 years, Ramsey Products has focused on helping customers with the selection and application of Silent Chain drives. Combine that experience and commitment to customer service with our ongoing focus on quality and you have today's Ramsey Products – manufacturing and supporting the world's widest range of industrial Silent Chain products.

Because Ramsey specializes in Silent Chain (Inverted Tooth) drives, we can provide solutions that are simply not available from other companies. Not only do we offer the widest range of standard chains and sprockets, we also custom design and produce chains and sprockets to fit our customer's exact requirements. If a job can be done with silent chain, we will help you find the most affordable and effective chain for the job! With warehouses and representatives around the world, we welcome the opportunity to serve you.



ENGINEERING SERVICES

At Ramsey, we recognize the importance of providing timely and effective technical product support. We strive to respond to all inquiries within one business day.

Ramsey manufactures an extensive range of silent chain and sprockets for use in industrial power transmission and conveying applications.

PRODUCT SUPPORT

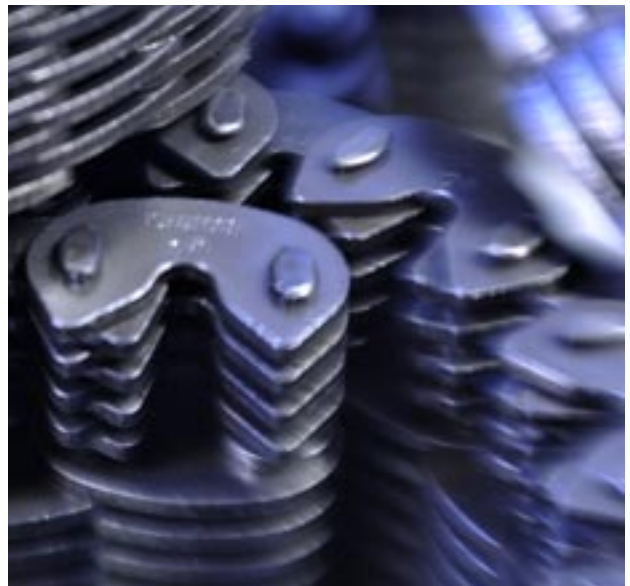
Customer service representatives at Ramsey are available to help you with any questions you might have. Help is available on a wide variety of subjects, ranging from product selection and quotation to order tracking.

RAMSEY SILENT CHAIN BASICS

All silent chains are made up of stacked rows of flat, tooth shaped driving links that mesh with sprockets having compatible tooth profiles, much the way a rack and pinion mesh. Typically, chains will also contain guide links, whose purpose is to maintain proper tracking of the chain on sprockets. Washers or spacers may be present in some chain constructions. All of these components are held together by riveted pins located in each chain joint. Although all silent chains have these basic features there are still many different styles, designs, and configurations.

Chains must always be accompanied by compatible sprockets. When considering different silent chain designs, it is essential that sprocket compatibility also be considered. Ramsey can assist you in the selection process.

Given the many possible variations in silent chain design it is important to understand some of the options that are available. Ramsey's engineering services and customer support can help you in the selection of the right chain for your particular application.

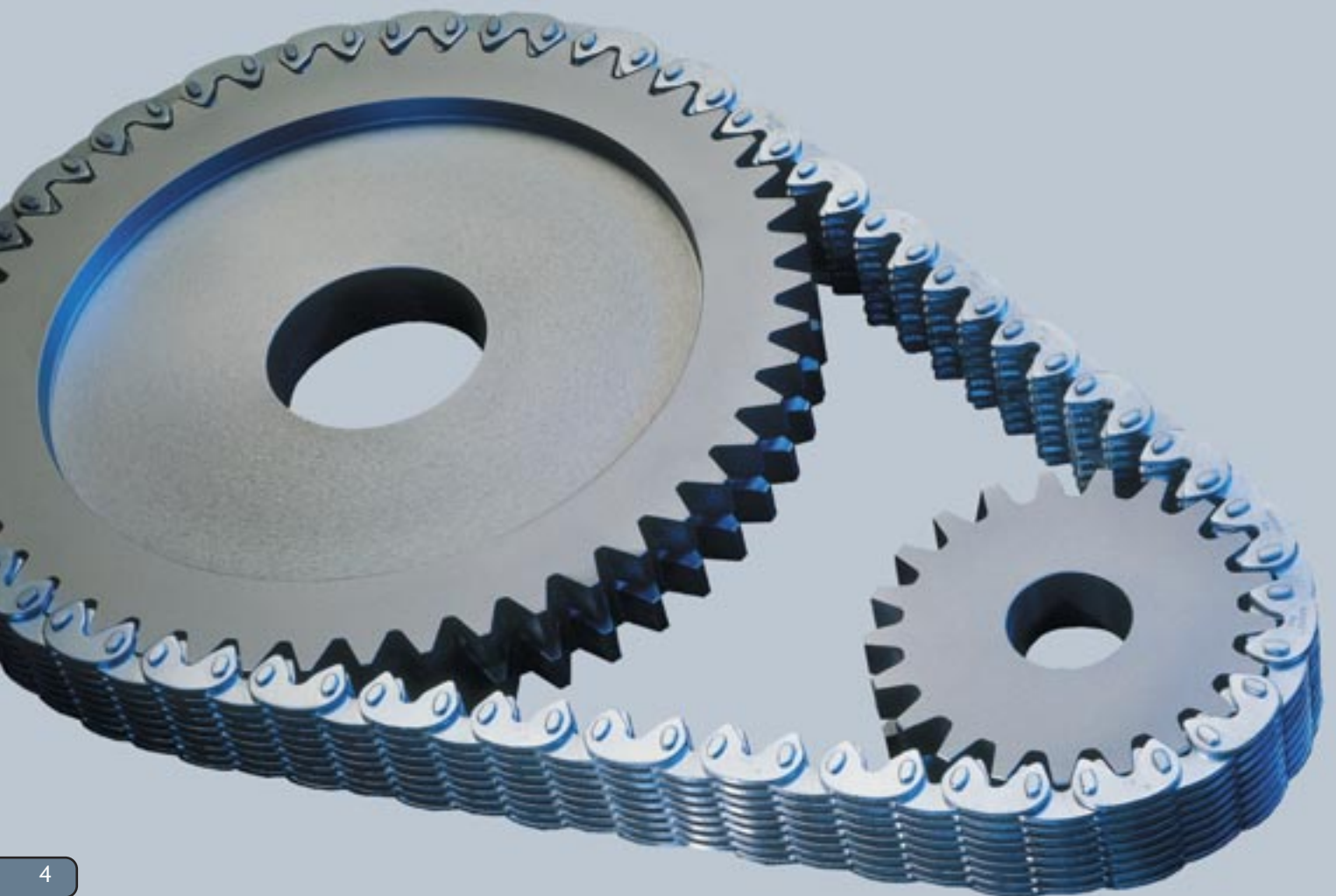


CHAINS FOR POWER TRANSMISSION

Silent chain drives are capable of transmitting power with low noise, high efficiency, and reduced vibration, at speeds and loads that exceed the capability of other belts and chains.

There are many styles of silent chain, and Ramsey offers a wide range of designs for different application requirements and budgets. Almost all Ramsey silent power transmission chains utilize efficient, quiet, two-pin roller bearing joints; technology which has been shown to outperform conventional, round pin joints. These chains can be found in a wide variety of demanding industrial applications.

Pictured: Rampower™



RPV™



- Two pin joint technology
- High performance – speeds to 35 m/s
- 3/8" through 2" pitch
- Interchanges with chains made by Morse and Renold



Rampower™



- Exclusive Ramsey high strength
- Twice the horsepower capacity of SC chain
- 3/8" through 2" pitch
- Operates on sprockets with ASME standard tooth profile



SC



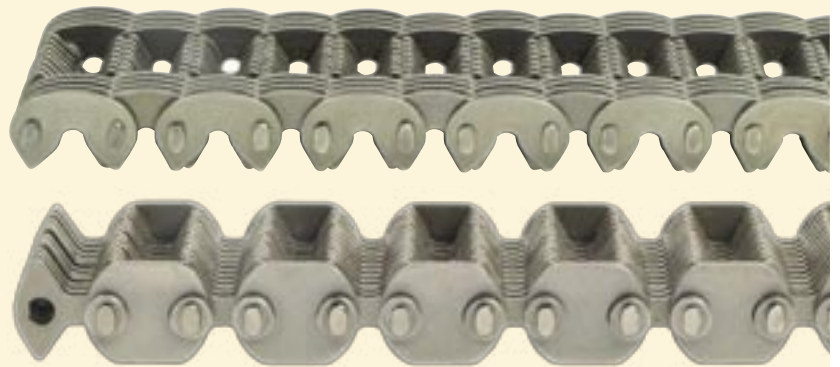
- Ramsey's original patented silent chain
- ANSI standard compatibility
- 3/16" through 1-1/2" pitch
- Economical replacement chain



Duplex



- Sprockets engage from both sides of the chain
- Three different styles: RamFlex™, SC Duplex, Rampower Duplex
- SC and Rampower Duplex: 3/8" through 3/4" pitch
- RamFlex: 1/2" through 1" pitch



3/16" pitch SC silent chain



- Available in steel and 304 stainless steel
- 10 standard widths for fractional horsepower or high temperature applications
- Round pin joint allows chain to backbend



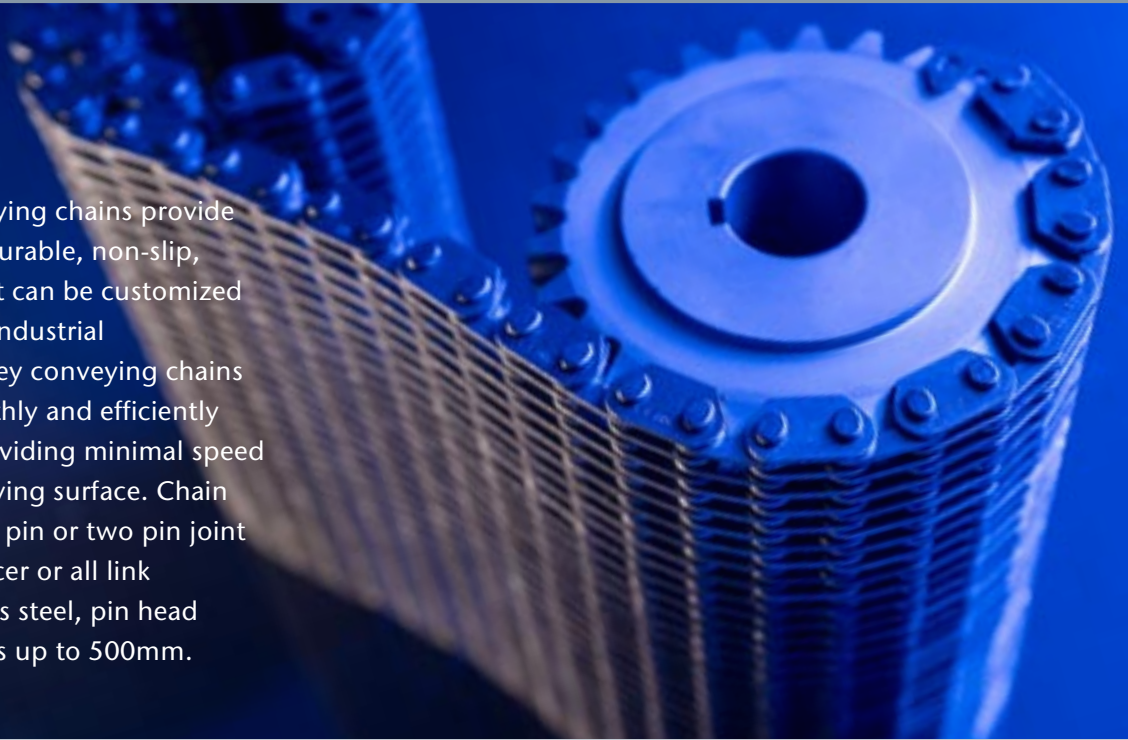
Specialty chain

- Made to order, custom chains
- Special materials and designs to fit specific applications
- No backbend chains



CHAINS FOR CONVEYING

Ramsey's silent conveying chains provide a heat resistant, flat, durable, non-slip, conveying surface that can be customized to fit a wide range of industrial applications. All Ramsey conveying chains are designed to smoothly and efficiently engage sprockets, providing minimal speed variation in the conveying surface. Chain options include single pin or two pin joint construction, link-spacer or all link constructions, stainless steel, pin head protection, and widths up to 500mm.



Ultralife® - 1/2" pitch, single pin



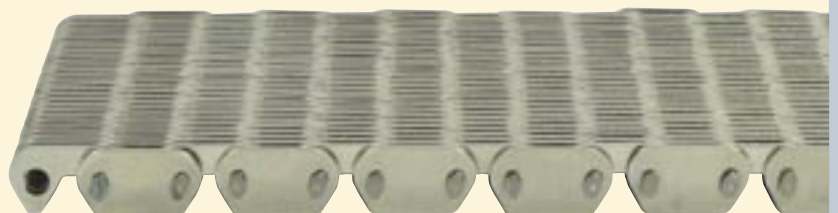
- Reduced elongation, less maintenance, extended life
- Runs on standard 1/2" pitch sprockets
- Available in center guide, side guide, and multiguide
- Link and link-spacer assemblies



Ultralife® - 1/2" pitch, two pin



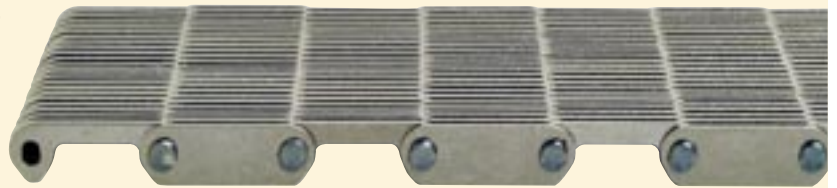
- Proven two pin joint technology
- Full range stock and custom widths
- Available in center guide, side guide, and multiguide
- Link and link-spacer assemblies



Ultralife® - 1" extended pitch, single pin



- Reduced conveyor weight
- Runs on standard 1/2" pitch sprockets
- Ramsey oval pin joint technology
- Available in center guide, side guide, and multiguide
- Link and link-spacer assemblies



Ultralife® - 1" extended pitch, two pin



- Reduced conveyor weight
- Runs on standard 1/2" pitch sprockets
- Ramsey two pin joint technology
- Available in center guide, side guide, and multiguide
- Link and link-spacer assemblies



LoProfile™ - 1/2" pitch

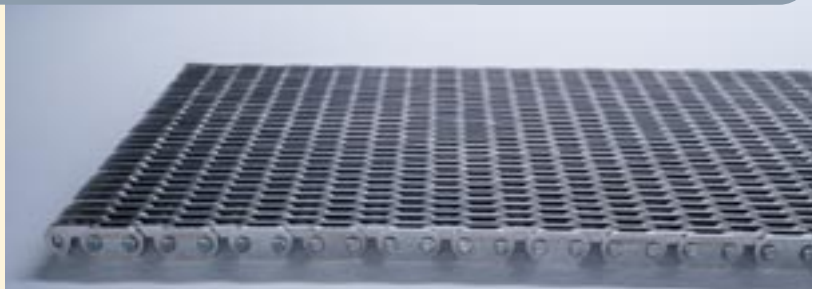


- Reduced overall link height: 10,2mm
- Available in center guide, side guide, and multiguide
- Runs on standard 1/2" pitch sprockets



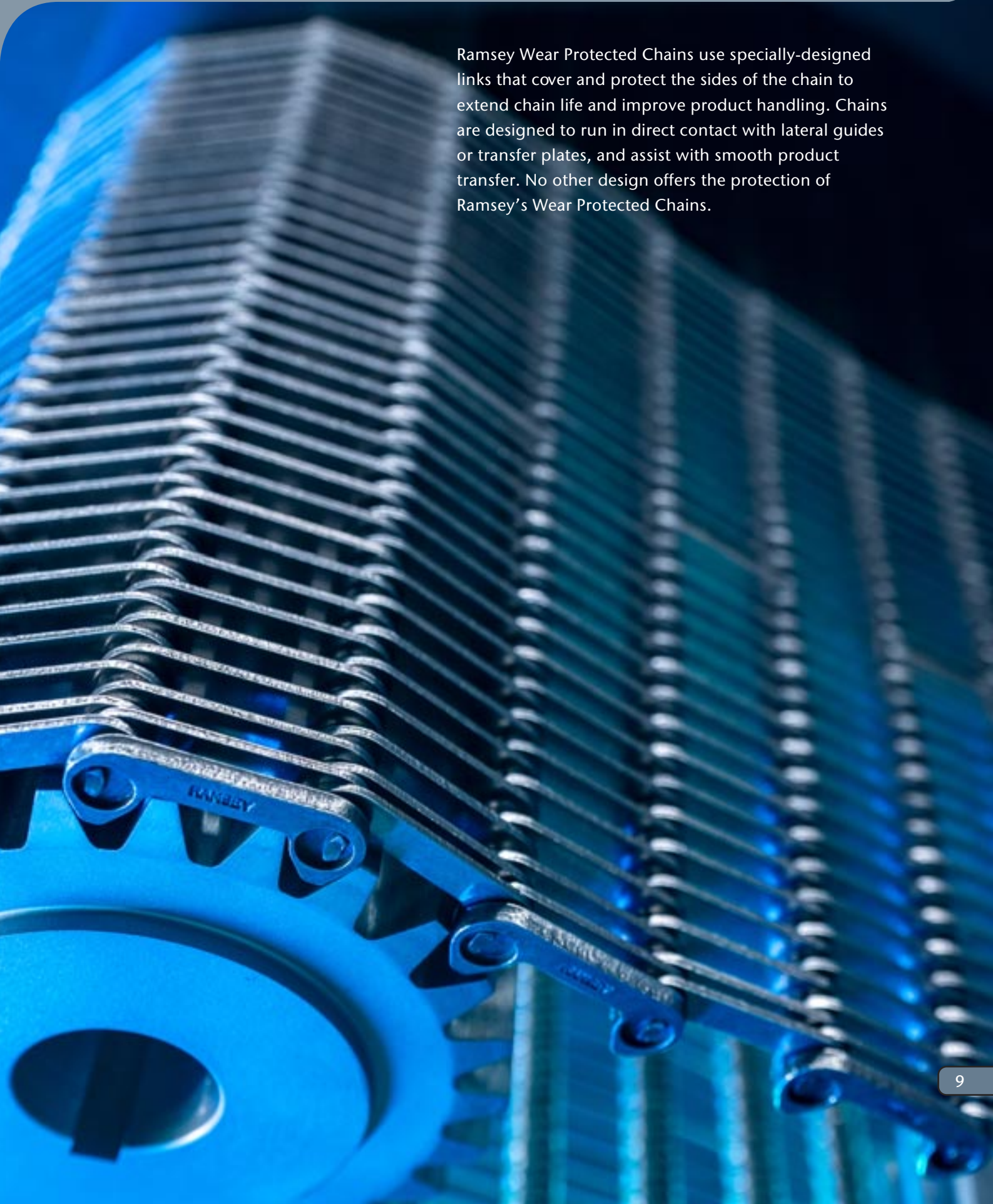
Stainless Steel - 1/2" pitch

- Higher temperature capability, intermittent temperatures up to 650°C
- Superior corrosion resistance
- Available in 316 and 420 stainless steel with hardened stainless or carbon steel pins
- Available in center guide, side guide, and multiguide



WEAR PROTECTED CONVEYING CHAINS

Ramsey Wear Protected Chains use specially-designed links that cover and protect the sides of the chain to extend chain life and improve product handling. Chains are designed to run in direct contact with lateral guides or transfer plates, and assist with smooth product transfer. No other design offers the protection of Ramsey's Wear Protected Chains.



1/2" PITCH CONVEYING CHAINS

Lifeguard®

- Pin head protection with interlocking side links
- Reduced gaps between side plates reduces snagging on lateral guides
- Only available in side guide
- Patented in the US and Europe



Sentry®

- Pin head protection
- Prestressed, two pin chain joints
- 100% hardened alloy steel construction



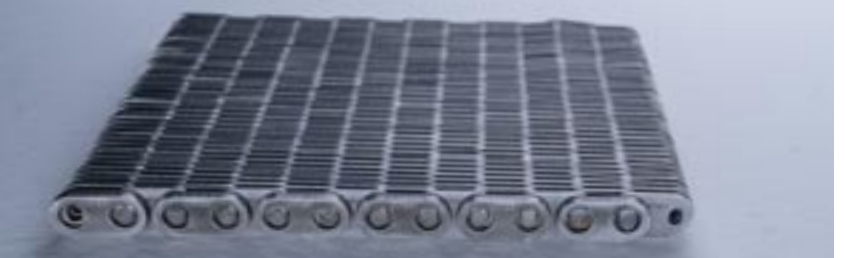
All-Steel® - ASFX Center Guide

- Pin head protection
- Single pin chain joints
- 100% hardened alloy steel



All-Steel® - ASFX Multiguide

- Pin head protection
- 100% hardened alloy steel
- Available in FX powdered metal
- Available in side guide with FX powdered metal



1" EXTENDED PITCH CONVEYING CHAINS

Lifeguard® Extended Pitch

- Pin head protection with interlocking side links
- Reduced gaps between side plates reduces snagging on lateral guides
- Only available in side guide



Sentry® Extended Pitch

- Pin head protection
- Prestressed, two pin chain joints
- 100% hardened alloy steel construction
- Available in center guide, side guide, and multiguide



All-Steel® - ASFX Center Guide Extended Pitch

- Pin head protection
- Single pin chain joints
- 100% hardened alloy steel



All-Steel - ASFX Multiguide Extended Pitch

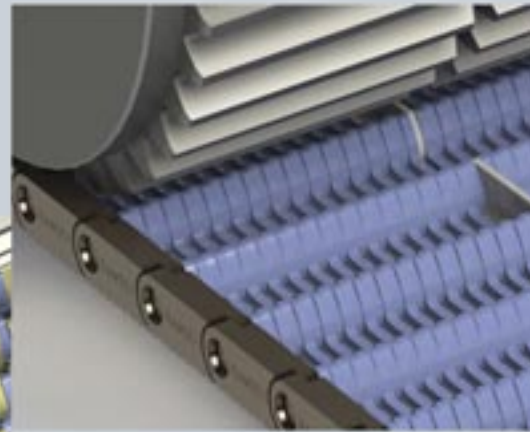
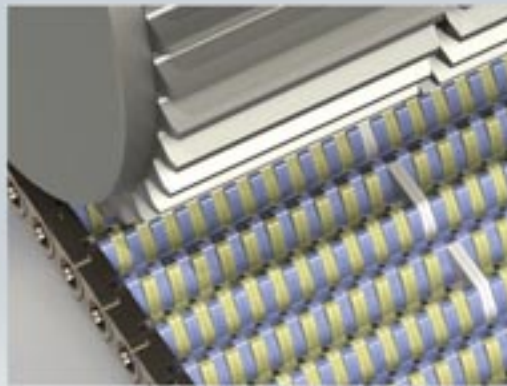
- Pin head protection
- 100% hardened alloy steel



R-SELECT™ CHAINS

R-Select™ chains are built with links made from highly wear resistant steel. Chains can be made from 100% wear resistant links or customized to place wear resistant links only in areas of the chain which incur the most wear.

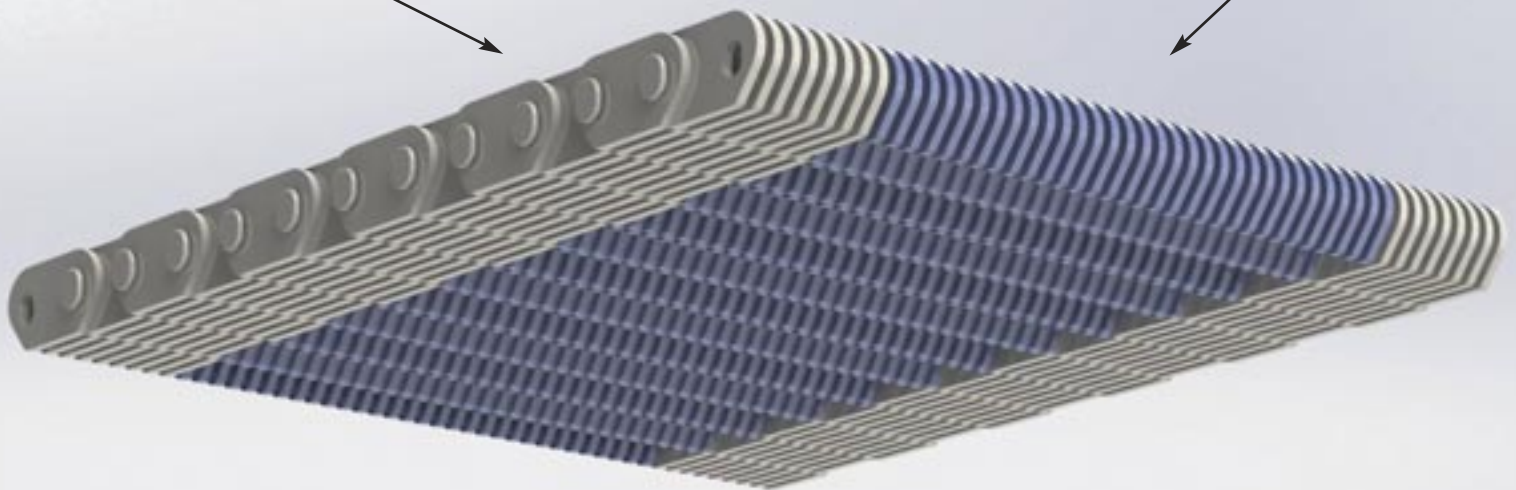
Patented in the US and Europe



Standard Links



R-Select Links



SPROCKETS, GEARS AND COUPLINGS

Ramsey offers a full range of stock and made to order sprockets in pitches ranging from 3/16" pitch to 2 1/4" pitch. Stock sprockets are available with minimum plain bores or bored for taper lock bushings. For an additional charge they can be machined with a finished bore and keyway. Made to order sprockets provide an almost unlimited range of options and are a large part of our daily production. Ramsey also supplies sprockets to replace most competitors' products.

Ramsey sprockets



- Stock and custom order; center guide or side guide available
- Choice of materials – typically carbon steel or ductile iron; other materials available
- Hardened teeth – Rockwell hardness of Rc 50 minimum

Ramsey chain couplings



- Easy installation
- Straight and diagonal designs
- Straight type composed of coupling halves split perpendicular to the shaft axis
- Diagonal type split at an angle resulting in a higher load capacity
- Carbon steel or stainless steel options

Ramsey gears



- Custom machined – no minimum order quantity
- Tooth hardening is available
- Spur gears
- Helical gears
- Choice of materials

RKO TOOL AND TAKE OUT ARM

Connecting and disconnecting conveying chains can be tedious and time consuming. This is especially true with wear protected chains like Ramsey Allguard FX and Lifeguard, where pin heads are recessed below chain link surfaces. Ramsey engineers designed the RKO Ramsey Knock Out Tool® to quickly and easily remove pins wherever a chain must be disconnected. The same tool can be used to simplify installation of chain connecting pins wherever chain sections need to be joined.

RAMSEY RKO TOOL, STANDARD AND WIDE BODY



Patented in US and Europe

- Saves time connecting and disconnecting chains
- Assists in breaking of pin head and removal of the pin during disconnection
- Can be setup to fit your exact chain
- Maintains chain link and spacer alignment during chain connection
- Modular guide plates adapt to most Ramsey Wear Protected Chains

IS machines rely on Take Out Arms to efficiently and accurately transfer hollow glassware from the mold to the dead plate. Ramsey's Take Out Arms utilize high performance RPV silent chain to provide more than 10 times the life of a typical belt driven arm; stretch is eliminated and precision registration is maintained throughout the life of the drive.

TAKE OUT ARM AND RETROFIT KIT



- Complete drive solutions, available to fit most IS machine designs
- Designed with high performance RPV chain and sprockets
- Greatly extend TOA life and dramatically reduce maintenance costs
- Kit allows take out arms from other manufacturers to be converted to RPV silent chain drives
- Optional shear pin designs available to protect against drive overloading

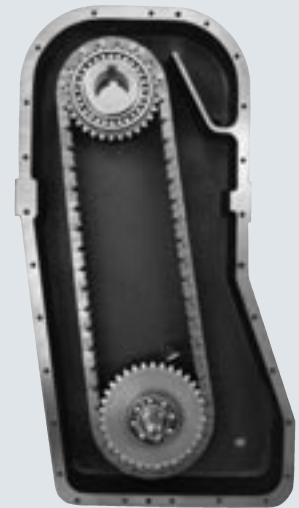
DRIVE SYSTEMS AND CUSTOM CHAINS

DRIVE SYSTEMS

Ramsey's Hyperlink® drives are customized, fully enclosed chain drive solutions built to deliver the exact loads, speeds and drive ratios needed in your application. All Hyperlink drives feature proprietary, high performance RPV or Rampower silent chains. Chains are sized for each application and matching sprockets are precision machined and heat treated for maximum wear life. Input and output shafts can be machined with keyways or splines and enclosures can be designed to fit specific space and mounting requirements. Fully contained lubrication systems are available and all components are sized to provide long lasting, trouble free, performance.

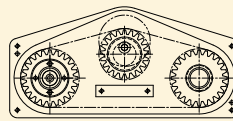
RAMSEY DRIVE FEATURES:

- Up to 99% efficient
- Large center distances (up to 1.150 mm)
- Optimum/exact drive ratios
- Fully customizable
- Built to exact space requirements
- Low maintenance
- Capable of loads of 3,000 HP (2.240 Kw) and speeds exceeding 35 m/s
- No minimum order quantity



With Ramsey drive systems there's no need to couple together multiple components to achieve the speeds and drive ratios you require

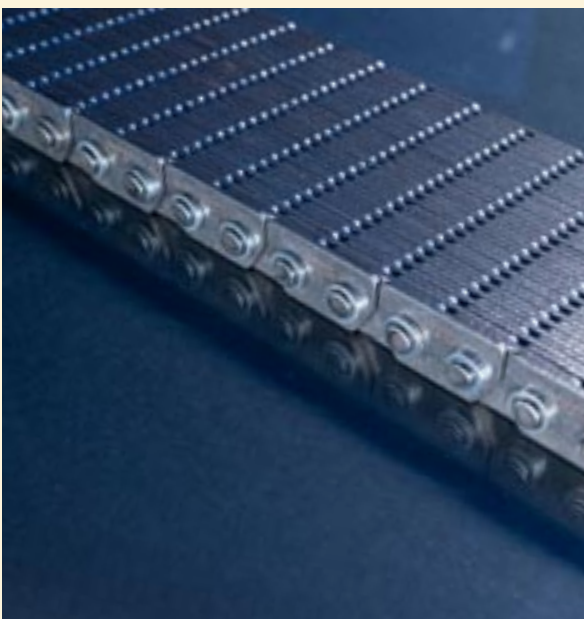
RAMSEY TAKE OUT ARM



Complete drive solutions designed with high performance RPV chain and sprockets

Greatly extend TOA life and dramatically reduce maintenance costs

CUSTOM CHAIN CAPABILITIES



Ramsey often custom designs and manufactures chains for unique and unusual applications. Some custom designs involve simply producing a new chain width or changing the location of the guide links. More extensive customization, including the development of a new chain design or link profile that's ideally suited for a special conveying or power transmission application. Special environmental conditions may call for alternative materials or processing, such as stainless steel or zinc plating.

And just because it's custom doesn't mean it has to be costly or time-consuming. Ramsey has an experienced in-house design team, highly skilled toolmakers, and complete manufacturing capabilities, all committed to providing the most affordable solutions to our customers.

The Chain Doctor

We've learned a lot during our 100 years in the chain business and it was from that experience that The Chain Doctor was born. The Chain Doctor serves as voice for our collective silent chain knowledge and we hope that you will come to know him as a trusted source for technical chain information. He answers technical questions, introduces new products, makes announcements, and relays new information. Not sure whether to go with a two pin or single pin chain? Wondering what benefits Ramsey Silent Chain® offers over mesh belts or a table top chain? Visit The Chain Doctor on our website (www.ramseyproducts.com) for answers to these questions and a whole lot more.



Look for these Ramsey trademarks:

Allguard FX™

Hyperlink® Drives

Lifeguard® - US Patents: 8,322,522 B2; 8,356,709; 2013/0087436 A1; EU Patent: EP 2368816

LoProfile™

Ramflex™

Ramsey All-Steel®

Ramsey Silent Chain®

RKO Ramsey Knock Out Tool® - US Patent 9,174,269 B2; EU Patent: EP 2905092

R-Select™ - US Patent US 8,474,607; EU Patent: EP 2640651

Sentry™

The Chain Doctor®

Ultralife®

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