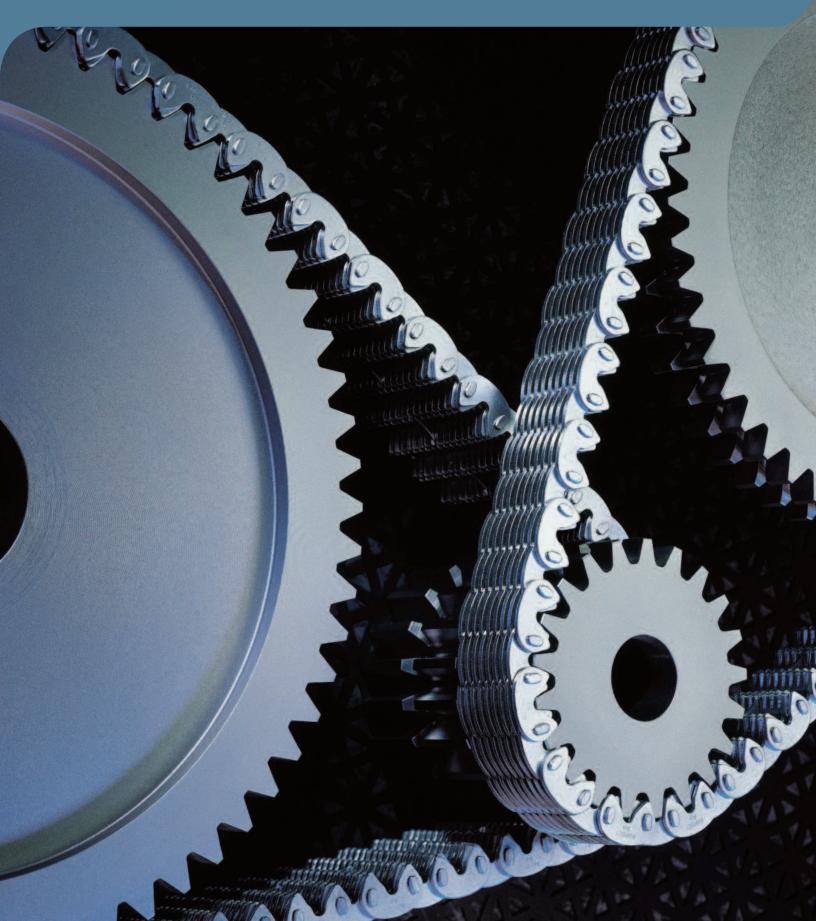


# Ramsey Silent Chain®



### Who we are

-For more than 90 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 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.

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.







# 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**<sup>™</sup> chain

- Ramsey's best chain
- Two pin joint technology
- High performance speeds to 35 m/s
- Interchanges with chains made by Rexroth, Morse, Mecman, Renold



# (0/0/0/0/0)

### Rampower<sup>™</sup> chain

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



# $\bigoplus$ $\bigcirc$ $\bigcirc$ $\bigcirc$ $\bigcirc$ $\bigcirc$ $\bigcirc$ $\bigcirc$

#### **SC** chain

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





### **Duplex chain**

- Designed to engage and drive sprockets from both sides of the chain
- Three different styles of duplex silent chain: RamFlex<sup>™</sup>, SC Duplex, Rampower Duplex





# 

### 3/16" pitch SC silent chain

- Made entirely of corrosion resistant 304 stainless steel
- 10 standard widths for fractional horsepower or high temperature applications
- A round pin joint allows chain to backbend



### Specialty chain

- Made to order, custom chains
- Special materials and designs to fit specific applications.









# 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 20 inches (508mm).



### Ultralife® - single pin chain

- Ramsey's best conveyor chain
- Available in 1/2" pitch
- Reduced elongation
- Extended life
- Standard sprockets



# (0/(0/0)\(0)\(0)\(0)

## Ultralife® - two pin chain

- · Proven two pin joint technology
- Full range stock and custom widths
- Link, link-spacer, and multiguide assemblies



# (0/(0/0)/(0/0)

### Standard conveyor chain

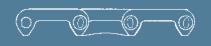
- The world's most popular single pin silent chain
- Proven oval pin joint technology
- Full range stock and custom widths
- Link, link-spacer, and multiguide assemblies



### Extended, single pin, 1"pitch conveyor chain

- Reduced conveyor weight
- Standard 1/2" pitch sprockets
- Ramsey oval pin joint technology
- Many widths and assemblies available





### Extended, two pin, 1"pitch conveyor chain

- Reduced conveyor weight
- Standard 1/2" pitch sprockets
- · Ramsey two pin joint technology
- Many widths and assemblies available



## (0/(0/0)/(0/0)

### **LoProfile**<sup>™</sup> **chain**

- Reduced overall link height and larger flats on the tips of each link
- Designed to reduce bearing stress on wear plates
- Reduced link wear and resistance to sliding



# Wear Protected 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.

Pictured: Sentry™



### Allguard FX™ chain

- Chains are protected to prevent premature chain failure and pin head wear
- Pin heads are protected from wear by being recessed in the side links
- Available in center guide, side guide and multiguide styles



### Lifeguard® chain (Patented)

- · Interlocking side links
- Reduced gaps between side plates reduces snagging on lateral guides
- Pin heads are protected from wear by being recessed in the side links



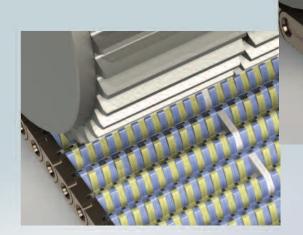
### Sentry<sup>™</sup> chain

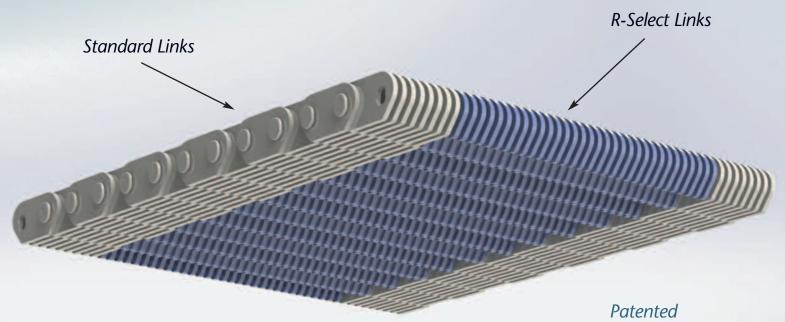
- Two pin chain joints available in 1/2" and 1" pitch
- Guard links with fully recessed pin heads for head protection
- 100% hardened alloy steel construction



## R-Select<sup>™</sup> chains

R-Select™ chains are built with links made from a special wear resistant steel alloy. But what makes R-Select unique is that chains do not need to be made entirely from wear resistant links. They can be produced using a mixture of wear resistant links and more economical standard steel links. This allows wear resistant links to be used in the parts of the chain which are expected to wear the most. Other parts of the chain, which are less subject to wear, can be made with standard links. Because the chain is not made entirely of more costly wear resistant links, overall cost can be kept down.





# 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 Ramsey Knock Out 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 saves time connecting and disconnecting chains



- Maintains chain link and spacer alignment during chain connection
- Equipped with modular guide plates that allow the tool to be adapted to almost any Ramsey Allguard FX or Lifeguard chain
- The RKO tool can be delivered already setup to fit your exact chain, or you can order the modular guide plates individually, and configure the tool for any chain that you wish

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, avaliable 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 are also available to protect against drive overloading

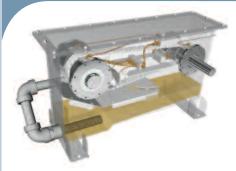
## Drive systems

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:

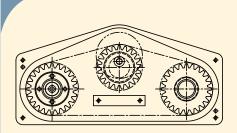
- Up to 99% efficient
- Large center distances (up to 45")
- Optimum / exact drive ratios
- Fully customizable
- Built to exact space requirements
- Low maintenance
- Capable of loads of 3,000 HP (2240 Kw) and speeds exceeding 7,000 FPM (35.5 m/s)
- No minimum order quantity





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**

With the widest selection of standard chains and sprockets in the world, Ramsey Products can usually find an effective, affordable stock solution for our customers' needs. But stock solutions are not always possible and here at Ramsey, we don't shy away from special applications.







Our engineers love a challenge, and they are anxious to put their knowledge to work for you. Ramsey routinely 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 may be needed to develop a chain design, or link profile, that is 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. If a job can be done with silent chain, we will help you find the most affordable and effective chain for the job!

### The Chain Doctor®

We've learned a lot during our 90 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.



Allguard FX<sup>™</sup> Hyperlink<sup>®</sup> Drives

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

LoProfile™

Ramflex™

Ramsey Silent Chain®

RKO Ramsey Knock Out Tool® - US Patent 9,174,269 B2

**R-Select**<sup>™</sup> - US Patent US 9,174,269 B2

Sentry™

The Chain Doctor®

*Ultralife*®



Catalog# 216

#### **Ramsey Products Corporation**

P.O. Box 668827 Charlotte, NC 28266-8827 Ship To: 135 Performance Drive Belmont, NC 28012 Tel: (704) 394-0322 Fax: (704) 394-9134 www.ramseychain.com sales@ramseychain.com

#### **Ramsey Products Europe**

Oldenkotsedijk 21 7481 VA Haaksbergen The Netherlands Ph +31 (0)53 4306135 Fax +31 (0)53 5729716 Euro.sales@ramseychain.com

