

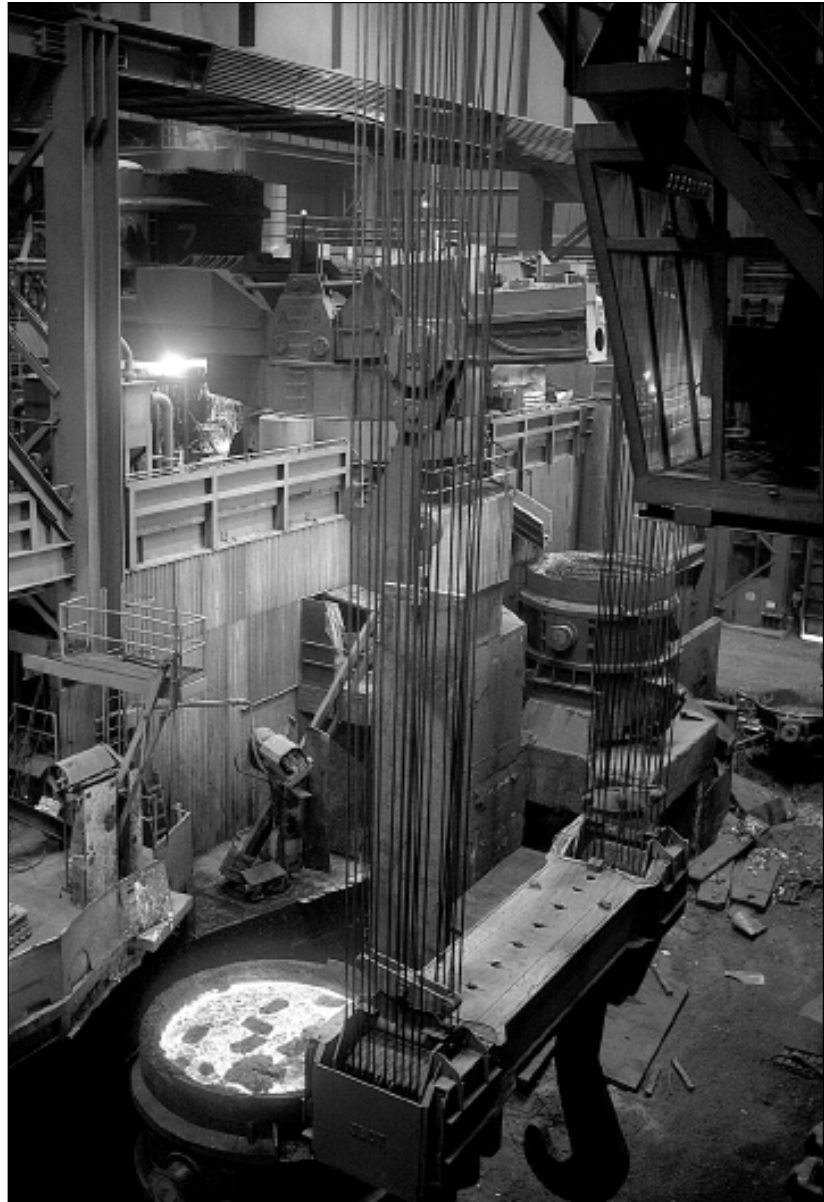
 **UNION CHAIN DIVISION - METAL PROCESSING**
U.S. TSUBAKI

Metal Processing

B - INDUSTRY APPLICATIONS

The metal processing industry has special conveyor needs. The weight of the materials, distance to be conveyed, and the environment make great demands on chain. Union Conveyor Chains are designed to stand up to the punishing conditions as raw metals are turned into finished goods.

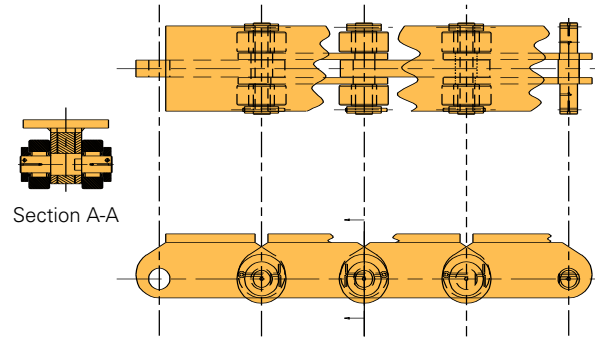
We offer a variety of Conveyor Chains for the metal processing industry. Some are listed on the following pages. In addition, we can manufacture a chain to meet your exact specifications. Contact Union Engineering to discuss your application.



Flat Top Chains

Flat Top Chains are designed to convey ingots, billets, large structural shapes, upended coils, and more to and from process operations. The flat top plate design offers large areas to evenly distribute product load. This minimizes the effect of transfer impacts that can cause product damage. In addition, the top plate protects the chain joint from unwanted exposure to heat or abrasive particles. Because of the heavy load, bearing rollers are widely used to provide the lowest chain tension and trouble-free operation.

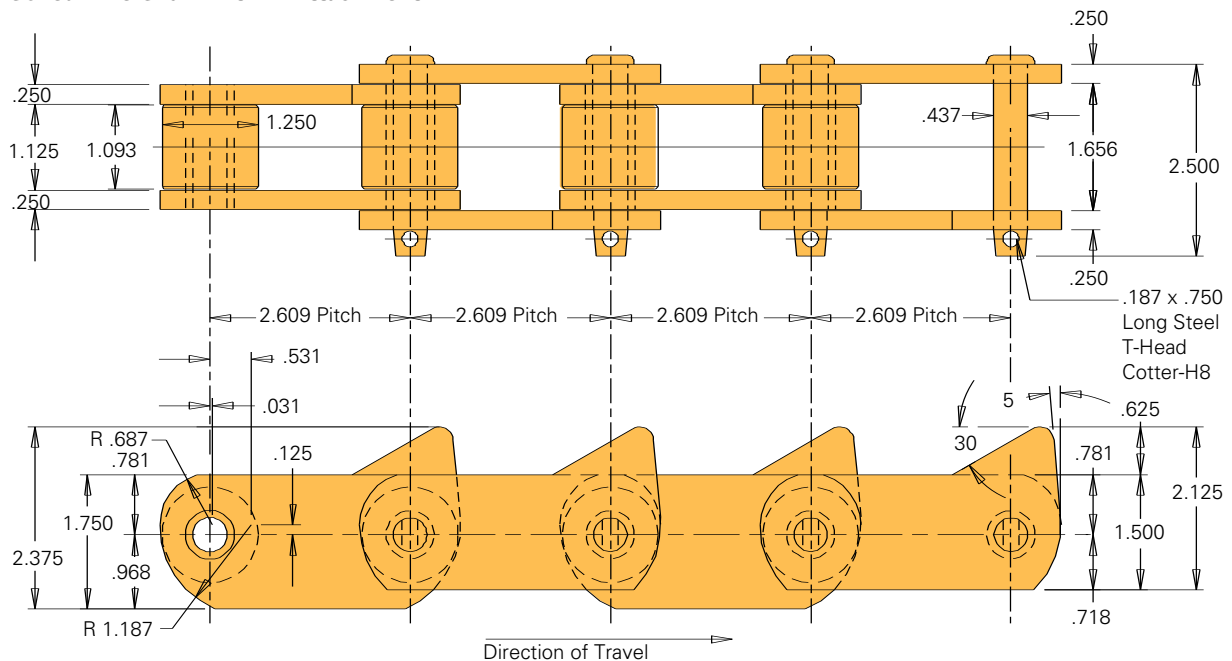
Flat Top Chain



Coiled Wire Chains

Coiled Wire Chains are designed to run conveyors in hot wire mills. These conveyors act as cooling lines, transferring continuous loops of hot wire, which are coiled after cooling down. Coiled Wire Chains are offered with special M-style attachments at every pitch to force the wire to fall between as it is loaded onto the moving conveyor.

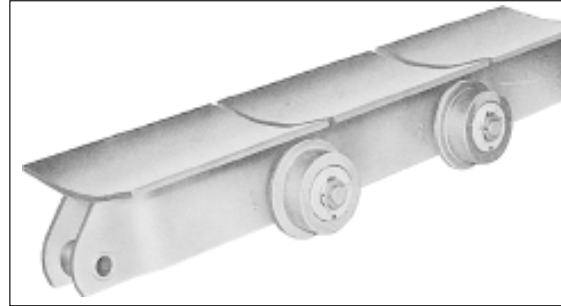
Coiled Wire Chain with M Attachment



UNION CHAIN DIVISION - METAL PROCESSING

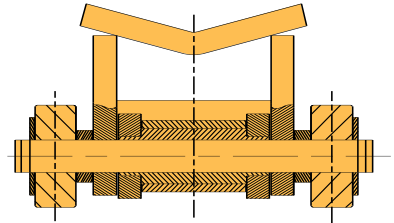
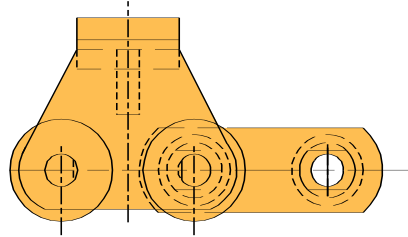
Coil Conveyor Chains

Move coils, pipe, tubing, or other large, round shapes with Gull Wing Chains or Saddle Attachments on Roller Conveyor Chains. The vee shape is designed to accommodate a range of diameter sizes that run within the process. The saddle or vee plate corner edges can be ground smooth to avoid scratching product during transfers. Gull Wing Chains or Saddle Attachments on Roller Conveyor Chains can be adapted to a variety of conveyor configurations, from top plates to bearing rollers and from inboard to outboard carrier rollers. Often economy is achieved through the use of multiple chain strands or chain strands independent of carrier assemblies.

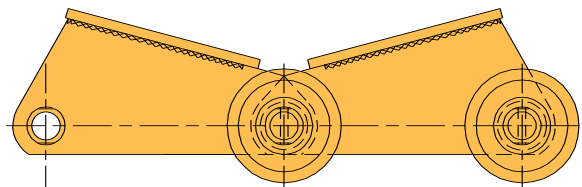
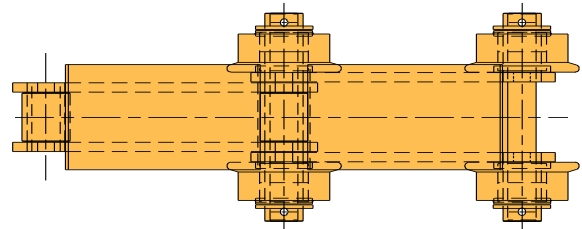


B - INDUSTRY APPLICATIONS

Gull Wing Chain



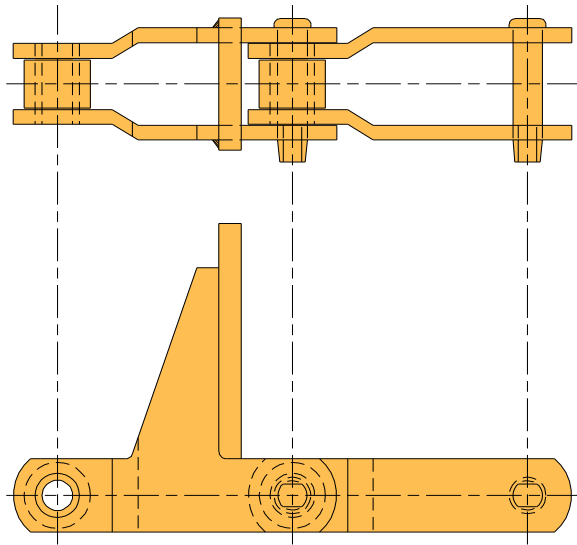
Saddle Attachment



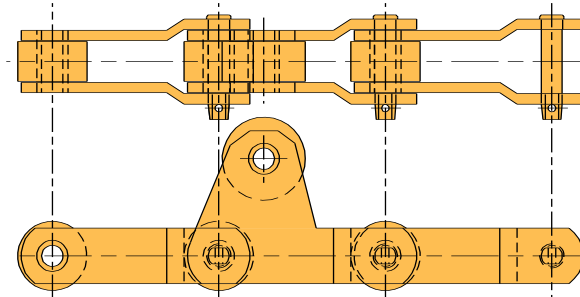
Pusher Attachment Chains

Pusher Attachment Chains are designed for cooling beds where temperatures can reach 1,900°F. Special finger attachments push against sliding or rolling product such as billet or bars, keeping it on-line. Pusher Attachment Chains are usually designed with three to six strands across to side push evenly through the bar length. Attachments are generally MM-style with top rollers or pusher bars that project upward to engage product for side transfer movement. Designs are customized to your operation, based on the width or shape of the conveyed material.

MM Attachment



Top Roller Attachment



UNION CHAIN DIVISION - METAL PROCESSING

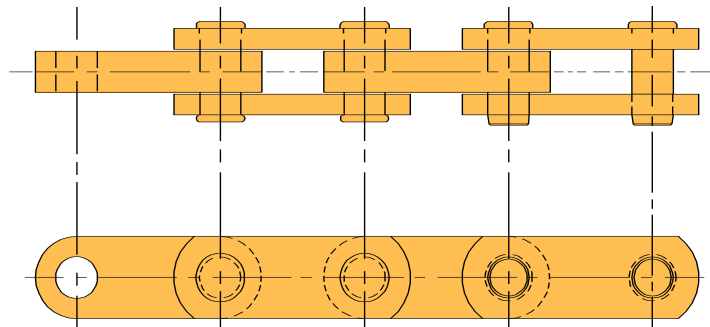
Draw Bench Bar and Pin Chains

Draw Bench Bar and Pin Chains are the tension linkage that pulls a sizing mandrel through tubing. Mandrels interfere with the smaller relative tube size to create very high chain pull. So the chain must provide very high ultimate strength and long service life. Often Draw Bench Bar and Pin Chains terminate with strands called suicide chains. In an over-run situation, suicide chains stop the pulling, thus protecting the unit from permanent damage. Because of the chain tension, sprockets require enhanced features to attain the best performance.

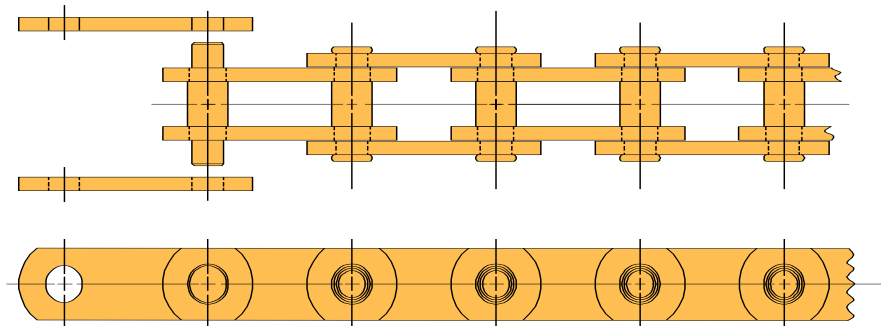


B - INDUSTRY APPLICATIONS

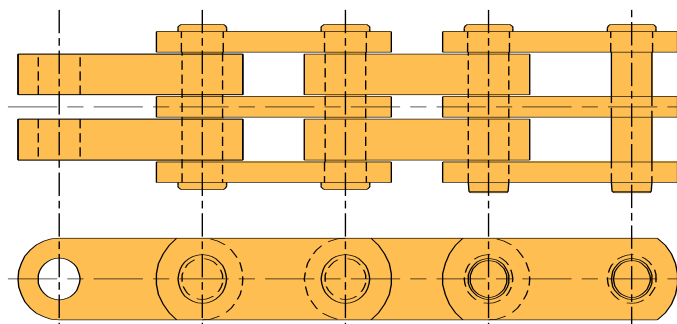
Style 1



Style 2

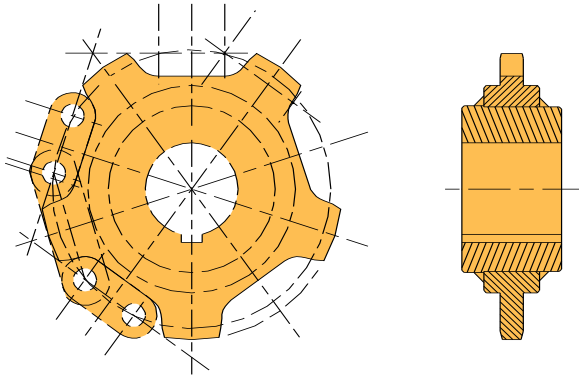


Style 3



Sprockets for Draw Bench Chain

The Union Chain Division has a variety of sprockets for the metal processing industries. Some operations, like pulling a sizing mandrel through tubing, create very high chain tension. This process can put significant stress on the sprockets. To keep your operation moving, you need sprockets that can stand up to the challenge. Every Union sprocket is carefully manufactured to tight tolerances to ensure smooth operation in your applications.



Make In-Line Inspections Easy

Put machinery access at your fingertips. ONE-TOUCH INSPECTION DOOR® is a dust- and rain-tight inspection and service door for conveyors, as well as processing and handling equipment. These pre-fabricated units are in-stock and ready-to-go for easy installation at the job site. Once in place, ONE-TOUCH INSPECTION DOOR allows for quick and simple inspection without the need for special tools: just lift the lever! No bolts to loosen and no covers to misplace. One touch is all it takes...it's that simple. For more information, see the ONE-TOUCH INSPECTION DOOR description in Section C.

THE UNION SOLUTION

- **Strong, long-lasting chains**
- **Attachments for your application**
- **Temperature resistance**
- **Withstand heavy shock loads**
- **Product undamaged and on-line**
- **High-tension chains and sprockets**