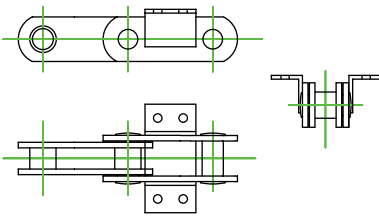


CONVEYOR CHAIN ATTACHMENTS

Attachments are any parts 'attached' to a plain conveyor chain in order to adapt it for a particular purpose. Attachments can either be an integral part of a link plate or they can be built into a chain, replacing a standard link. The more common types of attachments are either welded, riveted or bolted onto the chain.

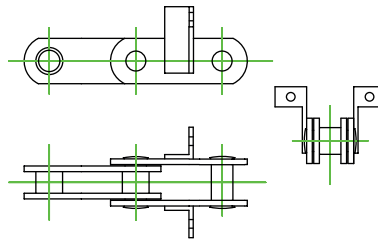
Hollow pin chain is not normally supplied with attachments. The hollow pins offer an existing facility for fitting attachments, usually by bolts or tie rods. It should be noted that if bolting an attachment rigidly through two adjacent hollow pins then this should be done on outer links, to ensure unhindered articulation of the chain.

Most attachments are designated by a letter of the alphabet. However, it should be noted that not all manufacturers use the same letter designations.



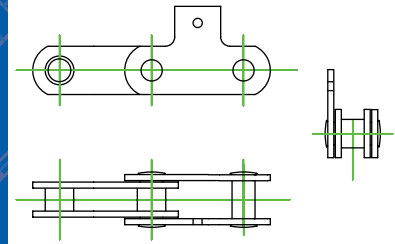
A & K Attachments

This is the most common type of attachment, generally used for fixing apron slats, rubber belts and buckets on elevators. The attachment offers a platform parallel to the chain axis, usually containing one or two holes for attaching additional components. A1 and K1 attachments offer one hole, while A2 and K2 attachments offer 2 holes in the platform. 'A' generally designates an attachment on only one side of the chain, while 'K' designates that the attachment is on both sides of the chain. The spacing of the attachment is usually designated after the attachment type and number of holes. For example, a platform attachment on both sides of the chain with two holes, every fourth pitch, would be designated K2-04.



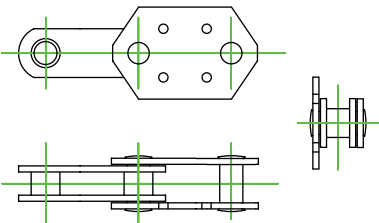
F Attachments

'F' attachments are commonly used for pusher and scraper applications and comprises of a stood attachment with a vertical surface at right angles to the chain. It is not common for these attachments to be integral to the chain and are usually offered as a welded, riveted or bolted attachment. As with 'A' and 'K' attachments, 'F' attachments can be provided with one or two holes, designated F1 or F2 respectively and can be attached to one side or both sides of the conveyor chain.



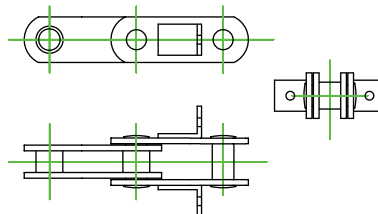
M Attachments

'M' attachments offer a flat surface, usually on one side of the chain, parallel to the chain line and are basically an extended link plate where the top edge of the link is extended. 'M' type attachments follow the standard with regards to the number of holes provided with M2 attachments containing two holes. This type of attachment is usually integral to the chain, although 'M' type attachments can be welded to the link plate if required.



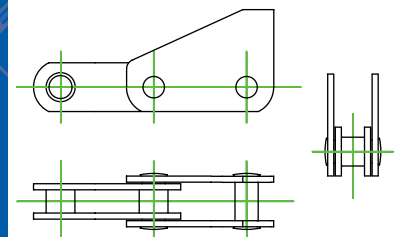
G Attachments

'G' attachments offer a flat surface on the side of the chain, parallel to the chain line and are basically extended link plates. 'M' type attachments extend only the top edge of a link plate, while 'G' type attachments extend both the top and bottom edges of the link plate. The number after a 'G' style attachment designates the number of pairs of holes, with a 'G2' attachment containing two holes above the chain centreline and two holes below. They are usually supplied on one side of the chain, with special considerations being required when designing sprockets to suit 'G' style attachments. These types of attachment are usually found on pallet conveyors and bucket elevators.



L Attachments

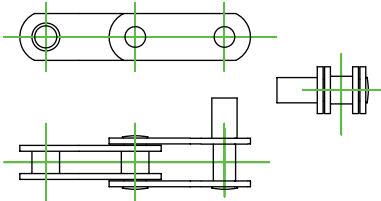
'L' attachments are usually found on lower strength chains and offer a flat face perpendicular to the chains link plate. The most common application for this style of attachment is box and bar scraper systems. The attachment can either be an integral part of the link plate, being bent after the leading bearing pin, or they can be welded to the link plate between the bearing pins. The attachments can be supplied on one side or both sides of the chain, with the number after the letter designating the number of holes, i.e. an L2 attachment would offer two holes. Unlike other styles of attachment, L attachments can be used as scrapers without any additional fixings, with the plain attachment being designated L0 (as it does not contain any holes).



S or Pusher Attachments

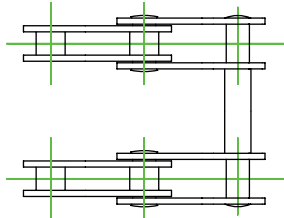
This style of attachment is used as a pusher dog. The attachments consist of triangular plates which replace the standard link plates on either inner or outer links. For heavy duty applications, a spacer block is welded or bolted between the two attachments to increase chain rigidity, while bolted spacers can be used as replaceable wear parts.

It should also be noted that for heavy duty applications, it is common to mount outboard rollers on both sides of the chain before and after the pusher dog. The outboard rollers resist the reactive forces on the pusher dog, preventing the chain from 'kinking' and therefore lifting off the conveyor track.



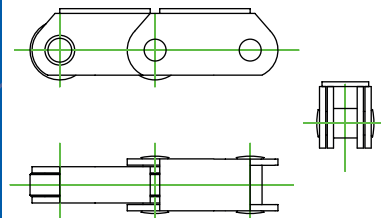
Extended Bearing Pins & Spigot Pins

These types of 'attachments' have many different applications, such as tray elevators, festoon conveyors and push/pull systems. Extended pins can be fitted through hollow bearing pins in the conveyor chain, can be manufactured into the chain or can be fitted through holes in the centre of the links plates on inners or outers. It is also possible to case harden the pins in order to increase their working life.



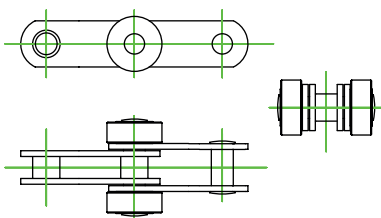
Stay or Cross bars

Cross bars are commonly used on mesh belts, piano hinge belts, festoon conveyors and push/pull systems, with assembly resembling extended bearing pins.



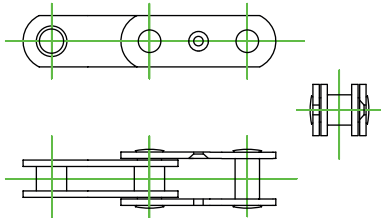
Top Plates

Top plates are a flat plate, usually welded on to deep link conveyor chain. Their job is to protect items falling into the chain when the deep link conveyor chain is used to carry items, such as pallets which could splinter. In their simplest form they are a flat rectangular plate, although bending over the edge on both sides allows the chain to be guided in a similar way to flanged rollers. This is particularly useful for longer conveyors.



Outboard Rollers

The main uses for outboard rollers are to increase the load carrying capacity of the conveyor chain or to help stabilise reactive loads on pusher dog applications. Outboard rollers can be bolted to the chain through hollow pins, although the most common method is to use extended bearings pins and circlips for retention. Outboard rollers also have the advantage of being replaceable in the event of wear, with the chains rollers only being used for sprocket gearing, helping to extend the working life of the conveyor chain.



Drilled Link Plates

Drilled link plates allow attachments to be fitted to plain conveyor chain using bolts or rivets. One common application for drilled links is to fit spigot or extended pins, although drilled links are often used in the water industry to secure screen elements to the conveyor chains. It is common to use counter sunk holes in order to avoid bolt heads interfering with conveyor chain sprockets. Holes drilled in the opposite side to the counter sunk holes allow access for tools in order to secure the bolts fitted through the opposing link plate.



Non Standard Attachments

As we manufacture each chain that we sell, we are able to supply special and bespoke attachments or fixings. Please contact us to discuss your particular requirements, or view our bespoke chain section for example bespoke chain fixtures.

Example Bespoke Attachments



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