

Mast Chains

Forklift Mast Chain - Used in different functions, leaf chains are regulated by ANSI. They can be utilized for lift truck masts, as balancers between heads and counterweight in several machine tools, and for tension linkage and low-speed pulling. Leaf chains are at times also referred to as Balance Chains.

Features and Construction

Made of a simple pin construction and link plate, steel leaf chains is identified by a number that refers to the lacing of the links and the pitch. The chains have particular features like high tensile strength per section area, that enables the design of smaller mechanisms. There are B- and A+ kind chains in this particular series and both the AL6 and BL6 Series have the same pitch as RS60. Lastly, these chains cannot be driven using sprockets.

Handling and Selection

Comparably, in roller chains, all of the link plates have higher fatigue resistance due to the compressive stress of press fits, whereas in leaf chains, just two outer plates are press fit. The tensile strength of leaf chains is high and the maximum acceptable tension is low. When handling leaf chains it is important to check with the manufacturer's handbook so as to ensure the safety factor is outlined and utilize safety measures all the time. It is a good idea to apply extreme caution and use extra safety measures in functions wherein the consequences of chain failure are severe.

Using much more plates in the lacing causes the higher tensile strength. For the reason that this does not improve the maximum allowable tension directly, the number of plates utilized can be limited. The chains require regular lubrication as the pins link directly on the plates, producing an extremely high bearing pressure. Making use of a SAE 30 or 40 machine oil is frequently suggested for most applications. If the chain is cycled more than one thousand times every day or if the chain speed is more than 30m for each minute, it would wear extremely rapidly, even with continuous lubrication. Thus, in either of these conditions the use of RS Roller Chains would be a lot more suitable.

The AL-type of chains must only be used under certain conditions like when wear is not a huge concern, if there are no shock loads, the number of cycles does not go over a hundred day by day. The BL-type would be better suited under other situations.

If a chain utilizing a lower safety factor is selected then the stress load in parts will become higher. If chains are used with corrosive elements, then they can become fatigued and break somewhat easily. Doing regular maintenance is really essential if operating under these types of conditions.

The inner link or outer link type of end link on the chain will determine the shape of the clevis. Clevis connectors or Clevis pins are made by manufacturers, but the user usually supplies the clevis. An improperly made clevis can lessen the working life of the chain. The strands should be finished to length by the producer. Check the ANSI standard or contact the manufacturer.