Forklift Mast Chain

Mast Chains - Used in various applications, leaf chains are regulated by ANSI. They can be utilized for lift truck masts, as balancers between heads and counterweight in several machine gadgets, and for tension linkage and low-speed pulling. Leaf chains are sometimes also called Balance Chains.

Construction and Features

Constructed 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 specific features like for example high tensile strength for each section area, that enables the design of smaller mechanisms. There are A- and B- type chains in this series and both the AL6 and BL6 Series include the same pitch as RS60. Lastly, these chains cannot be powered with sprockets.

Handling and Selection

Comparably, in roller chains, all of the link plates maintain higher fatigue resistance due to the compressive stress of press fits, while in leaf chains, just two outer plates are press fit. The tensile strength of leaf chains is high and the most acceptable tension is low. Whenever handling leaf chains it is vital to check with the manufacturer's guidebook to be able to ensure the safety factor is outlined and utilize safety measures always. It is a great idea to apply extreme care and utilize extra safety guards in applications where the consequences of chain failure are serious.

Higher tensile strength is a direct correlation to the use of much more plates. As the utilization of much more plates does not improve the most permissible tension directly, the number of plates may be restricted. The chains need frequent lubrication since the pins link directly on the plates, producing a very high bearing pressure. Utilizing a SAE 30 or 40 machine oil is often advised 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 will wear very quick, even with continual lubrication. So, in either of these conditions the use of RS Roller Chains would be much more suitable.

AL type chains are only to be used under certain conditions such as where there are no shock loads or if wear is not a huge issue. Be positive that the number of cycles does not go beyond a hundred per day. The BL-type would be better suited under other conditions.

If a chain utilizing a lower safety factor is chosen then the stress load in parts would become higher. If chains are used with corrosive elements, then they could become fatigued and break somewhat easily. Performing regular maintenance is really vital when operating under these types of situations.

The outer link or inner link type of end link on the chain will determine the shape of the clevis. Clevis connectors or Clevis pins are constructed by manufacturers, but the user normally supplies the clevis. A wrongly constructed clevis can decrease the working life of the chain. The strands should be finished to length by the manufacturer. Check the ANSI standard or call the producer.