

Forklift Mast Chains

Mast Chains - Leaf Chains have different functions and are regulated by ANSI. They are used for lift truck masts, for low-speed pulling and tension linkage, and as balancers between head and counterweight in some machine tools. Leaf chains are occasionally even 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 pitch and the lacing of the links. The chains have certain features such as high tensile strength for each section area, which enables the design of smaller mechanisms. There are A- and B- type chains in this particular series and both the BL6 and AL6 Series contain the same pitch as RS60. Lastly, these chains cannot be powered using sprockets.

Selection and Handling

In roller chains, the link plates maintain a higher fatigue resistance due to the compressive tension of press fits, yet the leaf chain just has two outer press fit plates. On the leaf chain, the most permissible tension is low and the tensile strength is high. While handling leaf chains it is important to check with the manufacturer's handbook so as to guarantee the safety factor is outlined and utilize safety measures always. It is a great idea to exercise extreme care and use extra safety guards in applications where the consequences of chain failure are serious.

Using a lot more plates in the lacing results in the higher tensile strength. As this does not improve the most permissible tension directly, the number of plates utilized may be limited. The chains need frequent lubrication because the pins link directly on the plates, producing a really high bearing pressure. Making use of a SAE 30 or 40 machine oil is normally advised for most applications. If the chain is cycled over 1000 times day by day or if the chain speed is over 30m for each minute, it will wear really fast, even with continuous lubrication. So, in either of these conditions the use of RS Roller Chains would be a lot more suitable.

AL type chains are only to be used under particular conditions like for example where there are no shock loads or when wear is not really a huge concern. Be sure that the number of cycles does not go beyond 100 each day. The BL-type would be better suited under various situations.

If a chain utilizing a lower safety factor is selected 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 important if operating under these types of conditions.

The kind of end link of the chain, whether it is an outer link or inner link, determines the shape of the clevis. Clevis connectors or likewise called Clevis pins are made by manufacturers but usually, the user supplies the clevis. An improperly constructed clevis could decrease the working life of the chain. The strands must be finished to length by the producer. Check the ANSI standard or call the maker.