

Mast Chains

Mast Chains - Utilized in various functions, leaf chains are regulated by ANSI. They could be utilized for forklift masts, as balancers between counterweight and heads in several machine tools, and for low-speed pulling and tension linkage. Leaf chains are at times likewise called Balance Chains.

Features and Construction

Leaf chains are actually steel chains with a simple link plate and pin construction. The chain number refers to the lacing of the links and the pitch. The chains have specific features like high tensile strength for each section area, that allows the design of smaller machines. There are B- and A+ type chains in this particular series and both the AL6 and BL6 Series include the same pitch as RS60. Lastly, these chains cannot be driven utilizing sprockets.

Handling and Selection

In roller chains, the link plates have a higher fatigue resistance because of the compressive stress of press fits, yet the leaf chain just contains two outer press fit plates. On the leaf chain, the maximum acceptable tension is low and the tensile strength is high. If handling leaf chains it is essential to confer with the manufacturer's guidebook so as to ensure the safety factor is outlined and utilize safety measures at all times. It is a great idea to carry out utmost caution and use extra safety guards in applications where the consequences of chain failure are serious.

Higher tensile strength is a direct correlation to the use of more plates. As the use of more plates does not improve the utmost acceptable tension directly, the number of plates could be restricted. The chains require frequent lubrication for the reason that the pins link directly on the plates, generating a very high bearing pressure. Using a SAE 30 or 40 machine oil is normally suggested for the majority of applications. If the chain is cycled over 1000 times day by day or if the chain speed is more than 30m for every minute, it will wear extremely fast, even with constant lubrication. Hence, in either of these conditions using RS Roller Chains would be 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 every day. The BL-type would be better suited under different conditions.

If a chain utilizing a lower safety factor is chosen then the stress load in components would become higher. If chains are utilized with corrosive elements, then they may become fatigued and break somewhat easily. Performing regular maintenance is important if operating under these kinds of situations.

The inner link or outer link type of end link on the chain would determine the shape of the clevis. Clevis connectors or Clevis pins are constructed by manufacturers, but the user typically supplies the clevis. An improperly made clevis could decrease the working life of the chain. The strands should be finished to length by the maker. Refer to the ANSI standard or call the producer.