

Mast Chain

Mast Chain - Utilized in different functions, leaf chains are regulated by ANSI. They could be used for lift truck masts, as balancers between heads and counterweight in some machine devices, and for tension linkage and low-speed pulling. Leaf chains are sometimes even called Balance Chains.

Construction and Features

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

Handling and Selection

Comparably, in roller chains, all of the link plates have higher fatigue resistance because of 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. If handling leaf chains it is essential to check with the manufacturer's handbook to be able to guarantee the safety factor is outlined and utilize safety measures at all times. It is a better idea to apply utmost care and use extra safety guards in functions wherein the consequences of chain failure are serious.

Higher tensile strength is a direct correlation to the use of a lot more plates. As the use of more plates does not enhance the utmost allowable tension directly, the number of plates may be limited. The chains require regular lubrication as the pins link directly on the plates, producing an extremely high bearing pressure. Utilizing a SAE 30 or 40 machine oil is frequently suggested for the majority of applications. If the chain is cycled over one thousand times day after day or if the chain speed is over 30m for every minute, it would wear extremely fast, even with continuous lubrication. Thus, in either of these situations the use of RS Roller Chains will be a lot more suitable.

The AL-type of chains should only be used under particular conditions like for example if wear is really not a big issue, when there are no shock loads, the number of cycles does not go over a hundred daily. The BL-type would be better suited under different situations.

The stress load in parts would become higher if a chain utilizing a lower safety factor is chosen. If the chain is even utilized amongst corrosive situations, it could easily fatigue and break very fast. Performing frequent maintenance is vital when operating under these types of situations.

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 typically supplies the clevis. An improperly constructed clevis could lessen the working life of the chain. The strands must be finished to length by the manufacturer. Check the ANSI standard or contact the maker.