

Mast Chain

Mast Chains - Leaf Chains comprise several applications and are regulated by ANSI. They are meant for tension linkage, forklift masts and for low-speed pulling, and as balancers between head and counterweight in several machine devices. Leaf chains are occasionally likewise called Balance Chains.

Features and Construction

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

Handling and Selection

In roller chains, the link plates have a higher fatigue resistance because of the compressive tension of press fits, yet the leaf chain just contains two outer press fit plates. On the leaf chain, the most allowable tension is low and the tensile strength is high. While handling leaf chains it is essential to check with the manufacturer's instruction manual so as to guarantee the safety factor is outlined and use safety measures at all times. It is a good idea to carry out extreme caution and utilize extra safety measures in applications wherein the consequences of chain failure are severe.

Utilizing more plates in the lacing results in the higher tensile strength. In view of the fact that this does not improve the most allowable tension directly, the number of plates utilized can be limited. The chains require frequent lubrication because the pins link directly on the plates, producing a really high bearing pressure. Utilizing a SAE 30 or 40 machine oil is frequently suggested for nearly all applications. If the chain is cycled over one thousand times daily or if the chain speed is more than 30m for each minute, it will wear really rapidly, even with continual lubrication. Hence, in either of these situations the use of RS Roller Chains will be a lot more suitable.

AL type chains are just to be utilized under certain situations like for example where there are no shock loads or when wear is not a huge issue. Be positive that the number of cycles does not exceed one hundred per day. The BL-type would be better suited under other situations.

If a chain with a lower safety factor is chosen then the stress load in parts will become higher. If chains are used with corrosive elements, then they can become fatigued and break rather easily. Performing regular maintenance is really important if operating under these kinds of situations.

The type of end link of the chain, whether it is an inner link or outer link, determines the shape of the clevis. Clevis connectors or Clevis pins are constructed by manufacturers but usually, the user supplies the clevis. A wrongly made clevis could lessen the working life of the chain. The strands must be finished to length by the maker. Refer to the ANSI standard or phone the manufacturer.