

Mast Chain

Mast Chains - Used in different functions, leaf chains are regulated by ANSI. They could be used for lift truck masts, as balancers between counterweight and heads in several machine tools, and for low-speed pulling and tension linkage. Leaf chains are sometimes likewise referred to as Balance Chains.

Construction and Features

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

Handling and Selection

In roller chains, the link plates have a higher fatigue resistance due to the compressive tension of press fits, yet the leaf chain just contains two outer press fit plates. On the leaf chain, the maximum permissible tension is low and the tensile strength is high. Whenever handling leaf chains it is vital to check with the manufacturer's instruction booklet so as to ensure the safety factor is outlined and utilize safety guards at all times. It is a better idea to exercise extreme care and utilize extra safety measures in applications where the consequences of chain failure are severe.

Using more plates in the lacing causes the higher tensile strength. Because this does not improve the utmost acceptable tension directly, the number of plates utilized may be restricted. The chains need regular lubrication in view of the fact that the pins link directly on the plates, producing a very high bearing pressure. Making use of a SAE 30 or 40 machine oil is often advised for the majority of applications. If the chain is cycled more than one thousand times on a daily basis or if the chain speed is over 30m for every minute, it would wear very rapidly, even with continual lubrication. Thus, in either of these conditions the use of RS Roller Chains would be much more suitable.

The AL-type of chains should just be used under certain conditions such as if wear is really not a big issue, if there are no shock loads, the number of cycles does not exceed one hundred a day. The BL-type would be better suited under various situations.

If a chain using a lower safety factor is selected then the stress load in components will become higher. If chains are used with corrosive elements, then they could become fatigued and break somewhat easily. Doing regular maintenance is important when 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 also called Clevis pins are constructed by manufacturers but usually, the user supplies the clevis. An improperly made clevis could decrease the working life of the chain. The strands must be finished to length by the producer. Refer to the ANSI standard or call the manufacturer.