

Mast Chain

Mast Chains - 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 several machine tools, and for tension linkage and low-speed pulling. Leaf chains are sometimes even known as Balance Chains.

Construction and Features

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

Selection and Handling

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, only two outer plates are press fit. The tensile strength of leaf chains is high and the maximum permissible tension is low. If handling leaf chains it is vital to confer with the manufacturer's instruction manual in order to guarantee the safety factor is outlined and use safety guards at all times. It is a better idea to apply extreme care 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. Since this does not improve the utmost allowable tension directly, the number of plates used can be restricted. The chains need regular lubrication for the reason that the pins link directly on the plates, generating a very high bearing pressure. Utilizing a SAE 30 or 40 machine oil is normally suggested for nearly all applications. If the chain is cycled more than one thousand times daily or if the chain speed is more than 30m for every minute, it will wear very fast, even with constant lubrication. Therefore, in either of these conditions utilizing RS Roller Chains would be much more suitable.

AL type chains are only to be used under particular conditions like where there are no shock loads or if wear is not a big issue. Be positive that the number of cycles does not exceed one hundred day by day. The BL-type would be better suited under various conditions.

The stress load in parts will become higher if a chain utilizing a lower safety factor is chosen. If the chain is also used amongst corrosive situations, it can easily fatigue and break extremely quick. Performing frequent maintenance is really vital if operating under these kinds of situations.

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 Clevis pins are made by manufacturers but usually, the user provides the clevis. A wrongly made clevis can reduce the working life of the chain. The strands should be finished to length by the manufacturer. Refer to the ANSI standard or phone the producer.