Mast Chain

Mast Chains - Utilized in different functions, leaf chains are regulated by ANSI. They can be used for forklift masts, as balancers between counterweight and heads in several machine gadgets, and for low-speed pulling and tension linkage. Leaf chains are occasionally likewise known as Balance Chains.

Features and Construction

Constructed of a simple pin construction and link plate, steel leaf chains is identified by a number which refers to the pitch and the lacing of the links. The chains have particular features like high tensile strength for every section area, which allows the design of smaller machines. There are A- and B- kind chains in this series and both the AL6 and BL6 Series comprise the same pitch as RS60. Lastly, these chains cannot be driven using sprockets.

Handling and Selection

Comparably, in roller chains, all of the link plates have higher fatigue resistance due to the compressive stress of press fits, while in leaf chains, only two outer plates are press fit. The tensile strength of leaf chains is high and the utmost acceptable tension is low. While handling leaf chains it is essential to consult the manufacturer's catalogue in order to ensure the safety factor is outlined and use safety measures all the time. It is a good idea to exercise extreme caution and utilize extra safety measures in functions wherein the consequences of chain failure are severe.

Higher tensile strength is a direct correlation to the use of much more plates. As the utilization of more plates does not improve the maximum allowable tension directly, the number of plates can be restricted. The chains require regular lubrication because the pins link directly on the plates, producing an extremely high bearing pressure. Using a SAE 30 or 40 machine oil is normally suggested for nearly all applications. If the chain is cycled more than 1000 times daily or if the chain speed is over 30m for every minute, it will wear very fast, even with continuous lubrication. So, in either of these conditions the use of RS Roller Chains would be more suitable.

AL type chains are just to be used under certain conditions like for example where there are no shock loads or when wear is not a huge problem. Be sure that the number of cycles does not exceed 100 per day. The BL-type will be better suited under various conditions.

The stress load in parts will become higher if a chain utilizing a lower safety factor is selected. If the chain is also utilized among corrosive situations, it could easily fatigue and break extremely fast. Performing frequent maintenance is essential if operating under these kinds 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. A wrongly constructed clevis can decrease the working life of the chain. The strands must be finished to length by the manufacturer. Refer to the ANSI standard or call the maker.