Mast Chain

Mast Chains - Leaf Chains consist of various functions and are regulated by ANSI. They are intended for forklift masts, for low-speed pulling and tension linkage, and as balancers between head and counterweight in several machine tools. Leaf chains are at times likewise called Balance Chains.

Construction and Features

Leaf chains are actually steel chains utilizing a simple pin construction and link plate. The chain number refers to the pitch and the lacing of the links. The chains have certain features like for instance high tensile strength for every section area, that enables the design of smaller devices. There are B- and A+ type chains in this series and both the AL6 and BL6 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 most acceptable tension is low. If handling leaf chains it is important to check with the manufacturer's handbook to be able to guarantee the safety factor is outlined and utilize safety measures all the time. It is a better idea to apply utmost caution and use extra safety measures in applications wherein the consequences of chain failure are severe.

Using much more plates in the lacing causes the higher tensile strength. Because this does not enhance the utmost permissible tension directly, the number of plates utilized could be limited. The chains require frequent lubrication because the pins link directly on the plates, generating an extremely high bearing pressure. Utilizing a SAE 30 or 40 machine oil is often suggested for most applications. If the chain is cycled more than one thousand times daily or if the chain speed is more than 30m for each minute, it will wear really rapidly, even with continuous lubrication. So, in either of these situations using RS Roller Chains would be more suitable.

AL type chains are only to be used under certain situations like for example where there are no shock loads or when wear is not really a big problem. Be certain that the number of cycles does not go beyond one hundred every day. The BL-type will be better suited under other conditions.

The stress load in components would become higher if a chain utilizing a lower safety factor is selected. If the chain is even used among corrosive conditions, it could easily fatigue and break really fast. Doing frequent maintenance is important 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 likewise called Clevis pins are made by manufacturers but often, the user supplies the clevis. An improperly made clevis can decrease the working life of the chain. The strands should be finished to length by the manufacturer. Check the ANSI standard or contact the maker.