Mast Chain

Mast Chains - Leaf Chains have different applications and are regulated by ANSI. They are utilized for low-speed pulling, for tension linkage and forklift masts, and as balancers between counterweight and head in several machine devices. Leaf chains are occasionally also known as Balance Chains.

Features and Construction

Leaf chains are actually 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 particular features such as high tensile strength per section area, that enables the design of smaller devices. There are A- and B- kind chains in this particular series and both the BL6 and AL6 Series have the same pitch as RS60. Lastly, these chains cannot be driven with sprockets.

Handling and Selection

Comparably, in roller chains, all of the link plates maintain higher fatigue resistance because of 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 most allowable tension is low. When handling leaf chains it is important to consult the manufacturer's manual so as to ensure the safety factor is outlined and use safety guards at all times. It is a better idea to exercise extreme care and utilize extra safety guards in applications where the consequences of chain failure are severe.

Higher tensile strength is a direct correlation to the use of a lot more plates. In view of the fact that the use of more plates does not enhance the utmost allowable tension directly, the number of plates may be restricted. The chains require frequent lubrication since the pins link directly on the plates, producing a very high bearing pressure. Using a SAE 30 or 40 machine oil is normally 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 would wear very quick, even with continuous lubrication. Hence, in either of these conditions the use of RS Roller Chains will be more suitable.

AL type chains are just to be used under certain conditions like where there are no shock loads or when wear is not a big problem. Be sure that the number of cycles does not go over a hundred per day. The BL-type will be better suited under other situations.

If a chain utilizing 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 somewhat easily. Doing frequent maintenance is important if operating under these kinds of situations.

The outer link or inner link type of end link on the chain will determine the shape of the clevis. Clevis connectors or likewise known as Clevis pins are constructed by manufacturers, but the user usually supplies the clevis. A wrongly constructed 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.