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 counterweight and heads in some machine devices, and for tension linkage and low-speed pulling. Leaf chains are occasionally also called Balance Chains.

Features and Construction

Leaf chains are steel chains with 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 like for instance high tensile strength for every section area, that allows the design of smaller mechanisms. There are A- and B- kind chains in this series and both the AL6 and BL6 Series have the same pitch as RS60. Finally, these chains cannot be driven with sprockets.

Selection and Handling

Comparably, in roller chains, all of the link plates maintain higher fatigue resistance because of the compressive stress of press fits, whereas in leaf chains, just two outer plates are press fit. The tensile strength of leaf chains is high and the utmost allowable tension is low. While handling leaf chains it is important to check with the manufacturer's catalogue in order to ensure the safety factor is outlined and use safety measures all the time. It is a great idea to carry out extreme care and use extra safety measures in functions wherein the consequences of chain failure are serious.

Higher tensile strength is a direct correlation to the use of more plates. Because the use of more plates does not improve the maximum allowable tension directly, the number of plates could be limited. The chains require regular lubrication because the pins link directly on the plates, generating a very high bearing pressure. Making use of a SAE 30 or 40 machine oil is frequently suggested for nearly all applications. If the chain is cycled over 1000 times day after day or if the chain speed is more than 30m per minute, it would wear extremely quick, even with continual lubrication. Thus, in either of these situations utilizing RS Roller Chains would be a lot more suitable.

AL type chains are only to be utilized under particular conditions such as where there are no shock loads or if wear is not really a big issue. Be positive that the number of cycles does not go over 100 daily. The BL-type would be better suited under various situations.

The stress load in components will become higher if a chain with a lower safety factor is selected. If the chain is even utilized amongst corrosive conditions, it can easily fatigue and break very quick. Performing frequent maintenance is important if operating under these kinds of situations.

The inner link or outer link kind of end link on the chain would determine the shape of the clevis. Clevis connectors or otherwise known as Clevis pins are constructed by manufacturers, but the user normally 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 phone the producer.