Mast Chain

Mast Chains - Leaf Chains comprise various functions and are regulated by ANSI. They are meant for low-speed pulling, for tension linkage and lift truck masts, and as balancers between head and counterweight in some machine devices. Leaf chains are occasionally even referred to as Balance Chains.

Features and Construction

Made of a simple link plate and pin construction, steel leaf chains is identified by a number that refers to the lacing of the links and the pitch. The chains have particular features like high tensile strength for every section area, that allows the design of smaller devices. There are B- and A+ type chains in this particular series and both the BL6 and AL6 Series have 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 maintain higher fatigue resistance because of the compressive stress of press fits, while in leaf chains, just 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 important to confer with the manufacturer's manual to be able to guarantee the safety factor is outlined and use safety measures all the time. It is a good idea to exercise utmost care and use extra safety measures in applications where the consequences of chain failure are serious.

Higher tensile strength is a direct correlation to the utilization of much more plates. For the reason that the use of a lot more plates does not enhance the maximum allowable tension directly, the number of plates could be restricted. The chains need regular lubrication because the pins link directly on the plates, generating a really high bearing pressure. Using a SAE 30 or 40 machine oil is frequently suggested for most applications. If the chain is cycled over 1000 times in a day or if the chain speed is more than 30m for every minute, it will wear very rapidly, even with constant lubrication. Thus, in either of these situations the use of RS Roller Chains will be more suitable.

The AL-type of chains should just be utilized under certain conditions like for example if wear is not a big issue, if there are no shock loads, the number of cycles does not go over one hundred day after day. The BL-type would be better suited under other conditions.

The stress load in parts would become higher if a chain with a lower safety factor is chosen. If the chain is also used amongst corrosive situations, it could easily fatigue and break really quick. Doing frequent maintenance is really vital when 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 Clevis pins are made by manufacturers but normally, the user provides 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 call the manufacturer.