Mast Chain

Mast Chains - Utilized in various applications, leaf chains are regulated by ANSI. They could be used for lift truck masts, as balancers between heads and counterweight in several machine gadgets, and for tension linkage and low-speed pulling. Leaf chains are at times even called Balance Chains.

Features and Construction

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

Handling and Selection

Comparably, in roller chains, all of the link plates have 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 most permissible tension is low. When handling leaf chains it is important to confer with the manufacturer's instruction booklet to be able to guarantee the safety factor is outlined and use safety guards all the time. It is a better idea to exercise utmost care and use extra safety measures in applications where the consequences of chain failure are severe.

Utilizing a lot more plates in the lacing leads to the higher tensile strength. As this does not enhance the maximum acceptable tension directly, the number of plates utilized could be restricted. The chains require frequent lubrication because the pins link directly on the plates, generating a really high bearing pressure. Making use of a SAE 30 or 40 machine oil is normally advised for most applications. If the chain is cycled over one thousand times daily or if the chain speed is more than 30m for every minute, it will wear extremely rapidly, even with continuous lubrication. Thus, in either of these situations the use of RS Roller Chains would be more suitable.

The AL-type of chains should only be utilized under particular situations like for instance if wear is really not a big concern, if there are no shock loads, the number of cycles does not go over one hundred day by day. The BL-type will be better suited under different situations.

If a chain with a lower safety factor is selected then the stress load in parts would become higher. If chains are used with corrosive elements, then they could become fatigued and break quite easily. Performing regular maintenance is important if operating under these types of situations.

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 made by manufacturers but often, the user provides the clevis. An improperly made clevis can reduce the working life of the chain. The strands should be finished to length by the manufacturer. Refer to the ANSI standard or contact the manufacturer.