Mast Chain

Mast Chain - Used in various functions, leaf chains are regulated by ANSI. They can be used for lift truck masts, as balancers between counterweight and heads in several machine devices, and for low-speed pulling and tension linkage. Leaf chains are occasionally likewise called Balance Chains.

Features and Construction

Constructed of a simple pin construction and link plate, 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 for instance high tensile strength for every section area, that enables the design of smaller mechanisms. There are A- and B- type chains in this particular series and both the AL6 and BL6 Series include the same pitch as RS60. Finally, these chains cannot be powered utilizing sprockets.

Selection and Handling

In roller chains, the link plates have a higher fatigue resistance due to the compressive stress of press fits, yet the leaf chain only has two outer press fit plates. On the leaf chain, the most acceptable tension is low and the tensile strength is high. If handling leaf chains it is important to check with the manufacturer's guidebook so as to guarantee the safety factor is outlined and use safety measures at all times. It is a better idea to apply utmost care and utilize extra safety guards in applications wherein the consequences of chain failure are severe.

Using more plates in the lacing causes the higher tensile strength. For the reason that this does not improve the utmost permissible tension directly, the number of plates used could be restricted. The chains require frequent lubrication since the pins link directly on the plates, producing a really high bearing pressure. Utilizing a SAE 30 or 40 machine oil is often advised for most applications. If the chain is cycled more than 1000 times day by day or if the chain speed is more than 30m per minute, it would wear very quick, even with continuous lubrication. Therefore, in either of these conditions using RS Roller Chains would be more suitable.

The AL-type of chains should only be utilized under certain situations such as when wear is really not a huge problem, if there are no shock loads, the number of cycles does not exceed one hundred on a daily basis. The BL-type would be better suited under other conditions.

If a chain using a lower safety factor is chosen then the stress load in parts will become higher. If chains are utilized with corrosive elements, then they could become fatigued and break quite easily. Doing regular maintenance is vital when operating under these kinds 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 otherwise called Clevis pins are made by manufacturers but often, the user supplies the clevis. A wrongly made clevis could decrease the working life of the chain. The strands should be finished to length by the maker. Check the ANSI standard or get in touch with the manufacturer.