Mast Chains

Mast Chains - Leaf Chains comprise different applications and are regulated by ANSI. They are utilized for forklift masts, for low-speed pulling and tension linkage, and as balancers between head and counterweight in certain machine devices. Leaf chains are sometimes even called Balance Chains.

Construction and Features

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

Selection and Handling

Comparably, in roller chains, all of the link plates maintain higher fatigue resistance due to the compressive stress of press fits, whereas in leaf chains, only two outer plates are press fit. The tensile strength of leaf chains is high and the most acceptable tension is low. While handling leaf chains it is essential to confer with the manufacturer's instruction manual to be able to guarantee the safety factor is outlined and utilize safety guards all the time. It is a great idea to apply 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 utilization of a lot more plates. For the reason that the use of much more plates does not improve the maximum allowable tension directly, the number of plates may be restricted. The chains need regular lubrication as the pins link directly on the plates, producing a really high bearing pressure. Utilizing a SAE 30 or 40 machine oil is frequently advised for the majority of applications. If the chain is cycled more than one thousand times day by day or if the chain speed is over 30m for each minute, it will wear very quick, even with continual lubrication. Thus, in either of these situations the use of RS Roller Chains will be a lot more suitable.

The AL-type of chains should just be used under particular conditions such as when wear is not a big problem, when there are no shock loads, the number of cycles does not exceed a hundred on a daily basis. The BL-type would be better suited under different conditions.

The stress load in parts would become higher if a chain with a lower safety factor is selected. If the chain is also used among corrosive situations, it could easily fatigue and break very fast. Doing regular maintenance is really essential if operating under these kinds of situations.

The inner link or outer link kind of end link on the chain will determine the shape of the clevis. Clevis connectors or also known as Clevis pins are made by manufacturers, but the user typically supplies the clevis. An improperly constructed clevis can lessen 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.