Mast Chains

Mast Chains - Utilized in various functions, leaf chains are regulated by ANSI. They could be utilized for forklift masts, as balancers between heads and counterweight in some machine tools, and for low-speed pulling and tension linkage. Leaf chains are at times also referred to as Balance Chains.

Construction and Features

Leaf chains are actually steel chains using a simple link plate and pin construction. The chain number refers to the lacing of the links and the pitch. The chains have specific features like for example high tensile strength for every section area, which allows the design of smaller devices. There are B- and A+ type chains in this series and both the BL6 and AL6 Series contain the same pitch as RS60. Finally, these chains cannot be powered utilizing sprockets.

Selection and Handling

Comparably, in roller chains, all of the link plates have higher fatigue resistance due to 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 allowable tension is low. Whenever handling leaf chains it is important to check with the manufacturer's instruction booklet in order to ensure the safety factor is outlined and utilize safety measures all the time. It is a good idea to apply utmost care and utilize extra safety measures in functions wherein the consequences of chain failure are serious.

Higher tensile strength is a direct correlation to the utilization of a lot more plates. For the reason that the utilization of much more plates does not improve the most allowable tension directly, the number of plates may be limited. The chains need regular lubrication because the pins link directly on the plates, producing a very high bearing pressure. Using a SAE 30 or 40 machine oil is frequently advised for nearly all applications. If the chain is cycled more than one thousand times every day or if the chain speed is over 30m for every minute, it would wear very quick, even with continuous lubrication. Therefore, in either of these conditions the use of RS Roller Chains will be a lot more suitable.

AL type chains are only to be used under particular situations like for example where there are no shock loads or if wear is not a huge problem. Make positive that the number of cycles does not go beyond one hundred on a daily basis. The BL-type would 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 utilized with corrosive elements, then they may become fatigued and break quite easily. Performing regular maintenance is vital when 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 likewise known as Clevis pins are made by manufacturers, but the user typically supplies the clevis. An improperly made clevis can lessen the working life of the chain. The strands should be finished to length by the maker. Refer to the ANSI standard or contact the producer.