

Mast Chains

Mast Chains - Leaf Chains comprise various functions and are regulated by ANSI. They are utilized for tension linkage, lift truck masts and for low-speed pulling, and as balancers between counterweight and head in certain machine tools. Leaf chains are occasionally also known as Balance Chains.

Features and Construction

Constructed 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 for instance high tensile strength per section area, that allows the design of smaller machines. There are A- and B- kind chains in this particular series and both the AL6 and BL6 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, whereas in leaf chains, just two outer plates are press fit. The tensile strength of leaf chains is high and the most allowable tension is low. When handling leaf chains it is essential to confer with the manufacturer's instruction booklet in order to guarantee the safety factor is outlined and utilize safety measures always. It is a good idea to carry out extreme care and utilize extra safety measures in functions wherein the consequences of chain failure are severe.

Higher tensile strength is a direct correlation to the utilization of more plates. In view of the fact that the use of much more plates does not improve the most acceptable tension directly, the number of plates can be limited. The chains require regular lubrication in view of the fact that the pins link directly on the plates, producing an extremely high bearing pressure. Using a SAE 30 or 40 machine oil is normally suggested for the majority of applications. If the chain is cycled more than 1000 times in a day or if the chain speed is over 30m for each minute, it would wear extremely rapidly, even with continuous lubrication. Hence, in either of these conditions using RS Roller Chains will be much more suitable.

The AL-type of chains must just be utilized under particular situations like if wear is really not a huge issue, if there are no shock loads, the number of cycles does not go beyond 100 each day. The BL-type would be better suited under different situations.

The stress load in components will become higher if a chain utilizing a lower safety factor is selected. If the chain is even utilized among corrosive situations, it can easily fatigue and break really fast. Doing regular maintenance is important 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 likewise called Clevis pins are constructed by manufacturers but often, the user provides the clevis. An improperly made clevis could decrease the working life of the chain. The strands should be finished to length by the producer. Check the ANSI standard or call the maker.