

Mast Chains

Mast Chains - Leaf Chains comprise various applications and are regulated by ANSI. They are used for low-speed pulling, for tension linkage and lift truck masts, and as balancers between head and counterweight in certain machine devices. Leaf chains are sometimes even referred to as 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 particular features like high tensile strength for every section area, that allows the design of smaller mechanisms. There are A- and B- kind 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.

Selection and Handling

Comparably, in roller chains, all of the link plates maintain 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 utmost permissible tension is low. When handling leaf chains it is essential to confer with the manufacturer's instruction booklet so as to guarantee the safety factor is outlined and utilize safety guards always. It is a better idea to apply extreme caution and utilize extra safety guards in applications where the consequences of chain failure are severe.

Higher tensile strength is a direct correlation to the use of more plates. For the reason that the use of more plates does not improve the most allowable tension directly, the number of plates may be limited. The chains require frequent lubrication because the pins link directly on the plates, producing a very high bearing pressure. Utilizing a SAE 30 or 40 machine oil is often advised for nearly all applications. If the chain is cycled more than 1000 times in a day or if the chain speed is more than 30m for every minute, it would wear very rapidly, even with continuous lubrication. Hence, in either of these conditions the use of RS Roller Chains will be a lot more suitable.

The AL-type of chains must just be used under particular conditions like when wear is not a huge issue, if there are no shock loads, the number of cycles does not exceed one hundred a day. The BL-type would be better suited under other situations.

If a chain using a lower safety factor is selected then the stress load in components will become higher. If chains are used with corrosive elements, then they could become fatigued and break rather easily. Doing frequent maintenance is really vital 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 likewise called Clevis pins are made by manufacturers but usually, the user supplies the clevis. A wrongly made clevis could lessen the working life of the chain. The strands should be finished to length by the maker. Check the ANSI standard or phone the maker.