

Mast Chain

Mast Chains - Leaf Chains comprise different functions and are regulated by ANSI. They are used for low-speed pulling, for tension linkage and lift truck masts, and as balancers between counterweight and head in some machine gadgets. Leaf chains are sometimes likewise referred to as Balance Chains.

Features and Construction

Leaf chains are steel chains with a simple pin construction and link plate. The chain number refers to the pitch and the lacing of the links. The chains have certain features like for example high tensile strength per section area, that enables the design of smaller mechanisms. There are B- and A+ type chains in this series and both the BL6 and AL6 Series comprise the same pitch as RS60. Lastly, 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, only two outer plates are press fit. The tensile strength of leaf chains is high and the utmost allowable tension is low. When handling leaf chains it is essential to check with the manufacturer's manual so as to guarantee the safety factor is outlined and utilize safety guards all the time. It is a good idea to carry out utmost care and utilize extra safety guards in applications wherein the consequences of chain failure are severe.

Utilizing more plates in the lacing results in the higher tensile strength. As this does not enhance the maximum permissible tension directly, the number of plates utilized may be limited. The chains require frequent lubrication since the pins link directly on the plates, producing a very high bearing pressure. Using a SAE 30 or 40 machine oil is normally advised for the majority of applications. If the chain is cycled more than 1000 times on a daily basis or if the chain speed is over 30m per minute, it would wear really fast, even with continuous lubrication. Thus, in either of these conditions the use of RS Roller Chains would be more suitable.

AL type chains are only to be used under certain conditions like for instance where there are no shock loads or if wear is not really a big problem. Make positive that the number of cycles does not go beyond 100 per day. The BL-type will be better suited under other situations.

The stress load in components will become higher if a chain using a lower safety factor is selected. If the chain is even utilized amongst corrosive conditions, it can easily fatigue and break extremely fast. Performing frequent maintenance is really vital if 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 also called Clevis pins are constructed by manufacturers but normally, the user supplies the clevis. An improperly constructed clevis could lessen the working life of the chain. The strands must be finished to length by the maker. Check the ANSI standard or get in touch with the manufacturer.