

Mast Chain

Mast Chains - Used in various functions, leaf chains are regulated by ANSI. They could be used for forklift masts, as balancers between heads and counterweight in some machine devices, and for tension linkage and low-speed pulling. Leaf chains are occasionally also known 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 lacing of the links and the pitch. The chains have certain features like high tensile strength per section area, which allows the design of smaller mechanisms. There are A- and B- kind chains in this particular series and both the AL6 and BL6 Series comprise the same pitch as RS60. Finally, these chains cannot be driven utilizing sprockets.

Handling and Selection

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 utmost allowable tension is low. While handling leaf chains it is important to confer with the manufacturer's handbook so as to ensure the safety factor is outlined and use safety guards all the time. 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.

Utilizing more plates in the lacing leads to the higher tensile strength. In view of the fact that this does not improve the maximum permissible tension directly, the number of plates used may be restricted. The chains require frequent lubrication as the pins link directly on the plates, producing a very high bearing pressure. Making use of a SAE 30 or 40 machine oil is often advised for the majority of applications. If the chain is cycled over 1000 times every day or if the chain speed is more than 30m for every minute, it would wear really fast, even with continuous lubrication. Thus, in either of these situations the use of RS Roller Chains would be much more suitable.

AL type chains are only to be utilized under particular conditions like where there are no shock loads or when wear is not really a big concern. Make positive that the number of cycles does not exceed one hundred every day. The BL-type will be better suited under different situations.

If a chain using a lower safety factor is chosen then the stress load in parts will become higher. If chains are used with corrosive elements, then they could become fatigued and break quite easily. Doing regular maintenance is essential if operating under these types of conditions.

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 otherwise called Clevis pins are made by manufacturers but normally, the user provides the clevis. An improperly made clevis can reduce the working life of the chain. The strands should be finished to length by the manufacturer. Check the ANSI standard or phone the maker.