

Mast Chain

Mast Chains - Leaf Chains consist of different functions and are regulated by ANSI. They are meant for tension linkage, forklift masts and for low-speed pulling, and as balancers between head and counterweight in several machine gadgets. Leaf chains are sometimes likewise 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 for instance high tensile strength for every section area, that enables the design of smaller mechanisms. There are A- and B- kind chains in this series and both the AL6 and BL6 Series contain the same pitch as RS60. Finally, these chains cannot be driven using sprockets.

Selection and Handling

Comparably, in roller chains, all of the link plates have 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 acceptable tension is low. Whenever handling leaf chains it is vital to check with the manufacturer's guidebook to be able to guarantee the safety factor is outlined and utilize safety measures at all times. It is a good idea to exercise extreme caution and utilize extra safety measures in applications wherein the consequences of chain failure are serious.

Utilizing much more plates in the lacing leads to the higher tensile strength. Since this does not improve the most acceptable tension directly, the number of plates used can be limited. The chains require frequent lubrication for the reason that the pins link directly on the plates, producing an extremely high bearing pressure. Making use of a SAE 30 or 40 machine oil is often advised for nearly all applications. If the chain is cycled more than 1000 times each day or if the chain speed is over 30m for each minute, it would wear very fast, even with continuous lubrication. So, in either of these situations utilizing RS Roller Chains will be much more suitable.

AL type chains are only to be utilized under particular situations like for instance where there are no shock loads or if wear is not a big issue. Make certain that the number of cycles does not exceed one hundred per day. The BL-type would be better suited under different conditions.

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 can become fatigued and break rather easily. Performing regular maintenance is important when operating under these types of situations.

The type of end link of the chain, whether it is an inner link or outer link, determines the shape of the clevis. Clevis connectors or also called Clevis pins are constructed by manufacturers but usually, the user provides the clevis. A wrongly constructed clevis can decrease the working life of the chain. The strands must be finished to length by the manufacturer. Check the ANSI standard or get in touch with the maker.