

Mast Chains

Mast Chains - Used in different functions, leaf chains are regulated by ANSI. They could be utilized for forklift masts, as balancers between heads and counterweight in several machine devices, and for low-speed pulling and tension linkage. Leaf chains are sometimes even called Balance Chains.

Features and Construction

Leaf chains are steel chains with a simple pin construction and link plate. The chain number 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 enables the design of smaller mechanisms. There are B- and A+ type chains in this series and both the BL6 and AL6 Series have the same pitch as RS60. Finally, these chains cannot be driven utilizing 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 maximum acceptable tension is low. Whenever handling leaf chains it is essential to consult the manufacturer's guidebook to be able to ensure the safety factor is outlined and use safety measures always. It is a good idea to exercise utmost caution and use extra safety measures in applications where the consequences of chain failure are serious.

Higher tensile strength is a direct correlation to the utilization of much more plates. Since the use of more plates does not enhance the most permissible tension directly, the number of plates may be limited. The chains require regular lubrication in view of the fact that the pins link directly on the plates, generating a very high bearing pressure. Making use of a SAE 30 or 40 machine oil is often suggested for the majority of applications. If the chain is cycled over one thousand times daily or if the chain speed is more than 30m per minute, it would wear extremely quick, even with continual lubrication. Hence, in either of these situations utilizing RS Roller Chains will be a lot more suitable.

The AL-type of chains must only be utilized under particular conditions like for instance if wear is really not a huge issue, if there are no shock loads, the number of cycles does not exceed a hundred day after day. The BL-type would be better suited under various situations.

The stress load in components would become higher if a chain using a lower safety factor is chosen. If the chain is also utilized amongst corrosive conditions, it can easily fatigue and break really fast. Performing frequent maintenance is really essential if operating under these types of conditions.

The kind of end link of the chain, whether it is an inner link or outer link, determines the shape of the clevis. Clevis connectors or otherwise called Clevis pins are constructed by manufacturers but normally, the user provides the clevis. A wrongly made clevis can reduce the working life of the chain. The strands should be finished to length by the maker. Check the ANSI standard or call the maker.