

Forklift Mast Chain

Mast Chains - Utilized in various applications, leaf chains are regulated by ANSI. They could be utilized for lift truck masts, as balancers between heads and counterweight in several machine tools, and for low-speed pulling and tension linkage. 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 lacing of the links and the pitch. The chains have specific features such as high tensile strength per section area, that enables the design of smaller mechanisms. There are A- and B- type chains in this particular series and both the BL6 and AL6 Series contain the same pitch as RS60. Finally, these chains cannot be powered with 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, while in leaf chains, just two outer plates are press fit. The tensile strength of leaf chains is high and the most allowable tension is low. Whenever handling leaf chains it is important to check with the manufacturer's instruction manual so as to guarantee the safety factor is outlined and use safety measures all the time. It is a better idea to apply extreme caution and utilize extra safety measures in functions where the consequences of chain failure are serious.

Higher tensile strength is a direct correlation to the use of more plates. Since the use of much more plates does not enhance the most permissible tension directly, the number of plates could be limited. The chains need regular lubrication as the pins link directly on the plates, producing a very high bearing pressure. Utilizing a SAE 30 or 40 machine oil is frequently suggested for most applications. If the chain is cycled more than one thousand times daily or if the chain speed is over 30m per minute, it will wear extremely quick, even with continual lubrication. Thus, in either of these situations utilizing RS Roller Chains will be more suitable.

AL type chains are just to be utilized under certain situations like for instance where there are no shock loads or when wear is not a big issue. Be positive that the number of cycles does not go over a hundred on a daily basis. The BL-type will be better suited under other situations.

If a chain with a lower safety factor is chosen then the stress load in parts will become higher. If chains are utilized with corrosive elements, then they can become fatigued and break quite easily. Doing frequent maintenance is vital when operating under these types of conditions.

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 otherwise called Clevis pins are constructed by manufacturers but often, the user supplies the clevis. A wrongly made clevis can decrease the working life of the chain. The strands must be finished to length by the producer. Check the ANSI standard or contact the maker.