

Forklift Mast Chains

Mast Chains - Leaf Chains consist of various applications and are regulated by ANSI. They are utilized for tension linkage, forklift masts and for low-speed pulling, and as balancers between head and counterweight in certain machine tools. Leaf chains are occasionally even referred to as Balance Chains.

Features and Construction

Leaf chains are actually steel chains using a simple link plate and pin construction. The chain number refers to the pitch and the lacing of the links. The chains have certain features like for instance high tensile strength per section area, which enables the design of smaller mechanisms. There are A- and B- kind chains in this series and both the BL6 and AL6 Series include 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, whereas in leaf chains, only two outer plates are press fit. The tensile strength of leaf chains is high and the most permissible tension is low. If handling leaf chains it is essential to consult the manufacturer's instruction manual so as to ensure the safety factor is outlined and utilize safety guards all the time. It is a good idea to apply utmost caution and use extra safety measures in functions where the consequences of chain failure are serious.

Using a lot more plates in the lacing leads to the higher tensile strength. Because this does not enhance the maximum permissible tension directly, the number of plates utilized could be limited. The chains need regular lubrication in view of the fact that the pins link directly on the plates, producing an extremely high bearing pressure. Utilizing a SAE 30 or 40 machine oil is often advised for the majority of applications. If the chain is cycled over one thousand times on a daily basis or if the chain speed is more than 30m per minute, it would wear extremely fast, even with continuous lubrication. Hence, in either of these situations using RS Roller Chains would be much more suitable.

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

The stress load in parts 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 quick. Doing frequent maintenance is really essential if operating under these types 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 otherwise called Clevis pins are made by manufacturers but normally, the user supplies the clevis. An improperly constructed clevis could reduce the working life of the chain. The strands must be finished to length by the manufacturer. Refer to the ANSI standard or contact the maker.