

Forklift Mast Chain

Mast Chains - Utilized in different functions, leaf chains are regulated by ANSI. They can be utilized for lift truck masts, as balancers between counterweight and heads in some machine tools, and for low-speed pulling and tension linkage. Leaf chains are sometimes also called Balance Chains.

Features and Construction

Leaf chains are actually steel chains utilizing a simple pin construction and link plate. The chain number refers to the pitch and the lacing of the links. The chains have certain features like high tensile strength per section area, that allows the design of smaller machines. There are B- and A+ kind chains in this series and both the AL6 and BL6 Series contain the same pitch as RS60. Lastly, these chains cannot be powered using sprockets.

Selection and Handling

Comparably, in roller chains, all of the link plates maintain higher fatigue resistance due to the compressive stress of press fits, while in leaf chains, only two outer plates are press fit. The tensile strength of leaf chains is high and the utmost acceptable tension is low. While handling leaf chains it is vital to consult the manufacturer's instruction booklet in order to ensure the safety factor is outlined and use safety measures always. It is a better idea to exercise extreme caution and use extra safety measures in applications where the consequences of chain failure are severe.

Utilizing more plates in the lacing results in the higher tensile strength. As this does not improve the utmost allowable tension directly, the number of plates used may be restricted. The chains need regular lubrication because the pins link directly on the plates, generating an extremely high bearing pressure. Utilizing a SAE 30 or 40 machine oil is frequently advised for nearly all applications. If the chain is cycled more than one thousand times every day or if the chain speed is over 30m per minute, it will wear really rapidly, even with constant lubrication. So, in either of these conditions utilizing RS Roller Chains would be much more suitable.

The AL-type of chains must only be used under certain conditions like for example if wear is really not a big concern, if there are no shock loads, the number of cycles does not go over a hundred each day. The BL-type would be better suited under different conditions.

The stress load in components would become higher if a chain utilizing a lower safety factor is chosen. If the chain is likewise used among corrosive situations, it can easily fatigue and break very fast. Doing frequent maintenance is important if operating under these kinds of conditions.

The outer link or inner link kind of end link on the chain would determine the shape of the clevis. Clevis connectors or Clevis pins are constructed by manufacturers, but the user usually provides the clevis. A wrongly constructed clevis could lessen the working life of the chain. The strands should be finished to length by the manufacturer. Refer to the ANSI standard or contact the producer.