

Forklift Mast Chain

Mast Chains - Leaf Chains consist of several functions and are regulated by ANSI. They are used for low-speed pulling, for tension linkage and lift truck masts, and as balancers between head and counterweight in several machine devices. Leaf chains are at times even called Balance Chains.

Features and Construction

Leaf chains are steel chains utilizing a simple link plate and pin construction. The chain number refers to the lacing of the links and the pitch. The chains have specific features such as high tensile strength per section area, that allows the design of smaller devices. There are B- and A+ type chains in this series and both the AL6 and BL6 Series comprise the same pitch as RS60. Finally, these chains cannot be driven with 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 most acceptable tension is low. If handling leaf chains it is vital to confer with the manufacturer's instruction manual to be able to guarantee the safety factor is outlined and use safety guards always. It is a better idea to exercise utmost caution and use extra safety measures in functions wherein the consequences of chain failure are severe.

Higher tensile strength is a direct correlation to the utilization of a lot more plates. Since the use of a lot more plates does not enhance the utmost allowable tension directly, the number of plates could be limited. The chains require frequent lubrication since 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 most applications. If the chain is cycled more than one thousand times on a daily basis or if the chain speed is over 30m for each minute, it would wear really rapidly, even with constant lubrication. Hence, in either of these situations utilizing RS Roller Chains would be a lot more suitable.

The AL-type of chains must only be used under certain situations like for instance when wear is really not a big concern, when there are no shock loads, the number of cycles does not go beyond a hundred day after day. The BL-type will be better suited under various conditions.

If a chain utilizing a lower safety factor is chosen then the stress load in parts will become higher. If chains are used with corrosive elements, then they may become fatigued and break somewhat easily. Performing frequent maintenance is really vital if 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 otherwise called Clevis pins are made by manufacturers but usually, the user provides the clevis. A wrongly constructed clevis can lessen the working life of the chain. The strands should be finished to length by the manufacturer. Check the ANSI standard or phone the producer.