

Forklift Mast Chains

Mast Chains - Utilized in various functions, leaf chains are regulated by ANSI. They could be used for forklift masts, as balancers between counterweight and heads in several machine gadgets, and for low-speed pulling and tension linkage. Leaf chains are at times also called Balance Chains.

Construction and Features

Leaf chains are actually steel chains using a simple pin construction and link plate. The chain number refers to the lacing of the links and the pitch. The chains have certain features such as high tensile strength for every section area, which enables the design of smaller devices. There are B- and A+ type chains in this particular series and both the BL6 and AL6 Series have the same pitch as RS60. Finally, these chains cannot be driven with sprockets.

Handling and Selection

Comparably, in roller chains, all of the link plates maintain higher fatigue resistance due to the compressive stress of press fits, whereas in leaf chains, just two outer plates are press fit. The tensile strength of leaf chains is high and the most permissible tension is low. When handling leaf chains it is vital to consult the manufacturer's catalogue to be able to ensure the safety factor is outlined and use safety guards all the time. It is a great idea to exercise utmost care and use extra safety measures in applications where the consequences of chain failure are severe.

Using more plates in the lacing results in the higher tensile strength. Because this does not enhance the maximum allowable tension directly, the number of plates used could be restricted. The chains require frequent lubrication as the pins link directly on the plates, producing a really 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 each day or if the chain speed is more than 30m for every minute, it will wear really quick, even with continuous lubrication. Hence, in either of these situations utilizing RS Roller Chains would be much more suitable.

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

If a chain utilizing a lower safety factor is selected then the stress load in parts would become higher. If chains are utilized with corrosive elements, then they could become fatigued and break rather 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 also called Clevis pins are made by manufacturers but usually, the user provides the clevis. A wrongly constructed clevis can reduce the working life of the chain. The strands must be finished to length by the maker. Check the ANSI standard or contact the maker.