Forklift Mast Chain

Mast Chains - Leaf Chains have various functions and are regulated by ANSI. They are designed for tension linkage, lift truck masts and for low-speed pulling, and as balancers between counterweight and head in several machine tools. Leaf chains are at times even referred to as Balance Chains.

Features and Construction

Constructed of a simple link plate and pin construction, steel leaf chains is identified by a number which refers to the pitch and the lacing of the links. The chains have specific features such as high tensile strength for each section area, that enables the design of smaller mechanisms. There are B- and A+ kind chains in this particular series and both the BL6 and AL6 Series comprise the same pitch as RS60. Lastly, these chains cannot be powered utilizing 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 maximum allowable tension is low. Whenever handling leaf chains it is important to check with the manufacturer's catalogue so as to guarantee the safety factor is outlined and utilize safety guards at all times. It is a great idea to exercise utmost care and utilize extra safety guards in applications wherein the consequences of chain failure are severe.

Utilizing more plates in the lacing leads to the higher tensile strength. Since this does not improve the utmost acceptable tension directly, the number of plates utilized could be limited. The chains need regular lubrication because the pins link directly on the plates, producing a very high bearing pressure. Making use of a SAE 30 or 40 machine oil is often advised for nearly all applications. If the chain is cycled over 1000 times in a day or if the chain speed is over 30m for each minute, it would wear extremely fast, even with continuous lubrication. So, in either of these conditions utilizing RS Roller Chains would be more suitable.

The AL-type of chains must only be used under particular conditions like for instance when wear is not a big issue, if there are no shock loads, the number of cycles does not exceed one hundred each day. The BL-type would be better suited under different conditions.

If a chain with a lower safety factor is selected then the stress load in parts will become higher. If chains are used with corrosive elements, then they can become fatigued and break rather easily. Performing frequent maintenance is really vital when operating under these types of situations.

The inner link or outer link kind of end link on the chain would determine the shape of the clevis. Clevis connectors or likewise known as Clevis pins are constructed by manufacturers, but the user normally provides the clevis. A wrongly made clevis can lessen the working life of the chain. The strands must be finished to length by the maker. Check the ANSI standard or contact the maker.