Forklift Mast Chain

Forklift Mast Chains - Leaf Chains comprise several applications and are regulated by ANSI. They are used for low-speed pulling, for tension linkage and forklift masts, and as balancers between head and counterweight in certain machine gadgets. Leaf chains are sometimes even referred to as Balance Chains.

Features and Construction

Constructed of a simple pin construction and link plate, steel leaf chains is identified by a number which refers to the pitch and the lacing of the links. The chains have specific features like for example high tensile strength for each section area, that allows the design of smaller mechanisms. There are A- and B- kind chains in this series and both the AL6 and BL6 Series include the same pitch as RS60. Finally, these chains cannot be powered utilizing sprockets.

Selection and Handling

In roller chains, the link plates have a higher fatigue resistance because of the compressive stress of press fits, yet the leaf chain only has two outer press fit plates. On the leaf chain, the most permissible tension is low and the tensile strength is high. While handling leaf chains it is important to consult the manufacturer's instruction manual so as to guarantee the safety factor is outlined and utilize safety measures always. It is a better idea to apply utmost care and utilize extra safety measures in applications where the consequences of chain failure are severe.

Utilizing more plates in the lacing causes the higher tensile strength. In view of the fact that this does not enhance the most acceptable tension directly, the number of plates used could be limited. The chains require regular lubrication in view of the fact that the pins link directly on the plates, generating a very high bearing pressure. Using a SAE 30 or 40 machine oil is often advised for most applications. If the chain is cycled over 1000 times daily or if the chain speed is more than 30m per minute, it will wear very quick, even with constant lubrication. Thus, in either of these situations utilizing RS Roller Chains would be more suitable.

The AL-type of chains should only be utilized under particular conditions like for example when wear is really not a big problem, when there are no shock loads, the number of cycles does not go over one hundred a day. The BL-type would be better suited under other conditions.

If a chain with a lower safety factor is selected then the stress load in components will become higher. If chains are utilized with corrosive elements, then they can become fatigued and break quite easily. Doing regular maintenance is really essential if operating under these kinds 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 likewise called Clevis pins are made by manufacturers but usually, the user provides the clevis. A wrongly constructed clevis can decrease the working life of the chain. The strands must be finished to length by the producer. Check the ANSI standard or contact the manufacturer.