Forklift Mast Chains

Mast Chains - Used in various applications, leaf chains are regulated by ANSI. They could be utilized for forklift masts, as balancers between heads and counterweight in some machine tools, and for low-speed pulling and tension linkage. Leaf chains are at times also referred to as Balance Chains.

Construction and Features

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

Selection and Handling

In roller chains, the link plates have a higher fatigue resistance because of the compressive tension of press fits, yet the leaf chain only contains two outer press fit plates. On the leaf chain, the maximum acceptable tension is low and the tensile strength is high. If handling leaf chains it is essential to check with the manufacturer's handbook to be able to guarantee the safety factor is outlined and use safety guards at all times. It is a great idea to exercise utmost care and use extra safety measures in applications where the consequences of chain failure are serious.

Higher tensile strength is a direct correlation to the use of more plates. Because the use of much more plates does not improve the most permissible tension directly, the number of plates could be limited. The chains require regular lubrication in view of the fact that 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 suggested for the majority of applications. If the chain is cycled more than 1000 times daily or if the chain speed is over 30m for each minute, it would wear very fast, even with continual lubrication. So, in either of these situations using RS Roller Chains will be more suitable.

AL type chains are just to be used under certain conditions like for instance where there are no shock loads or if wear is not a huge concern. Make sure that the number of cycles does not exceed 100 every day. The BL-type will be better suited under various conditions.

If a chain with a lower safety factor is selected then the stress load in components will become higher. If chains are used with corrosive elements, then they may become fatigued and break quite easily. Doing frequent maintenance is really vital when operating under these kinds of conditions.

The outer link or inner link type of end link on the chain will determine the shape of the clevis. Clevis connectors or likewise known as Clevis pins are made by manufacturers, but the user usually provides the clevis. An improperly constructed clevis could lessen the working life of the chain. The strands should be finished to length by the manufacturer. Check the ANSI standard or contact the maker.