Forklift Mast Chain

Mast Chains - Used in various applications, leaf chains are regulated by ANSI. They can be used for forklift masts, as balancers between heads and counterweight in several machine tools, and for tension linkage and low-speed pulling. Leaf chains are sometimes even known as Balance Chains.

Construction and Features

Leaf chains are actually steel chains with a simple pin construction and link plate. The chain number 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 machines. There are A- and B- kind chains in this series and both the AL6 and BL6 Series comprise the same pitch as RS60. Finally, these chains cannot be powered with sprockets.

Handling and Selection

In roller chains, the link plates maintain a higher fatigue resistance due to the compressive stress of press fits, yet the leaf chain only has two outer press fit plates. On the leaf chain, the maximum acceptable tension is low and the tensile strength is high. Whenever handling leaf chains it is important to confer with the manufacturer's catalogue in order to ensure the safety factor is outlined and utilize safety measures all the time. It is a great idea to apply extreme care and utilize extra safety measures in applications wherein the consequences of chain failure are serious.

Higher tensile strength is a direct correlation to the use of much more plates. As the use of a lot more plates does not enhance the most allowable tension directly, the number of plates can be limited. The chains need regular lubrication for the reason 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 normally advised for the majority of applications. If the chain is cycled over one thousand times every day or if the chain speed is more than 30m for each minute, it will wear really fast, even with constant lubrication. Hence, in either of these conditions the use of RS Roller Chains would be much more suitable.

AL type chains are only to be used under certain situations like for example where there are no shock loads or if wear is not a huge issue. Be certain that the number of cycles does not exceed a hundred per day. The BL-type would be better suited under other situations.

The stress load in components would become higher if a chain utilizing a lower safety factor is selected. If the chain is even utilized among corrosive situations, it can easily fatigue and break extremely quick. Doing regular maintenance is really essential if operating under these types of conditions.

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 Clevis pins are made by manufacturers but often, the user provides the clevis. A wrongly made clevis can decrease the working life of the chain. The strands should be finished to length by the producer. Refer to the ANSI standard or contact the maker.