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 devices, and for tension linkage and low-speed pulling. Leaf chains are at times even called Balance Chains.

Features and Construction

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

Handling and Selection

Comparably, in roller chains, all of the link plates have higher fatigue resistance due to the compressive stress of press fits, while in leaf chains, only two outer plates are press fit. The tensile strength of leaf chains is high and the most permissible tension is low. Whenever handling leaf chains it is vital to check with the manufacturer's instruction manual to be able to ensure the safety factor is outlined and use safety measures always. It is a great idea to exercise extreme caution and use extra safety guards in applications wherein the consequences of chain failure are serious.

Higher tensile strength is a direct correlation to the utilization of more plates. Since the use of a lot more plates does not improve the utmost permissible tension directly, the number of plates could be restricted. The chains require frequent lubrication in view of the fact that the pins link directly on the plates, generating a very high bearing pressure. Utilizing a SAE 30 or 40 machine oil is frequently suggested for nearly all applications. If the chain is cycled more than 1000 times day by day or if the chain speed is over 30m for each minute, it will wear extremely fast, even with continuous lubrication. Thus, in either of these conditions the use of RS Roller Chains would be a lot more suitable.

The AL-type of chains must just be used under certain conditions such as if wear is not a big issue, if there are no shock loads, the number of cycles does not go over one hundred day by day. The BL-type will be better suited under various conditions.

The stress load in parts would become higher if a chain utilizing a lower safety factor is chosen. If the chain is likewise used among corrosive conditions, it could easily fatigue and break very fast. Doing regular maintenance is important if operating under these kinds of conditions.

The outer link or inner link kind of end link on the chain will determine the shape of the clevis. Clevis connectors or Clevis pins are made by manufacturers, but the user normally supplies the clevis. A wrongly constructed clevis can reduce the working life of the chain. The strands must be finished to length by the producer. Check the ANSI standard or call the producer.