Forklift Mast Chain

Mast Chain - Leaf Chains comprise various applications and are regulated by ANSI. They are meant for forklift masts, for low-speed pulling and tension linkage, and as balancers between head and counterweight in several machine tools. Leaf chains are occasionally also called Balance Chains.

Construction and Features

Made 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 certain features like for instance high tensile strength for every section area, which allows the design of smaller devices. There are B- and A+ type chains in this series and both the AL6 and BL6 Series include the same pitch as RS60. Lastly, these chains cannot be driven using sprockets.

Selection and Handling

Comparably, in roller chains, all of the link plates have 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. While handling leaf chains it is vital to confer with the manufacturer's handbook so as to ensure the safety factor is outlined and use safety guards at all times. It is a great idea to carry out utmost 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 use of a lot more plates. As the use of more plates does not improve the maximum permissible tension directly, the number of plates can be restricted. The chains need frequent lubrication for the reason that the pins link directly on the plates, generating an extremely high bearing pressure. Making use of a SAE 30 or 40 machine oil is normally suggested for nearly all applications. If the chain is cycled more than 1000 times daily or if the chain speed is over 30m per minute, it would wear extremely fast, even with continuous lubrication. So, in either of these conditions the use of RS Roller Chains would be much more suitable.

The AL-type of chains should only be utilized under certain situations such as when wear is not a huge issue, if there are no shock loads, the number of cycles does not go over a hundred on a daily basis. The BL-type will be better suited under various situations.

The stress load in parts will become higher if a chain using a lower safety factor is selected. If the chain is also used among corrosive situations, it could easily fatigue and break very fast. Performing regular maintenance is really vital when operating under these kinds of conditions.

The inner link or outer link type of end link on the chain will determine the shape of the clevis. Clevis connectors or Clevis pins are constructed by manufacturers, but the user usually provides the clevis. An improperly constructed clevis can reduce the working life of the chain. The strands must be finished to length by the maker. Check the ANSI standard or call the manufacturer.