Forklift Mast Chains

Mast Chains - Leaf Chains have several functions and are regulated by ANSI. They are designed for forklift masts, for low-speed pulling and tension linkage, and as balancers between head and counterweight in several machine devices. Leaf chains are occasionally even called Balance Chains.

Features and Construction

Leaf chains are 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 particular features like high tensile strength per section area, which allows the design of smaller devices. There are B- and A+ kind chains in this series and both the AL6 and BL6 Series have the same pitch as RS60. Lastly, these chains cannot be powered with sprockets.

Handling and Selection

In roller chains, the link plates maintain a higher fatigue resistance because of the compressive tension 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. If handling leaf chains it is important to check with the manufacturer's catalogue in order to guarantee the safety factor is outlined and use safety guards always. It is a great idea to carry out utmost caution and use extra safety measures in functions wherein the consequences of chain failure are serious.

Higher tensile strength is a direct correlation to the use of a lot more plates. In view of the fact that the use of more plates does not enhance the utmost allowable tension directly, the number of plates may be limited. The chains need frequent lubrication in view of the fact that the pins link directly on the plates, producing an extremely high bearing pressure. Using a SAE 30 or 40 machine oil is normally suggested for most applications. If the chain is cycled over 1000 times day after day or if the chain speed is over 30m for each minute, it would wear very fast, even with constant lubrication. Thus, in either of these conditions the use of RS Roller Chains will be a lot more suitable.

AL type chains are just to be utilized under particular conditions like for instance where there are no shock loads or if wear is not a huge problem. Be certain that the number of cycles does not exceed one hundred each day. The BL-type would 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 utilized amongst corrosive situations, it could easily fatigue and break extremely quick. Doing regular maintenance is really essential if operating under these types of conditions.

The inner link or outer link kind of end link on the chain would determine the shape of the clevis. Clevis connectors or otherwise known as Clevis pins are constructed by manufacturers, but the user typically supplies the clevis. An improperly made clevis could lessen the working life of the chain. The strands must be finished to length by the producer. Check the ANSI standard or contact the manufacturer.