Forklift Mast Chains

Mast Chains - Used in different applications, leaf chains are regulated by ANSI. They can be used for lift truck masts, as balancers between counterweight and heads in some machine tools, and for low-speed pulling and tension linkage. Leaf chains are at times likewise known as Balance Chains.

Construction and Features

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

Handling and Selection

Comparably, in roller chains, all of the link plates maintain higher fatigue resistance because of the compressive stress of press fits, while in leaf chains, just two outer plates are press fit. The tensile strength of leaf chains is high and the maximum acceptable tension is low. When handling leaf chains it is vital to confer with the manufacturer's handbook to be able to guarantee the safety factor is outlined and use safety measures always. It is a good idea to exercise extreme care and utilize extra safety guards in functions wherein the consequences of chain failure are severe.

Higher tensile strength is a direct correlation to the utilization of much more plates. For the reason that the utilization of more plates does not improve the most permissible tension directly, the number of plates can be limited. The chains require frequent lubrication because the pins link directly on the plates, generating a very high bearing pressure. Using a SAE 30 or 40 machine oil is frequently suggested for the majority of applications. If the chain is cycled over 1000 times day after day or if the chain speed is over 30m for every minute, it will wear really quick, even with continual lubrication. Therefore, in either of these situations the use of RS Roller Chains will be much more suitable.

The AL-type of chains should only be utilized under certain conditions like for example when wear is not a big problem, if there are no shock loads, the number of cycles does not go over 100 daily. The BL-type will be better suited under various conditions.

The stress load in components would become higher if a chain with a lower safety factor is selected. If the chain is even used amongst corrosive conditions, it can easily fatigue and break very quick. Doing frequent maintenance is vital when operating under these types of situations.

The outer link or inner link type of end link on the chain will determine the shape of the clevis. Clevis connectors or otherwise known as Clevis pins are made by manufacturers, but the user typically provides the clevis. A wrongly made clevis could decrease the working life of the chain. The strands should be finished to length by the manufacturer. Check the ANSI standard or call the maker.