

Forklift Mast Chain

Mast Chains - Used in various functions, leaf chains are regulated by ANSI. They can be utilized for forklift masts, as balancers between heads and counterweight in some machine devices, and for low-speed pulling and tension linkage. Leaf chains are sometimes also referred to as Balance Chains.

Features and Construction

Made of a simple pin construction and link plate, steel leaf chains is identified by a number which refers to the pitch and the lacing of the links. The chains have specific features like for example high tensile strength per section area, which allows the design of smaller mechanisms. There are B- and A+ kind chains in this particular series and both the AL6 and BL6 Series have the same pitch as RS60. Lastly, these chains cannot be powered using 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, whereas in leaf chains, just two outer plates are press fit. The tensile strength of leaf chains is high and the utmost permissible tension is low. If handling leaf chains it is vital to consult the manufacturer's guidebook to be able to ensure the safety factor is outlined and use safety measures always. It is a great idea to exercise utmost caution and utilize extra safety guards in functions wherein the consequences of chain failure are severe.

Using more plates in the lacing causes the higher tensile strength. For the reason that this does not improve the maximum permissible tension directly, the number of plates utilized can be limited. The chains require frequent lubrication because the pins link directly on the plates, producing an extremely high bearing pressure. Utilizing a SAE 30 or 40 machine oil is often suggested for the majority of applications. If the chain is cycled over 1000 times daily or if the chain speed is more than 30m for every minute, it will wear very quick, even with constant lubrication. Therefore, in either of these conditions using RS Roller Chains will be a lot more suitable.

The AL-type of chains must only be used under particular conditions like for instance when wear is not a big issue, when there are no shock loads, the number of cycles does not go over one hundred each day. The BL-type would be better suited under various conditions.

If a chain with a lower safety factor is selected then the stress load in parts will become higher. If chains are utilized with corrosive elements, then they can become fatigued and break somewhat easily. Performing regular maintenance is really vital when operating under these kinds of conditions.

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