Forklift Mast Chain

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

Features and Construction

Leaf chains are actually steel chains utilizing 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 such as high tensile strength per section area, which allows the design of smaller machines. There are A- and B- kind chains in this particular series and both the AL6 and BL6 Series include the same pitch as RS60. Finally, these chains cannot be driven 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, only two outer plates are press fit. The tensile strength of leaf chains is high and the most allowable tension is low. When handling leaf chains it is important to check with the manufacturer's handbook in order to ensure the safety factor is outlined and utilize safety measures at all times. It is a better idea to exercise extreme caution and utilize extra safety measures in functions where the consequences of chain failure are severe.

Higher tensile strength is a direct correlation to the use of more plates. For the reason that the utilization of a lot more plates does not improve the maximum permissible tension directly, the number of plates could be limited. The chains require regular lubrication in view of the fact that the pins link directly on the plates, producing a very high bearing pressure. Using a SAE 30 or 40 machine oil is normally suggested for nearly all applications. If the chain is cycled over 1000 times each day or if the chain speed is over 30m for each minute, it will wear really fast, even with continual 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 used under certain conditions such as where there are no shock loads or when wear is not a huge problem. Be positive that the number of cycles does not go beyond 100 per day. The BL-type will be better suited under other conditions.

If a chain with a lower safety factor is chosen then the stress load in parts would become higher. If chains are utilized with corrosive elements, then they can become fatigued and break quite easily. Performing frequent maintenance is essential if operating under these types of conditions.

The type of end link of the chain, whether it is an inner link or outer link, determines the shape of the clevis. Clevis connectors or Clevis pins are constructed by manufacturers but normally, the user provides the clevis. A wrongly made clevis could decrease the working life of the chain. The strands should be finished to length by the producer. Refer to the ANSI standard or get in touch with the maker.