Forklift Mast Chain

Mast Chain - Leaf Chains consist of various functions and are regulated by ANSI. They are utilized for low-speed pulling, for tension linkage and lift truck masts, and as balancers between counterweight and head in some machine gadgets. Leaf chains are sometimes even known as Balance Chains.

Construction and Features

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 certain features such as high tensile strength for every section area, which allows the design of smaller mechanisms. There are B- and A+ kind chains in this series and both the BL6 and AL6 Series contain the same pitch as RS60. Lastly, these chains cannot be driven with sprockets.

Selection and Handling

Comparably, in roller chains, all of the link plates maintain 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 maximum allowable tension is low. If handling leaf chains it is essential to consult the manufacturer's catalogue so as to guarantee the safety factor is outlined and utilize safety measures always. It is a good idea to exercise utmost care and utilize extra safety measures in applications where the consequences of chain failure are serious.

Using more plates in the lacing results in the higher tensile strength. For the reason that this does not enhance the most permissible tension directly, the number of plates used may be limited. The chains require frequent lubrication as 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 the majority of applications. If the chain is cycled over one thousand times day after day or if the chain speed is over 30m for each minute, it would wear really rapidly, even with continual lubrication. So, in either of these conditions utilizing RS Roller Chains would be much more suitable.

AL type chains are only to be utilized under particular conditions like for instance where there are no shock loads or if wear is not a big problem. Be sure that the number of cycles does not exceed 100 each day. The BL-type will be better suited under various situations.

The stress load in components would become higher if a chain utilizing a lower safety factor is selected. If the chain is also used among corrosive situations, it could easily fatigue and break really fast. Doing regular maintenance is really essential when operating under these types of situations.

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 otherwise called Clevis pins are constructed by manufacturers but normally, the user supplies the clevis. A wrongly made clevis could decrease the working life of the chain. The strands should be finished to length by the maker. Check the ANSI standard or contact the manufacturer.