

Mast Chain

Forklift Mast Chains - Leaf Chains consist of several functions and are regulated by ANSI. They are intended for low-speed pulling, for tension linkage and lift truck masts, and as balancers between counterweight and head in some machine tools. Leaf chains are sometimes likewise known as Balance Chains.

Construction and Features

Constructed of a simple link plate and pin construction, steel leaf chains is identified by a number that refers to the pitch and the lacing of the links. The chains have certain features such as high tensile strength for every section area, that enables the design of smaller devices. There are B- and A+ type chains in this series and both the AL6 and BL6 Series have the same pitch as RS60. Lastly, these chains cannot be driven using sprockets.

Handling and Selection

Comparably, in roller chains, all of the link plates have higher fatigue resistance because of the compressive stress of press fits, while 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. When handling leaf chains it is important to check with the manufacturer's instruction booklet to be able to guarantee the safety factor is outlined and use safety measures always. It is a good idea to apply utmost caution and utilize extra safety guards in functions wherein the consequences of chain failure are severe.

Using more plates in the lacing leads to the higher tensile strength. Because this does not enhance the maximum allowable tension directly, the number of plates used could be limited. The chains need regular lubrication as the pins link directly on the plates, producing an extremely high bearing pressure. Utilizing a SAE 30 or 40 machine oil is frequently suggested for nearly all applications. If the chain is cycled over one thousand times in a day or if the chain speed is more than 30m for each minute, it will wear really rapidly, even with continual lubrication. So, in either of these situations utilizing RS Roller Chains will be much more suitable.

The AL-type of chains should just be used under particular conditions such as if wear is not a big issue, when there are no shock loads, the number of cycles does not exceed one hundred each day. The BL-type will be better suited under various situations.

If a chain utilizing a lower safety factor is selected then the stress load in parts will become higher. If chains are used with corrosive elements, then they may become fatigued and break somewhat easily. Performing regular maintenance is really important 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 usually, the user supplies the clevis. An improperly made clevis can reduce the working life of the chain. The strands must be finished to length by the producer. Check the ANSI standard or phone the manufacturer.