## **Mast Chain**

Forklift Mast Chains - Leaf Chains consist of several functions and are regulated by ANSI. They are used for forklift masts, for low-speed pulling and tension linkage, and as balancers between counterweight and head in certain machine devices. Leaf chains are sometimes also called Balance Chains.

## Construction and Features

Leaf chains are 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 specific features like for instance high tensile strength for each section area, that allows the design of smaller machines. There are B- and A+ type chains in this particular series and both the AL6 and BL6 Series contain the same pitch as RS60. Lastly, these chains cannot be powered with sprockets.

## Selection and Handling

Comparably, in roller chains, all of the link plates have higher fatigue resistance due to 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 allowable tension is low. If handling leaf chains it is important to consult the manufacturer's instruction booklet so as to ensure the safety factor is outlined and use safety guards always. It is a better idea to apply extreme caution and use extra safety guards in functions wherein the consequences of chain failure are serious.

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 used can be limited. The chains require regular lubrication because the pins link directly on the plates, generating an extremely high bearing pressure. Using a SAE 30 or 40 machine oil is often suggested for nearly all applications. If the chain is cycled over one thousand times each day or if the chain speed is over 30m for each minute, it will wear extremely rapidly, even with continual lubrication. So, in either of these situations using RS Roller Chains would be a lot more suitable.

AL type chains are only to be used under certain conditions like where there are no shock loads or if wear is not really a big problem. Make certain that the number of cycles does not go over 100 per day. The BL-type would be better suited under other situations.

The stress load in components would become higher if a chain with a lower safety factor is chosen. If the chain is also utilized among corrosive conditions, it could easily fatigue and break really fast. Performing frequent maintenance is really vital when operating under these types of conditions.

The kind of end link of the chain, whether it is an outer link or inner link, determines the shape of the clevis. Clevis connectors or also called Clevis pins are constructed by manufacturers but normally, the user provides the clevis. An improperly constructed clevis could decrease the working life of the chain. The strands should be finished to length by the maker. Refer to the ANSI standard or phone the manufacturer.