

## Forklift Mast Chains

Mast Chains - Leaf Chains comprise various applications and are regulated by ANSI. They are designed for low-speed pulling, for tension linkage and forklift masts, and as balancers between head and counterweight in some machine tools. Leaf chains are sometimes also referred to as Balance Chains.

### Construction and Features

Made of a simple link plate and pin construction, steel leaf chains is identified by a number that refers to the lacing of the links and the pitch. The chains have certain features like high tensile strength for each 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 include the same pitch as RS60. Lastly, these chains cannot be driven with 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, whereas in leaf chains, only two outer plates are press fit. The tensile strength of leaf chains is high and the most permissible tension is low. While handling leaf chains it is essential to consult the manufacturer's instruction manual to be able to guarantee the safety factor is outlined and utilize safety guards all the time. It is a great idea to apply utmost care and use extra safety guards in functions where the consequences of chain failure are severe.

Utilizing more plates in the lacing results in the higher tensile strength. Because this does not improve the maximum acceptable tension directly, the number of plates utilized can be limited. The chains need regular lubrication in view of the fact that 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 one thousand times each day or if the chain speed is over 30m per minute, it will wear extremely quick, even with constant lubrication. Thus, in either of these conditions using RS Roller Chains would be a lot more suitable.

The AL-type of chains must only be utilized under certain conditions like for instance when wear is really not a huge issue, when there are no shock loads, the number of cycles does not go over one hundred a day. The BL-type will be better suited under other conditions.

The stress load in components would become higher if a chain utilizing a lower safety factor is chosen. If the chain is likewise used among corrosive situations, it can easily fatigue and break extremely fast. Doing frequent maintenance is essential if operating under these kinds of situations.

The inner link or outer link kind 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 provides the clevis. An improperly constructed clevis can reduce the working life of the chain. The strands should be finished to length by the manufacturer. Check the ANSI standard or get in touch with the manufacturer.