

## Mast Chains

Mast Chains - Used in various applications, leaf chains are regulated by ANSI. They can be used for forklift masts, as balancers between counterweight and heads in some machine tools, and for tension linkage and low-speed pulling. Leaf chains are occasionally even known as Balance Chains.

### Construction and Features

Leaf chains are actually steel chains using a simple pin construction and link plate. The chain number refers to the lacing of the links and the pitch. The chains have certain features like for example high tensile strength per section area, which enables the design of smaller machines. There are A- and B- type chains in this series and both the AL6 and BL6 Series comprise the same pitch as RS60. Finally, these chains cannot be driven utilizing sprockets.

### Selection and Handling

In roller chains, the link plates have a higher fatigue resistance because of the compressive stress of press fits, yet the leaf chain just has two outer press fit plates. On the leaf chain, the maximum allowable tension is low and the tensile strength is high. When handling leaf chains it is important to consult the manufacturer's guidebook in order to guarantee the safety factor is outlined and utilize safety guards all the time. It is a good idea to exercise utmost care and utilize extra safety measures in functions wherein the consequences of chain failure are severe.

Higher tensile strength is a direct correlation to the utilization of a lot more plates. Because the utilization of more plates does not improve the most acceptable tension directly, the number of plates could be restricted. The chains require regular lubrication since the pins link directly on the plates, generating an extremely high bearing pressure. Making use of a SAE 30 or 40 machine oil is often suggested for most applications. If the chain is cycled more than 1000 times in a day or if the chain speed is more than 30m for every minute, it would wear really fast, even with continual lubrication. Hence, in either of these conditions using RS Roller Chains would be more suitable.

AL type chains are just to be utilized under certain situations like for instance where there are no shock loads or if wear is not really a big issue. Be certain that the number of cycles does not exceed a hundred day after day. The BL-type will be better suited under other conditions.

If a chain using a lower safety factor is selected then the stress load in parts will become higher. If chains are used with corrosive elements, then they can become fatigued and break quite easily. Performing frequent maintenance is really important if operating under these kinds of situations.

The kind of end link of the chain, whether it is an inner link or outer link, determines the shape of the clevis. Clevis connectors or likewise called Clevis pins are made by manufacturers but often, the user supplies the clevis. An improperly constructed clevis could reduce 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 manufacturer.