

## Mast Chains

Mast Chains - Utilized in different applications, leaf chains are regulated by ANSI. They could be utilized for forklift masts, as balancers between heads and counterweight in several machine tools, and for tension linkage and low-speed pulling. Leaf chains are sometimes 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 such as high tensile strength per section area, which enables the design of smaller mechanisms. There are B- and A+ kind chains in this particular series and both the BL6 and AL6 Series have 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 maintain higher fatigue resistance due to the compressive stress of press fits, whereas in leaf chains, just two outer plates are press fit. The tensile strength of leaf chains is high and the utmost allowable tension is low. When handling leaf chains it is important to consult the manufacturer's instruction manual to be able to ensure the safety factor is outlined and use safety measures at all times. It is a good idea to exercise utmost care and use extra safety guards in functions where the consequences of chain failure are serious.

Using much 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 may be restricted. The chains require regular lubrication in view of the fact that the pins link directly on the plates, generating an extremely high bearing pressure. Utilizing a SAE 30 or 40 machine oil is often suggested for nearly all applications. If the chain is cycled over 1000 times in a day or if the chain speed is more than 30m for each minute, it would wear very rapidly, even with continual lubrication. So, in either of these situations utilizing RS Roller Chains would be more suitable.

AL type chains are only to be utilized under certain conditions such as where there are no shock loads or if wear is not a big concern. Be certain that the number of cycles does not go over 100 each day. The BL-type will be better suited under various conditions.

If a chain with a lower safety factor is chosen then the stress load in parts would become higher. If chains are utilized with corrosive elements, then they may become fatigued and break somewhat easily. Performing regular maintenance is really essential when operating under these kinds of situations.

The type of end link of the chain, whether it is an outer link or inner link, determines the shape of the clevis. Clevis connectors or likewise called Clevis pins are constructed by manufacturers but normally, the user provides the clevis. A wrongly constructed clevis can decrease the working life of the chain. The strands should be finished to length by the maker. Check the ANSI standard or phone the maker.