

## Mast Chains

Mast Chains - Utilized in various applications, leaf chains are regulated by ANSI. They can be utilized for forklift masts, as balancers between counterweight and heads in several machine tools, and for low-speed pulling and tension linkage. Leaf chains are sometimes likewise known as Balance Chains.

### Construction and Features

Made of a simple pin construction and link plate, steel leaf chains is identified by a number which refers to the lacing of the links and the pitch. The chains have certain features like for example high tensile strength for each section area, which allows the design of smaller devices. There are A- and B- type chains in this series and both the BL6 and AL6 Series comprise 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 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 most acceptable tension is low. Whenever handling leaf chains it is important to consult the manufacturer's handbook so as to ensure the safety factor is outlined and utilize safety measures at all times. It is a better idea to exercise utmost caution and utilize extra safety measures in applications where the consequences of chain failure are severe.

Using more plates in the lacing causes the higher tensile strength. In view of the fact that this does not improve the maximum permissible tension directly, the number of plates used could be restricted. The chains need frequent lubrication as the pins link directly on the plates, generating a very high bearing pressure. Making use of a SAE 30 or 40 machine oil is often advised for the majority of applications. If the chain is cycled more than 1000 times day after day or if the chain speed is more than 30m per minute, it would wear really fast, even with continuous lubrication. Hence, in either of these conditions using RS Roller Chains would be more suitable.

The AL-type of chains must just be utilized under particular situations like for instance when wear is really not a big problem, if there are no shock loads, the number of cycles does not exceed a hundred a day. The BL-type will be better suited under various situations.

The stress load in parts would become higher if a chain utilizing a lower safety factor is selected. If the chain is even used amongst corrosive situations, it can easily fatigue and break extremely quick. Doing regular maintenance is essential when operating under these types of conditions.

The outer link or inner link type of end link on the chain will determine the shape of the clevis. Clevis connectors or otherwise known as Clevis pins are constructed by manufacturers, but the user typically provides the clevis. A wrongly made clevis could lessen the working life of the chain. The strands must be finished to length by the manufacturer. Check the ANSI standard or get in touch with the producer.