## Mast Chains

Mast Chain - Leaf Chains consist of several applications and are regulated by ANSI. They are meant for tension linkage, lift truck masts and for low-speed pulling, and as balancers between counterweight and head in some 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 lacing of the links and the pitch. The chains have specific features such as high tensile strength for each section area, that allows the design of smaller devices. There are A- and B- type chains in this series and both the AL6 and BL6 Series include the same pitch as RS60. Finally, these chains cannot be driven with sprockets.

Handling and Selection

In roller chains, the link plates have a higher fatigue resistance due to the compressive tension of press fits, yet the leaf chain only has two outer press fit plates. On the leaf chain, the most acceptable tension is low and the tensile strength is high. Whenever handling leaf chains it is essential to confer with the manufacturer's guidebook in order to ensure the safety factor is outlined and use safety measures at all times. It is a great idea to carry out utmost caution and use extra safety guards in applications where the consequences of chain failure are serious.

Higher tensile strength is a direct correlation to the utilization of much more plates. Because the use of more plates does not enhance the utmost permissible tension directly, the number of plates can be restricted. The chains need regular lubrication for the reason that the pins link directly on the plates, producing a really high bearing pressure. Making use of a SAE 30 or 40 machine oil is normally suggested for nearly all applications. If the chain is cycled more than 1000 times every day or if the chain speed is over 30m for each minute, it will wear extremely fast, even with continuous lubrication. Thus, in either of these conditions utilizing RS Roller Chains would be a lot more suitable.

The AL-type of chains must only be utilized under certain conditions such as if wear is not a huge issue, when there are no shock loads, the number of cycles does not go over a hundred each day. The BL-type would be better suited under different conditions.

The stress load in components will become higher if a chain using a lower safety factor is chosen. If the chain is also utilized among corrosive conditions, it could easily fatigue and break very quick. Doing frequent maintenance is really vital if operating under these kinds of situations.

The outer link or inner link kind of end link on the chain will determine the shape of the clevis. Clevis connectors or likewise known as Clevis pins are constructed by manufacturers, but the user typically supplies the clevis. A wrongly constructed clevis can lessen the working life of the chain. The strands must be finished to length by the manufacturer. Check the ANSI standard or contact the producer.