## Mast Chains

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

Construction and Features

Leaf chains are steel chains utilizing a simple link plate and pin construction. The chain number refers to the lacing of the links and the pitch. The chains have particular features like for instance high tensile strength for each section area, that enables the design of smaller machines. There are B- and A+ kind chains in this series and both the BL6 and AL6 Series include the same pitch as RS60. Lastly, these chains cannot be driven utilizing 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, only two outer plates are press fit. The tensile strength of leaf chains is high and the utmost allowable tension is low. While handling leaf chains it is important to confer with the manufacturer's catalogue in order to guarantee the safety factor is outlined and utilize safety measures all the time. It is a good idea to apply extreme caution and utilize extra safety measures in functions wherein the consequences of chain failure are serious.

Using much more plates in the lacing causes the higher tensile strength. As this does not improve the most allowable tension directly, the number of plates utilized may be limited. The chains require regular lubrication in view of the fact that the pins link directly on the plates, producing a very high bearing pressure. Making use of a SAE 30 or 40 machine oil is often suggested for the majority of applications. If the chain is cycled over 1000 times each day or if the chain speed is more than 30m for each minute, it will wear extremely quick, even with continual lubrication. Thus, in either of these conditions the use of RS Roller Chains will be much more suitable.

The AL-type of chains should just be utilized under particular situations like for example if wear is not a big problem, if there are no shock loads, the number of cycles does not go beyond one hundred on a daily basis. The BL-type would be better suited under other conditions.

If a chain using a lower safety factor is selected then the stress load in components will become higher. If chains are utilized with corrosive elements, then they could become fatigued and break rather easily. Doing frequent maintenance is really essential when operating under these kinds of situations.

The outer link or inner link kind of end link on the chain would 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 decrease the working life of the chain. The strands should be finished to length by the manufacturer. Refer to the ANSI standard or call the maker.