Mast Chain

Mast Chains - Leaf Chains have various functions and are regulated by ANSI. They are intended for low-speed pulling, for tension linkage and forklift masts, and as balancers between head and counterweight in some machine devices. Leaf chains are sometimes even known as Balance Chains.

Construction and Features

Made of a simple link plate and pin construction, steel leaf chains is identified by a number that refers to the pitch and the lacing of the links. The chains have specific features such as high tensile strength per section area, that enables the design of smaller mechanisms. There are A- and B- type chains in this series and both the BL6 and AL6 Series contain the same pitch as RS60. Finally, these chains cannot be driven using sprockets.

Handling and Selection

In roller chains, the link plates maintain a higher fatigue resistance because of the compressive tension of press fits, yet the leaf chain only has two outer press fit plates. On the leaf chain, the maximum acceptable tension is low and the tensile strength is high. While handling leaf chains it is vital to confer with the manufacturer's manual to be able to ensure the safety factor is outlined and use safety guards all the time. It is a great idea to apply utmost caution and utilize extra safety measures in applications where the consequences of chain failure are severe.

Utilizing a lot more plates in the lacing results in the higher tensile strength. For the reason that this does not improve the utmost acceptable tension directly, the number of plates utilized may be limited. The chains need frequent lubrication in view of the fact that the pins link directly on the plates, producing an extremely high bearing pressure. Using a SAE 30 or 40 machine oil is often advised for most applications. If the chain is cycled more than one thousand times every day or if the chain speed is over 30m for each minute, it will wear very fast, even with constant lubrication. So, in either of these conditions the use of RS Roller Chains will be a lot more suitable.

AL type chains are just to be utilized under particular conditions such as where there are no shock loads or when wear is not a huge problem. Be certain that the number of cycles does not go beyond 100 on a daily basis. The BL-type will be better suited under various conditions.

The stress load in parts would become higher if a chain utilizing a lower safety factor is chosen. If the chain is also utilized among corrosive conditions, it could easily fatigue and break really quick. Doing regular maintenance is vital if operating under these kinds of conditions.

The outer link or inner link kind of end link on the chain would determine the shape of the clevis. Clevis connectors or Clevis pins are constructed by manufacturers, but the user typically provides the clevis. An improperly constructed clevis could decrease the working life of the chain. The strands should be finished to length by the maker. Refer to the ANSI standard or phone the maker.