

Mast Chain

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

Features and Construction

Leaf chains are actually steel chains with a simple link plate and pin construction. The chain number refers to the pitch and the lacing of the links. The chains have certain features like for instance high tensile strength for each section area, which allows 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 with sprockets.

Selection and Handling

In roller chains, the link plates have a higher fatigue resistance because of the compressive tension of press fits, yet the leaf chain just has two outer press fit plates. On the leaf chain, the most permissible tension is low and the tensile strength is high. Whenever handling leaf chains it is vital to consult the manufacturer's instruction manual to be able to ensure the safety factor is outlined and use safety guards at all times. It is a better idea to apply extreme caution and utilize extra safety guards in applications wherein the consequences of chain failure are serious.

Higher tensile strength is a direct correlation to the utilization of more plates. Because the use of much more plates does not improve the maximum allowable tension directly, the number of plates may be restricted. The chains require regular lubrication because the pins link directly on the plates, producing a very high bearing pressure. Utilizing a SAE 30 or 40 machine oil is normally suggested for most applications. If the chain is cycled over 1000 times day after day or if the chain speed is over 30m for every minute, it would wear extremely rapidly, even with continuous lubrication. Thus, in either of these situations using RS Roller Chains will be a lot more suitable.

AL type chains are only to be used under certain situations like where there are no shock loads or if wear is not a huge concern. Make positive that the number of cycles does not exceed one hundred day after day. The BL-type will be better suited under other situations.

The stress load in components would become higher if a chain using a lower safety factor is selected. If the chain is even used among corrosive conditions, it could easily fatigue and break very quick. Doing regular maintenance is really important when operating under these types of conditions.

The outer link or inner link type of end link on the chain would determine the shape of the clevis. Clevis connectors or also known as Clevis pins are made by manufacturers, but the user typically provides the clevis. An improperly made clevis can decrease the working life of the chain. The strands must be finished to length by the maker. Refer to the ANSI standard or get in touch with the producer.