Mast Chain

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 tension linkage and low-speed pulling. Leaf chains are sometimes also known as 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 example high tensile strength per section area, which allows the design of smaller mechanisms. There are A- and B- kind chains in this series and both the BL6 and AL6 Series include the same pitch as RS60. Finally, these chains cannot be powered utilizing sprockets.

Selection and Handling

In roller chains, the link plates maintain a higher fatigue resistance because of the compressive stress of press fits, yet the leaf chain just has two outer press fit plates. On the leaf chain, the maximum permissible tension is low and the tensile strength is high. When handling leaf chains it is important to confer with the manufacturer's manual so as to guarantee the safety factor is outlined and utilize safety guards at all times. It is a better idea to apply extreme caution and utilize extra safety measures in applications wherein the consequences of chain failure are severe.

Higher tensile strength is a direct correlation to the use of much more plates. Because the utilization of more plates does not improve the maximum acceptable tension directly, the number of plates may be restricted. The chains need frequent lubrication because the pins link directly on the plates, producing a really 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 over 1000 times day after day or if the chain speed is over 30m for each minute, it would wear very fast, even with continual lubrication. So, in either of these situations the use of RS Roller Chains would be a lot more suitable.

AL type chains are only to be used under certain situations like where there are no shock loads or when wear is not really a huge concern. Make positive that the number of cycles does not go over a hundred daily. The BL-type would be better suited under various situations.

If a chain with a lower safety factor is selected then the stress load in parts will become higher. If chains are utilized with corrosive elements, then they can become fatigued and break quite easily. Doing regular maintenance is really vital when operating under these kinds of conditions.

The type of end link of the chain, whether it is an inner link or outer link, determines the shape of the clevis. Clevis connectors or Clevis pins are made by manufacturers but usually, the user provides the clevis. An improperly 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 phone the producer.