Mast Chains

Leaf Chains comprise several functions and are regulated by ANSI. They are utilized for lift truck masts, for low-speed pulling and tension linkage, and as balancers between counterweight and head in certain machine gadgets. Leaf chains are at times also referred to as Balance Chains.

Features and Construction

Leaf chains are actually steel chains using a simple pin construction and link plate. The chain number refers to the pitch and the lacing of the links. The chains have particular features such as high tensile strength per section area, which allows the design of smaller mechanisms. There are B- and A+ kind chains in this series and both the BL6 and AL6 Series have the same pitch as RS60. Lastly, these chains cannot be powered with sprockets.

Selection and Handling

In roller chains, the link plates maintain a higher fatigue resistance because of the compressive tension of press fits, yet the leaf chain only contains two outer press fit plates. On the leaf chain, the most permissible tension is low and the tensile strength is high. When handling leaf chains it is essential to consult the manufacturer's instruction manual to be able to guarantee the safety factor is outlined and utilize safety guards all the time. It is a great idea to carry out utmost caution and utilize extra safety guards in functions wherein the consequences of chain failure are serious.

Using much more plates in the lacing results in the higher tensile strength. Because this does not improve the maximum allowable tension directly, the number of plates utilized can be limited. The chains require frequent lubrication since the pins link directly on the plates, producing a really high bearing pressure. Utilizing a SAE 30 or 40 machine oil is frequently suggested for most applications. If the chain is cycled over one thousand times day by day or if the chain speed is more than 30m per minute, it will wear really quick, even with constant lubrication. Therefore, in either of these situations the use of RS Roller Chains will be more suitable.

The AL-type of chains must just be used under certain situations like for instance if wear is not a huge problem, when there are no shock loads, the number of cycles does not go over a hundred every day. The BL-type will 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 may become fatigued and break quite easily. Performing regular maintenance is really vital if operating under these types of conditions.

The kind of end link of the chain, whether it is an inner link or outer link, determines the shape of the clevis. Clevis connectors or also called Clevis pins are constructed by manufacturers but usually, the user supplies the clevis. An improperly 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 manufacturer.