

Mast Chains

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

Construction and Features

Constructed of a simple link plate and pin construction, steel leaf chains is identified by a number which refers to the lacing of the links and the pitch. The chains have particular features like for instance high tensile strength per section area, which allows the design of smaller machines. There are A- and B- kind chains in this particular 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 have 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 permissible tension is low and the tensile strength is high. Whenever handling leaf chains it is vital to check with the manufacturer's manual so as to guarantee the safety factor is outlined and use safety guards at all times. It is a better idea to carry out utmost caution and use extra safety measures in applications wherein the consequences of chain failure are severe.

Higher tensile strength is a direct correlation to the utilization of a lot more plates. Because the utilization of much more plates does not improve the most allowable tension directly, the number of plates could be limited. The chains require frequent lubrication since 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 most applications. If the chain is cycled over 1000 times each day or if the chain speed is over 30m per minute, it will wear very quick, even with continual lubrication. Thus, in either of these conditions using RS Roller Chains would be more suitable.

The AL-type of chains must just be utilized under particular situations like for instance if wear is not a big problem, when there are no shock loads, the number of cycles does not go beyond a hundred day after day. The BL-type would be better suited under different situations.

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

The inner link or outer link type 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 normally supplies the clevis. An improperly made clevis can decrease the working life of the chain. The strands should be finished to length by the manufacturer. Refer to the ANSI standard or get in touch with the manufacturer.