Mast Chains

Leaf Chains have different functions and are regulated by ANSI. They are meant for tension linkage, forklift masts and for low-speed pulling, and as balancers between head and counterweight in several machine devices. Leaf chains are sometimes likewise called Balance Chains.

Construction and Features

Made of a simple pin construction and link plate, 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 for each section area, which allows the design of smaller mechanisms. There are A- and B- type chains in this particular series and both the BL6 and AL6 Series have the same pitch as RS60. Finally, these chains cannot be powered using sprockets.

Handling and Selection

In roller chains, the link plates have 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 allowable tension is low and the tensile strength is high. When handling leaf chains it is essential to consult the manufacturer's handbook so as to guarantee the safety factor is outlined and utilize safety guards always. It is a great idea to carry out utmost care and use extra safety measures in functions wherein the consequences of chain failure are serious.

Using much more plates in the lacing results in the higher tensile strength. Since this does not improve the most acceptable tension directly, the number of plates used may be restricted. The chains require frequent lubrication for the reason that the pins link directly on the plates, producing an extremely high bearing pressure. Making use of a SAE 30 or 40 machine oil is frequently advised for most applications. If the chain is cycled over one thousand times every day or if the chain speed is more than 30m per minute, it will wear extremely quick, even with continual lubrication. Therefore, in either of these conditions the use of RS Roller Chains will be more suitable.

AL type chains are just to be utilized under certain situations like where there are no shock loads or if wear is not a big problem. Make sure that the number of cycles does not go over a hundred day after day. The BL-type will be better suited under different conditions.

The stress load in parts would become higher if a chain using a lower safety factor is selected. If the chain is likewise utilized among corrosive conditions, it could easily fatigue and break very fast. Performing frequent maintenance is really important if operating under these kinds of situations.

The inner link or outer link kind of end link on the chain will determine the shape of the clevis. Clevis connectors or Clevis pins are made by manufacturers, but the user typically supplies the clevis. A wrongly made clevis can reduce the working life of the chain. The strands must be finished to length by the producer. Check the ANSI standard or call the producer.