

Mast Chains

Mast Chains - Leaf Chains have various applications and are regulated by ANSI. They are meant for tension linkage, forklift masts and for low-speed pulling, and as balancers between counterweight and head in certain machine devices. Leaf chains are occasionally even known as Balance Chains.

Construction and Features

Constructed of a simple link plate and pin construction, steel leaf chains is identified by a number that refers to the lacing of the links and the pitch. The chains have certain features like for example high tensile strength per section area, which enables the design of smaller devices. There are A- and B- type chains in this particular series and both the BL6 and AL6 Series contain the same pitch as RS60. Lastly, these chains cannot be powered using sprockets.

Selection and Handling

Comparably, in roller chains, all of the link plates maintain higher fatigue resistance due to the compressive stress of press fits, whereas in leaf chains, only two outer plates are press fit. The tensile strength of leaf chains is high and the maximum permissible tension is low. While handling leaf chains it is important to confer with the manufacturer's instruction booklet in order to guarantee the safety factor is outlined and utilize safety guards always. It is a great idea to carry out utmost caution and use extra safety guards in applications where the consequences of chain failure are serious.

Higher tensile strength is a direct correlation to the use of a lot more plates. Because the use of a lot more plates does not enhance the most acceptable tension directly, the number of plates can be restricted. The chains need regular lubrication as the pins link directly on the plates, producing an extremely high bearing pressure. Utilizing a SAE 30 or 40 machine oil is normally suggested for most applications. If the chain is cycled more than 1000 times day after day or if the chain speed is more than 30m per minute, it will wear really fast, even with continuous lubrication. Hence, in either of these situations using RS Roller Chains would be much more suitable.

AL type chains are only to be used under certain conditions like where there are no shock loads or when wear is not really a huge issue. Be sure that the number of cycles does not go over 100 on a daily basis. The BL-type will be better suited under other conditions.

The stress load in parts would become higher if a chain with a lower safety factor is selected. If the chain is even utilized among corrosive situations, it can easily fatigue and break very quick. Doing frequent maintenance is essential when operating under these kinds of situations.

The outer link or inner link type 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 usually provides the clevis. An improperly constructed clevis can decrease the working life of the chain. The strands should be finished to length by the producer. Check the ANSI standard or contact the producer.