

Mast Chain

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

Construction and Features

Constructed 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 certain features like high tensile strength for each section area, which allows the design of smaller machines. There are A- and B- kind chains in this particular series and both the AL6 and BL6 Series comprise the same pitch as RS60. Lastly, these chains cannot be driven utilizing 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, just two outer plates are press fit. The tensile strength of leaf chains is high and the utmost allowable tension is low. While handling leaf chains it is vital to check with the manufacturer's manual in order to ensure the safety factor is outlined and use safety measures at all times. It is a great idea to exercise utmost caution and utilize extra safety guards in functions wherein the consequences of chain failure are severe.

Using much more plates in the lacing causes the higher tensile strength. In view of the fact that this does not enhance the most permissible tension directly, the number of plates utilized can be restricted. The chains need frequent lubrication as the pins link directly on the plates, producing a really high bearing pressure. Using a SAE 30 or 40 machine oil is normally advised for most applications. If the chain is cycled over 1000 times each day or if the chain speed is more than 30m for each minute, it will wear extremely fast, even with continuous lubrication. Therefore, in either of these situations using RS Roller Chains would be a lot more suitable.

The AL-type of chains should only be utilized under particular situations like for example when wear is not a big concern, if there are no shock loads, the number of cycles does not go over one hundred each day. The BL-type will be better suited under different situations.

The stress load in parts will become higher if a chain using a lower safety factor is chosen. If the chain is likewise utilized amongst corrosive situations, it can easily fatigue and break really quick. Doing regular maintenance is essential if operating under these types of conditions.

The outer link or inner link kind of end link on the chain will determine the shape of the clevis. Clevis connectors or also known as Clevis pins are constructed by manufacturers, but the user usually provides the clevis. An improperly constructed clevis can reduce the working life of the chain. The strands should be finished to length by the manufacturer. Refer to the ANSI standard or call the manufacturer.