

Mast Chains

Used in various applications, leaf chains are regulated by ANSI. They can be used for forklift masts, as balancers between counterweight and heads in some machine gadgets, and for low-speed pulling and tension linkage. Leaf chains are occasionally likewise known as Balance Chains.

Features and Construction

Leaf chains are steel chains using a simple pin construction and link plate. The chain number 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 allows the design of smaller devices. There are B- and A+ type chains in this particular series and both the BL6 and AL6 Series contain the same pitch as RS60. Finally, these chains cannot be powered utilizing sprockets.

Selection and Handling

Comparably, in roller chains, all of the link plates have 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 maximum acceptable tension is low. While handling leaf chains it is essential to consult the manufacturer's instruction booklet so as to ensure the safety factor is outlined and utilize safety guards at all times. It is a better idea to exercise extreme care and utilize extra safety measures in functions wherein the consequences of chain failure are severe.

Higher tensile strength is a direct correlation to the utilization of more plates. For the reason that the use of much more plates does not enhance the maximum allowable tension directly, the number of plates may be restricted. The chains need regular lubrication since the pins link directly on the plates, generating 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 for each minute, it would wear extremely rapidly, even with constant lubrication. Therefore, in either of these conditions utilizing RS Roller Chains will be a lot more suitable.

AL type chains are just to be used under particular conditions like for instance where there are no shock loads or if wear is not a big problem. Be positive that the number of cycles does not go over a hundred on a daily basis. The BL-type would 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 also utilized among corrosive conditions, it can easily fatigue and break very fast. Doing regular maintenance is really important when operating under these kinds of conditions.

The outer link or inner link kind of end link on the chain would determine the shape of the clevis. Clevis connectors or also known as Clevis pins are made by manufacturers, but the user normally provides the clevis. An improperly made clevis could decrease the working life of the chain. The strands must be finished to length by the producer. Check the ANSI standard or call the maker.