

Mast Chain

Mast Chain - Leaf Chains comprise several applications and are regulated by ANSI. They are intended for tension linkage, lift truck masts and for low-speed pulling, and as balancers between counterweight and head in several machine gadgets. Leaf chains are at times also referred to 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 particular features like 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 AL6 and BL6 Series comprise the same pitch as RS60. Finally, these chains cannot be driven with sprockets.

Selection and Handling

In roller chains, the link plates have a higher fatigue resistance because of the compressive stress of press fits, yet the leaf chain just contains two outer press fit plates. On the leaf chain, the most permissible tension is low and the tensile strength is high. When handling leaf chains it is essential to consult the manufacturer's manual to be able to guarantee the safety factor is outlined and utilize safety measures all the time. It is a good idea to exercise extreme care and utilize extra safety guards in applications where the consequences of chain failure are serious.

Higher tensile strength is a direct correlation to the utilization of a lot more plates. Because the utilization of much more plates does not enhance the utmost acceptable tension directly, the number of plates can 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 frequently advised for the majority of applications. If the chain is cycled more than 1000 times each day or if the chain speed is more than 30m per minute, it will wear extremely quick, even with constant lubrication. Hence, in either of these situations the use of RS Roller Chains will be much more suitable.

AL type chains are only to be utilized under certain conditions such as where there are no shock loads or when wear is not a huge concern. Be positive that the number of cycles does not exceed a hundred daily. The BL-type would be better suited under different conditions.

If a chain utilizing a lower safety factor is chosen then the stress load in components would become higher. If chains are used with corrosive elements, then they could become fatigued and break somewhat easily. Performing frequent maintenance is really important if operating under these kinds of conditions.

The type of end link of the chain, whether it is an outer link or inner link, determines the shape of the clevis. Clevis connectors or also called Clevis pins are made by manufacturers but usually, the user supplies the clevis. A wrongly constructed clevis can reduce the working life of the chain. The strands should be finished to length by the manufacturer. Check the ANSI standard or call the producer.