

Mast Chain

Mast Chains - Leaf Chains consist of different applications and are regulated by ANSI. They are designed for tension linkage, lift truck masts and for low-speed pulling, and as balancers between head and counterweight in certain machine devices. Leaf chains are at times also called Balance Chains.

Construction and Features

Leaf chains are actually steel chains utilizing a simple link plate and pin construction. The chain number refers to the lacing of the links and the pitch. The chains have certain features like for instance high tensile strength for every section area, that allows the design of smaller mechanisms. There are A- and B- kind chains in this series and both the AL6 and BL6 Series comprise the same pitch as RS60. Finally, these chains cannot be driven using sprockets.

Handling and Selection

In roller chains, the link plates maintain a higher fatigue resistance due to the compressive tension of press fits, yet the leaf chain only has two outer press fit plates. On the leaf chain, the most permissible tension is low and the tensile strength is high. If handling leaf chains it is important to check with the manufacturer's handbook so as to ensure the safety factor is outlined and use safety guards at all times. It is a great idea to carry out extreme caution and use extra safety measures in applications wherein the consequences of chain failure are serious.

Utilizing more plates in the lacing leads to the higher tensile strength. In view of the fact that this does not enhance the maximum allowable tension directly, the number of plates used may be restricted. The chains need regular lubrication in view of the fact that the pins link directly on the plates, generating an extremely high bearing pressure. Making use of a SAE 30 or 40 machine oil is normally advised for the majority of applications. If the chain is cycled more than one thousand times daily or if the chain speed is more than 30m for each minute, it will wear extremely quick, even with continual lubrication. So, in either of these situations using RS Roller Chains would be much more suitable.

The AL-type of chains must just be utilized under certain situations like when wear is not a huge problem, when there are no shock loads, the number of cycles does not go beyond a hundred every day. The BL-type will be better suited under other conditions.

If a chain utilizing a lower safety factor is selected then the stress load in parts will become higher. If chains are utilized with corrosive elements, then they may become fatigued and break rather easily. Doing frequent maintenance is vital when operating under these kinds of situations.

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 usually provides the clevis. A wrongly made clevis can decrease the working life of the chain. The strands must be finished to length by the producer. Refer to the ANSI standard or phone the manufacturer.