

Mast Chain

Mast Chains - Leaf Chains comprise several functions and are regulated by ANSI. They are intended for lift truck masts, for low-speed pulling and tension linkage, and as balancers between head and counterweight in certain machine devices. Leaf chains are sometimes also referred to as Balance Chains.

Features and Construction

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

Handling and Selection

Comparably, in roller chains, all of the link plates have higher fatigue resistance because of the compressive stress of press fits, while in leaf chains, only two outer plates are press fit. The tensile strength of leaf chains is high and the most permissible tension is low. When handling leaf chains it is vital to consult the manufacturer's instruction manual so as to ensure the safety factor is outlined and use safety guards all the time. It is a better idea to apply extreme care and utilize extra safety guards in applications wherein the consequences of chain failure are severe.

Higher tensile strength is a direct correlation to the utilization of more plates. As the use of a lot more plates does not enhance the most acceptable tension directly, the number of plates can be limited. The chains require regular lubrication for the reason that the pins link directly on the plates, producing an extremely high bearing pressure. Making use of a SAE 30 or 40 machine oil is often advised for the majority of applications. If the chain is cycled more than one thousand times in a day or if the chain speed is over 30m per minute, it will wear really fast, even with continuous lubrication. Thus, in either of these conditions the use of RS Roller Chains will be more suitable.

AL type chains are only to be used under particular conditions like where there are no shock loads or when wear is not really a big issue. Make positive that the number of cycles does not go beyond 100 daily. The BL-type would be better suited under different situations.

If a chain with a lower safety factor is selected then the stress load in components will become higher. If chains are used with corrosive elements, then they can become fatigued and break quite easily. Performing regular maintenance is really vital when operating under these kinds of situations.

The kind of end link of the chain, whether it is an outer link or inner link, determines the shape of the clevis. Clevis connectors or Clevis pins are made by manufacturers but normally, the user provides the clevis. An improperly constructed clevis could lessen the working life of the chain. The strands should be finished to length by the maker. Refer to the ANSI standard or get in touch with the maker.