

Mast Chains

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

Construction and Features

Made 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 specific features such as high tensile strength per section area, that enables the design of smaller devices. There are A- and B- type chains in this series and both the BL6 and AL6 Series contain the same pitch as RS60. Finally, these chains cannot be driven utilizing sprockets.

Handling and Selection

In roller chains, the link plates maintain a higher fatigue resistance because of the compressive tension of press fits, yet the leaf chain just contains two outer press fit plates. On the leaf chain, the most acceptable tension is low and the tensile strength is high. Whenever handling leaf chains it is essential to confer with the manufacturer's handbook so as to ensure the safety factor is outlined and utilize safety guards at all times. It is a great idea to exercise utmost care and utilize extra safety measures in functions where the consequences of chain failure are severe.

Higher tensile strength is a direct correlation to the use of more plates. For the reason that the utilization of much more plates does not improve the most permissible tension directly, the number of plates can be limited. The chains need regular lubrication because the pins link directly on the plates, generating a very high bearing pressure. Utilizing a SAE 30 or 40 machine oil is often advised for the majority of applications. If the chain is cycled more than 1000 times every day or if the chain speed is over 30m per minute, it would wear extremely quick, even with constant lubrication. Hence, in either of these situations the use of RS Roller Chains will be more suitable.

AL type chains are just to be utilized under particular situations like where there are no shock loads or when wear is not a huge concern. Make certain that the number of cycles does not go beyond 100 each day. The BL-type would be better suited under different situations.

If a chain with a lower safety factor is chosen then the stress load in components would become higher. If chains are utilized with corrosive elements, then they may become fatigued and break rather easily. Performing frequent maintenance is vital when operating under these types of conditions.

The inner link or outer link kind of end link on the chain will determine the shape of the clevis. Clevis connectors or otherwise known as Clevis pins are made by manufacturers, but the user normally supplies the clevis. An improperly constructed clevis could reduce the working life of the chain. The strands should be finished to length by the producer. Check the ANSI standard or call the producer.