

Forklift Mast Chain

Mast Chain - Leaf Chains comprise different applications and are regulated by ANSI. They are intended for low-speed pulling, for tension linkage and lift truck masts, and as balancers between head and counterweight in several machine tools. Leaf chains are occasionally also called Balance Chains.

Construction and Features

Constructed of a simple link plate and pin construction, steel leaf chains is identified by a number that refers to the pitch and the lacing of the links. The chains have specific features like for instance high tensile strength for every section area, that enables the design of smaller devices. There are B- and A+ type chains in this series and both the AL6 and BL6 Series contain the same pitch as RS60. Lastly, these chains cannot be driven with sprockets.

Selection and Handling

In roller chains, the link plates maintain 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 maximum acceptable tension is low and the tensile strength is high. Whenever handling leaf chains it is important to consult the manufacturer's catalogue to be able to ensure the safety factor is outlined and use safety guards always. It is a great idea to exercise utmost caution and utilize extra safety measures in applications where the consequences of chain failure are serious.

Utilizing much more plates in the lacing leads to the higher tensile strength. Because this does not improve the most permissible tension directly, the number of plates utilized could be restricted. The chains require frequent lubrication as the pins link directly on the plates, generating a really high bearing pressure. Using a SAE 30 or 40 machine oil is often advised for nearly all applications. If the chain is cycled over 1000 times each day or if the chain speed is more than 30m per minute, it will wear really fast, even with continuous lubrication. So, in either of these conditions using RS Roller Chains would be more suitable.

AL type chains are only to be utilized under particular situations like for example where there are no shock loads or if wear is not a huge issue. Make sure that the number of cycles does not exceed a hundred every day. 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 parts would become higher. If chains are used with corrosive elements, then they could become fatigued and break quite easily. Doing frequent maintenance is really important when operating under these types of conditions.

The inner link or outer link type of end link on the chain would determine the shape of the clevis. Clevis connectors or likewise known as Clevis pins are made by manufacturers, but the user usually supplies the clevis. An improperly constructed clevis could reduce the working life of the chain. The strands should be finished to length by the manufacturer. Refer to the ANSI standard or get in touch with the maker.