

Forklift Mast Chains

Mast Chain - Leaf Chains consist of different functions and are regulated by ANSI. They are utilized for lift truck masts, for low-speed pulling and tension linkage, and as balancers between counterweight and head in several machine devices. Leaf chains are at times also referred to as Balance Chains.

Features and Construction

Leaf chains are actually steel chains using a simple pin construction and link plate. The chain number refers to the pitch and the lacing of the links. The chains have certain features such as high tensile strength for every 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. Lastly, these chains cannot be driven utilizing sprockets.

Selection and Handling

In roller chains, the link plates maintain a higher fatigue resistance due to the compressive stress of press fits, yet the leaf chain just contains two outer press fit plates. On the leaf chain, the maximum allowable tension is low and the tensile strength is high. While handling leaf chains it is vital to consult the manufacturer's manual so as to ensure the safety factor is outlined and utilize safety guards at all times. It is a good idea to exercise extreme caution and utilize extra safety measures in functions where the consequences of chain failure are serious.

Utilizing much more plates in the lacing results in the higher tensile strength. Because this does not improve the maximum permissible tension directly, the number of plates utilized could be restricted. The chains need frequent lubrication because the pins link directly on the plates, generating a really high bearing pressure. Making use of a SAE 30 or 40 machine oil is normally suggested for nearly all applications. If the chain is cycled over 1000 times day after day or if the chain speed is more than 30m for each minute, it would wear really quick, even with continual lubrication. Hence, in either of these conditions the use of RS Roller Chains will be much more suitable.

The AL-type of chains must just be used under certain conditions such as if wear is not a huge problem, when there are no shock loads, the number of cycles does not go over one hundred every day. The BL-type would be better suited under other situations.

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

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