

Forklift Mast Chains

Mast Chain - Leaf Chains comprise different applications and are regulated by ANSI. They are meant for forklift masts, for low-speed pulling and tension linkage, and as balancers between head and counterweight in some machine gadgets. Leaf chains are occasionally even called Balance Chains.

Construction and Features

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 particular features like for instance high tensile strength per section area, that enables the design of smaller machines. There are A- and B- kind chains in this series and both the BL6 and AL6 Series have the same pitch as RS60. Finally, these chains cannot be powered using sprockets.

Selection and Handling

In roller chains, the link plates maintain a higher fatigue resistance because of the compressive tension of press fits, yet the leaf chain just has two outer press fit plates. On the leaf chain, the maximum acceptable tension is low and the tensile strength is high. If handling leaf chains it is vital to confer with the manufacturer's guidebook in order to guarantee the safety factor is outlined and use safety measures at all times. It is a great idea to apply extreme care and utilize extra safety guards in functions where the consequences of chain failure are severe.

Using much more plates in the lacing causes the higher tensile strength. Since this does not improve the maximum allowable tension directly, the number of plates used can be restricted. The chains require regular lubrication because the pins link directly on the plates, producing a very high bearing pressure. Using a SAE 30 or 40 machine oil is normally advised for most applications. If the chain is cycled more than one thousand times day by day or if the chain speed is over 30m for every minute, it will wear extremely fast, even with continuous lubrication. Thus, in either of these situations the use of RS Roller Chains would be more suitable.

The AL-type of chains must only be used under certain situations like for instance when wear is not a huge problem, if there are no shock loads, the number of cycles does not go over 100 daily. The BL-type will be better suited under different situations.

The stress load in components would become higher if a chain with a lower safety factor is chosen. If the chain is also utilized among corrosive conditions, it could easily fatigue and break really fast. Doing frequent maintenance is important if operating under these types of conditions.

The inner link or outer link type of end link on the chain will determine the shape of the clevis. Clevis connectors or otherwise known as Clevis pins are constructed by manufacturers, but the user normally supplies the clevis. An improperly constructed clevis can 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 producer.