

Forklift Mast Chain

Mast Chains - Leaf Chains comprise several applications and are regulated by ANSI. They are meant for tension linkage, forklift masts and for low-speed pulling, and as balancers between head and counterweight in several machine devices. Leaf chains are sometimes likewise called 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 lacing of the links and the pitch. The chains have particular features like high tensile strength per section area, which allows the design of smaller machines. There are B- and A+ kind chains in this particular series and both the BL6 and AL6 Series comprise the same pitch as RS60. Finally, these chains cannot be powered utilizing sprockets.

Handling and Selection

In roller chains, the link plates maintain a higher fatigue resistance due to the compressive tension of press fits, yet the leaf chain just has two outer press fit plates. On the leaf chain, the most allowable tension is low and the tensile strength is high. When handling leaf chains it is important to confer with the manufacturer's instruction booklet in order to guarantee the safety factor is outlined and utilize safety measures always. It is a great idea to carry out extreme caution and use extra safety measures in applications wherein the consequences of chain failure are serious.

Utilizing much more plates in the lacing leads to the higher tensile strength. As this does not improve the maximum acceptable tension directly, the number of plates used may be limited. The chains need regular lubrication since the pins link directly on the plates, producing a very high bearing pressure. Making use of a SAE 30 or 40 machine oil is frequently advised for nearly all applications. If the chain is cycled over one thousand times each day or if the chain speed is more than 30m per minute, it would wear very quick, even with constant lubrication. Thus, in either of these conditions using RS Roller Chains would be more suitable.

The AL-type of chains must only be utilized under certain conditions like for example when wear is not a big concern, if there are no shock loads, the number of cycles does not go beyond one hundred day after day. The BL-type would be better suited under different situations.

If a chain utilizing a lower safety factor is chosen then the stress load in parts will become higher. If chains are used with corrosive elements, then they can become fatigued and break quite easily. Performing regular maintenance is important when operating under these types of situations.

The outer link or inner link type of end link on the chain will determine the shape of the clevis. Clevis connectors or also known as Clevis pins are constructed by manufacturers, but the user normally provides the clevis. A wrongly constructed clevis can decrease the working life of the chain. The strands must be finished to length by the maker. Refer to the ANSI standard or call the manufacturer.