

Forklift Mast Chains

Forklift Mast Chains - Leaf Chains have different functions and are regulated by ANSI. They are designed for tension linkage, lift truck masts and for low-speed pulling, and as balancers between counterweight and head in several machine devices. Leaf chains are occasionally even known as Balance Chains.

Construction and Features

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

Selection and Handling

Comparably, in roller chains, all of the link plates maintain higher fatigue resistance due to the compressive stress of press fits, whereas in leaf chains, only two outer plates are press fit. The tensile strength of leaf chains is high and the most permissible tension is low. While handling leaf chains it is essential to check with the manufacturer's manual so as to guarantee the safety factor is outlined and use safety guards at all times. It is a good idea to apply utmost caution and use extra safety guards in functions wherein the consequences of chain failure are serious.

Higher tensile strength is a direct correlation to the use of more plates. Since the use of much more plates does not improve the most permissible tension directly, the number of plates may be limited. The chains require regular lubrication for the reason that the pins link directly on the plates, producing an extremely high bearing pressure. Making use of a SAE 30 or 40 machine oil is normally advised for most applications. If the chain is cycled over 1000 times every day or if the chain speed is more than 30m for every minute, it would wear very rapidly, even with continual lubrication. Thus, in either of these situations utilizing RS Roller Chains will be more suitable.

AL type chains are just to be used under certain situations such as where there are no shock loads or when wear is not really a big concern. Be sure that the number of cycles does not go over one hundred each day. The BL-type will be better suited under other situations.

If a chain using a lower safety factor is chosen then the stress load in components would become higher. If chains are used with corrosive elements, then they can become fatigued and break quite easily. Performing frequent maintenance is important when operating under these kinds of situations.

The outer link or inner link type of end link on the chain would determine the shape of the clevis. Clevis connectors or likewise known as Clevis pins are constructed by manufacturers, but the user typically provides the clevis. An improperly constructed clevis can lessen the working life of the chain. The strands must be finished to length by the maker. Check the ANSI standard or contact the manufacturer.