

Forklift Mast Chains

Mast Chains - Used in various applications, leaf chains are regulated by ANSI. They can be utilized for forklift masts, as balancers between counterweight and heads in some machine devices, and for low-speed pulling and tension linkage. Leaf chains are occasionally even referred to as Balance Chains.

Construction and Features

Made of a simple pin construction and link plate, steel leaf chains is identified by a number which refers to the pitch and the lacing of the links. The chains have certain features such as high tensile strength for each 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 comprise the same pitch as RS60. Finally, these chains cannot be driven using sprockets.

Handling and Selection

Comparably, in roller chains, all of the link plates have higher fatigue resistance due to the compressive stress of press fits, while in leaf chains, just two outer plates are press fit. The tensile strength of leaf chains is high and the most allowable tension is low. Whenever handling leaf chains it is vital to check with the manufacturer's manual in order to guarantee the safety factor is outlined and use safety measures at all times. It is a good idea to carry out extreme care and utilize extra safety measures in applications wherein the consequences of chain failure are serious.

Higher tensile strength is a direct correlation to the utilization of more plates. In view of the fact that the utilization of much more plates does not enhance the most allowable tension directly, the number of plates can be restricted. The chains require frequent lubrication because the pins link directly on the plates, producing an extremely high bearing pressure. Utilizing a SAE 30 or 40 machine oil is often suggested for the majority of applications. If the chain is cycled more than 1000 times day by day or if the chain speed is over 30m per minute, it will wear extremely quick, even with continual lubrication. Hence, in either of these conditions the use of RS Roller Chains would be more suitable.

AL type chains are just to be used under certain conditions like for example where there are no shock loads or if wear is not a big issue. Make sure that the number of cycles does not exceed a hundred each day. The BL-type will be better suited under other conditions.

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

The outer link or inner link kind 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 usually provides the clevis. An improperly constructed clevis can reduce the working life of the chain. The strands should be finished to length by the manufacturer. Refer to the ANSI standard or call the producer.