

Forklift Mast Chains

Mast Chains - Leaf Chains consist of various functions and are regulated by ANSI. They are designed for tension linkage, lift truck masts and for low-speed pulling, and as balancers between head and counterweight in some machine tools. Leaf chains are at times likewise known as Balance Chains.

Construction and Features

Leaf chains are actually steel chains utilizing a simple link plate and pin construction. The chain number refers to the lacing of the links and the pitch. The chains have certain features like high tensile strength for each section area, that allows the design of smaller devices. There are A- and B- kind chains in this particular series and both the BL6 and AL6 Series comprise the same pitch as RS60. Lastly, these chains cannot be powered using sprockets.

Handling and Selection

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 acceptable tension is low. If handling leaf chains it is essential to confer with the manufacturer's instruction booklet so as to guarantee the safety factor is outlined and use safety measures always. It is a good idea to apply extreme care and use extra safety guards in applications wherein the consequences of chain failure are severe.

Higher tensile strength is a direct correlation to the utilization of much more plates. Because the utilization of a lot more plates does not improve the utmost acceptable tension directly, the number of plates may be restricted. The chains require frequent lubrication since the pins link directly on the plates, generating a very high bearing pressure. Utilizing a SAE 30 or 40 machine oil is normally suggested for most applications. If the chain is cycled over 1000 times every day or if the chain speed is more than 30m per minute, it would wear extremely quick, even with constant lubrication. Therefore, in either of these conditions using RS Roller Chains will be a lot more suitable.

The AL-type of chains should just be utilized under certain conditions such as if wear is really not a huge concern, if there are no shock loads, the number of cycles does not exceed one hundred a day. The BL-type will be better suited under other situations.

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

The inner link or outer link kind of end link on the chain would determine the shape of the clevis. Clevis connectors or Clevis pins are constructed by manufacturers, but the user typically supplies the clevis. An improperly 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 contact the producer.