Mast Chain

Mast Chains - Used in various functions, leaf chains are regulated by ANSI. They could be utilized for forklift masts, as balancers between heads and counterweight in several machine tools, and for tension linkage and low-speed pulling. Leaf chains are occasionally likewise referred to as Balance Chains.

Construction and Features

Leaf chains are steel chains utilizing a simple link plate and pin construction. The chain number refers to the pitch and the lacing of the links. The chains have certain features such as high tensile strength per section area, that allows the design of smaller devices. There are B- and A+ type chains in this particular series and both the BL6 and AL6 Series contain 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, 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. When handling leaf chains it is vital to check with the manufacturer's guidebook so as to ensure the safety factor is outlined and utilize safety measures all the time. It is a great idea to carry out utmost caution and utilize extra safety measures in functions where the consequences of chain failure are serious.

Using much more plates in the lacing results in the higher tensile strength. Since this does not improve the most acceptable tension directly, the number of plates utilized may be restricted. The chains need regular lubrication since the pins link directly on the plates, producing a very high bearing pressure. Utilizing a SAE 30 or 40 machine oil is often advised for the majority of applications. If the chain is cycled over 1000 times on a daily basis or if the chain speed is more than 30m for each minute, it would wear really fast, even with constant lubrication. Hence, in either of these situations utilizing RS Roller Chains will be more suitable.

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

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

The outer link or inner link type of end link on the chain would determine the shape of the clevis. Clevis connectors or Clevis pins are made by manufacturers, but the user typically provides the clevis. An improperly made clevis could lessen the working life of the chain. The strands must be finished to length by the producer. Refer to the ANSI standard or contact the producer.