Forklift Mast Chain

Mast Chains - Used in different functions, leaf chains are regulated by ANSI. They can be used for lift truck masts, as balancers between counterweight and heads in some machine tools, and for low-speed pulling and tension linkage. Leaf chains are at times also called Balance Chains.

Construction and Features

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

Selection and Handling

In roller chains, the link plates have a higher fatigue resistance due to the compressive tension of press fits, yet the leaf chain just contains two outer press fit plates. On the leaf chain, the maximum allowable tension is low and the tensile strength is high. While handling leaf chains it is essential to consult the manufacturer's guidebook in order to ensure the safety factor is outlined and use safety guards at all times. It is a good idea to carry out extreme care and utilize extra safety measures in functions where the consequences of chain failure are serious.

Higher tensile strength is a direct correlation to the utilization of more plates. As the utilization of more plates does not enhance the utmost permissible tension directly, the number of plates can be restricted. The chains require frequent lubrication in view of the fact that the pins link directly on the plates, generating a really high bearing pressure. Making use of a SAE 30 or 40 machine oil is often advised for most applications. If the chain is cycled over 1000 times each day or if the chain speed is over 30m per minute, it would wear very rapidly, even with constant lubrication. Hence, in either of these situations utilizing RS Roller Chains will be much more suitable.

The AL-type of chains must only be used under certain situations like when wear is really not a huge concern, if there are no shock loads, the number of cycles does not go beyond 100 each day. The BL-type will be better suited under various situations.

The stress load in components will become higher if a chain using a lower safety factor is selected. If the chain is even used among corrosive situations, it can easily fatigue and break really quick. Performing frequent maintenance is important when operating under these types of situations.

The inner link or outer link kind of end link on the chain will determine the shape of the clevis. Clevis connectors or Clevis pins are constructed by manufacturers, but the user normally provides the clevis. An improperly made clevis could reduce the working life of the chain. The strands must be finished to length by the manufacturer. Check the ANSI standard or contact the maker.