Mast Chains

Utilized in different functions, leaf chains are regulated by ANSI. They could be used for forklift masts, as balancers between heads and counterweight in some machine tools, and for low-speed pulling and tension linkage. Leaf chains are occasionally also called Balance Chains.

Features and Construction

Constructed of a simple link plate and pin construction, steel leaf chains is identified by a number that refers to the pitch and the lacing of the links. The chains have certain features like for instance high tensile strength per section area, which allows the design of smaller machines. There are B- and A+ type chains in this particular series and both the BL6 and AL6 Series have 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 because of the compressive tension of press fits, yet the leaf chain just contains two outer press fit plates. On the leaf chain, the maximum acceptable tension is low and the tensile strength is high. While handling leaf chains it is important to check with the manufacturer's catalogue to be able to ensure the safety factor is outlined and use safety guards at all times. It is a good idea to carry out extreme caution and utilize extra safety guards in applications where the consequences of chain failure are severe.

Higher tensile strength is a direct correlation to the utilization of more plates. As the utilization of a lot more plates does not enhance the most acceptable tension directly, the number of plates could be restricted. The chains need frequent lubrication since the pins link directly on the plates, generating a really high bearing pressure. Using a SAE 30 or 40 machine oil is normally suggested for the majority of applications. If the chain is cycled more than 1000 times every day or if the chain speed is over 30m per minute, it would wear really rapidly, even with continuous lubrication. Therefore, in either of these situations the use of RS Roller Chains would be a lot more suitable.

AL type chains are only to be used under particular conditions like where there are no shock loads or when wear is not really a big issue. Make positive that the number of cycles does not exceed 100 daily. The BL-type would be better suited under other situations.

If a chain using a lower safety factor is selected then the stress load in components will become higher. If chains are used with corrosive elements, then they may become fatigued and break somewhat easily. Performing frequent maintenance is really vital when operating under these kinds of situations.

The type of end link of the chain, whether it is an outer link or inner link, determines the shape of the clevis. Clevis connectors or likewise called Clevis pins are constructed by manufacturers but often, the user provides the clevis. A wrongly made clevis could reduce the working life of the chain. The strands should be finished to length by the producer. Check the ANSI standard or phone the manufacturer.