Mast Chain

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

Features and Construction

Constructed of a simple pin construction and link plate, steel leaf chains is identified by a number that refers to the lacing of the links and the pitch. The chains have particular features like high tensile strength per section area, that allows the design of smaller machines. There are B- and A+ type chains in this series and both the AL6 and BL6 Series comprise the same pitch as RS60. Finally, these chains cannot be powered utilizing sprockets.

Selection and Handling

In roller chains, the link plates maintain 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 acceptable tension is low and the tensile strength is high. If handling leaf chains it is essential to confer with the manufacturer's handbook so as to ensure the safety factor is outlined and utilize safety guards always. It is a great idea to apply utmost caution and use extra safety guards in functions where the consequences of chain failure are serious.

Higher tensile strength is a direct correlation to the utilization of much more plates. In view of the fact that the utilization of a lot more plates does not improve the utmost acceptable tension directly, the number of plates could be limited. The chains need frequent lubrication since the pins link directly on the plates, producing an extremely high bearing pressure. Making use of a SAE 30 or 40 machine oil is frequently suggested for the majority of applications. If the chain is cycled over 1000 times daily or if the chain speed is more than 30m per minute, it would wear really fast, even with continuous lubrication. Thus, in either of these situations the use of RS Roller Chains would be more suitable.

The AL-type of chains should just be utilized under certain conditions like for instance if wear is really not a big issue, when there are no shock loads, the number of cycles does not exceed 100 day after day. The BL-type would be better suited under other conditions.

The stress load in components will become higher if a chain utilizing a lower safety factor is selected. If the chain is also utilized amongst corrosive conditions, it can easily fatigue and break extremely fast. Doing frequent maintenance is essential when operating under these kinds of conditions.

The kind 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 made by manufacturers but normally, the user provides the clevis. A wrongly constructed clevis could reduce the working life of the chain. The strands should be finished to length by the maker. Check the ANSI standard or get in touch with the maker.