Mast Chain

Mast Chains - Utilized 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 occasionally also referred to as Balance Chains.

Construction and Features

Constructed of a simple link plate and pin construction, steel leaf chains is identified by a number that refers to the lacing of the links and the pitch. The chains have specific features like for instance high tensile strength for every section area, which allows the design of smaller machines. There are A- and B- type chains in this particular series and both the AL6 and BL6 Series comprise the same pitch as RS60. Lastly, these chains cannot be driven with 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, while in leaf chains, only two outer plates are press fit. The tensile strength of leaf chains is high and the utmost permissible tension is low. When handling leaf chains it is essential to check 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 carry out extreme caution and utilize extra safety measures in applications wherein the consequences of chain failure are serious.

Higher tensile strength is a direct correlation to the utilization of a lot more plates. Since the utilization of a lot more plates does not improve the maximum acceptable tension directly, the number of plates can be limited. The chains require frequent lubrication as 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 advised for the majority of applications. If the chain is cycled over one thousand times each day or if the chain speed is more than 30m for each minute, it would wear extremely fast, even with constant lubrication. Therefore, in either of these conditions using RS Roller Chains will be much more suitable.

AL type chains are just to be used under certain conditions like for example where there are no shock loads or when wear is not really a huge problem. Be positive that the number of cycles does not go beyond one hundred each day. The BL-type would be better suited under various situations.

If a chain utilizing a lower safety factor is selected then the stress load in parts will become higher. If chains are utilized with corrosive elements, then they may become fatigued and break somewhat easily. Performing frequent maintenance is important when operating under these types of conditions.

The outer link or inner link kind 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 supplies the clevis. A wrongly constructed clevis can lessen the working life of the chain. The strands must be finished to length by the manufacturer. Check the ANSI standard or call the producer.