Mast Chains

Mast Chains - Leaf Chains consist of several applications and are regulated by ANSI. They are designed for low-speed pulling, for tension linkage and forklift masts, and as balancers between head and counterweight in several machine gadgets. Leaf chains are sometimes likewise known as Balance Chains.

Features and Construction

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

Handling and Selection

Comparably, in roller chains, all of the link plates maintain higher fatigue resistance because of 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 most permissible tension is low. When handling leaf chains it is vital to confer with the manufacturer's catalogue in order to ensure the safety factor is outlined and use safety measures at all times. It is a good idea to apply extreme caution and utilize extra safety measures in functions where the consequences of chain failure are serious.

Utilizing much more plates in the lacing results in the higher tensile strength. In view of the fact that this does not enhance the most acceptable tension directly, the number of plates utilized may be restricted. The chains require regular lubrication since the pins link directly on the plates, generating an extremely high bearing pressure. Making use of a SAE 30 or 40 machine oil is often advised for most applications. If the chain is cycled more than 1000 times on a daily basis or if the chain speed is over 30m per minute, it would wear really rapidly, even with continuous lubrication. Thus, in either of these situations utilizing RS Roller Chains would be much more suitable.

AL type chains are only to be used under certain situations like for instance where there are no shock loads or if wear is not really a huge concern. Be certain that the number of cycles does not go beyond one hundred day by day. The BL-type would be better suited under different 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. Doing frequent maintenance is important when operating under these types of situations.

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 otherwise called Clevis pins are constructed by manufacturers but often, the user supplies the clevis. A wrongly made clevis can lessen the working life of the chain. The strands must be finished to length by the producer. Check the ANSI standard or call the producer.