Mast Chains

Forklift Mast Chains - Leaf Chains consist of various functions and are regulated by ANSI. They are utilized for forklift masts, for low-speed pulling and tension linkage, and as balancers between head and counterweight in several machine devices. Leaf chains are at times also referred to as Balance Chains.

Construction and Features

Made of a simple link plate and pin construction, steel leaf chains is identified by a number which refers to the pitch and the lacing of the links. The chains have specific features such as high tensile strength per section area, which enables the design of smaller mechanisms. There are B- and A+ kind chains in this series and both the BL6 and AL6 Series comprise the same pitch as RS60. Lastly, these chains cannot be powered 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, just two outer plates are press fit. The tensile strength of leaf chains is high and the most allowable tension is low. Whenever handling leaf chains it is essential to confer with the manufacturer's instruction manual to be able to ensure the safety factor is outlined and use safety guards always. It is a good idea to apply extreme care and use extra safety measures in applications wherein the consequences of chain failure are serious.

Higher tensile strength is a direct correlation to the use of much more plates. In view of the fact that the utilization of more plates does not enhance the utmost allowable tension directly, the number of plates can be limited. The chains need regular lubrication for the reason that the pins link directly on the plates, generating a very high bearing pressure. Making use of a SAE 30 or 40 machine oil is frequently suggested for most applications. If the chain is cycled more than one thousand times day by day or if the chain speed is over 30m for each minute, it will wear extremely rapidly, even with constant lubrication. Hence, in either of these situations using RS Roller Chains would be a lot more suitable.

AL type chains are only to be used under particular conditions such as where there are no shock loads or when wear is not really a big problem. Make certain that the number of cycles does not go beyond a hundred on a daily basis. The BL-type would be better suited under other conditions.

If a chain utilizing a lower safety factor is selected then the stress load in parts would become higher. If chains are used with corrosive elements, then they can become fatigued and break rather easily. Doing regular maintenance is important when operating under these types of situations.

The type of end link of the chain, whether it is an inner link or outer link, determines the shape of the clevis. Clevis connectors or likewise called Clevis pins are constructed by manufacturers but usually, the user supplies the clevis. A wrongly 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 manufacturer.