## Mast Chains

Mast Chains - Leaf Chains have various functions and are regulated by ANSI. They are designed for tension linkage, forklift masts and for low-speed pulling, and as balancers between counterweight and head in several machine tools. Leaf chains are at times 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 pitch and the lacing of the links. The chains have certain features such as high tensile strength per section area, which enables the design of smaller devices. There are A- and B- kind chains in this series and both the BL6 and AL6 Series comprise the same pitch as RS60. Lastly, these chains cannot be powered using sprockets.

Handling and Selection

Comparably, in roller chains, all of the link plates have higher fatigue resistance because of the compressive stress of press fits, whereas in leaf chains, just two outer plates are press fit. The tensile strength of leaf chains is high and the most acceptable tension is low. If handling leaf chains it is essential to check with the manufacturer's instruction booklet in order to ensure the safety factor is outlined and utilize safety guards all the time. It is a great idea to carry out utmost care and use extra safety measures in functions wherein the consequences of chain failure are serious.

Higher tensile strength is a direct correlation to the use of a lot more plates. Since the utilization of much more plates does not enhance the most allowable tension directly, the number of plates may be restricted. The chains need regular lubrication for the reason that the pins link directly on the plates, generating a very high bearing pressure. Utilizing a SAE 30 or 40 machine oil is often suggested for the majority of applications. If the chain is cycled more than one thousand times in a day or if the chain speed is more than 30m for each minute, it would wear extremely quick, even with continuous lubrication. Therefore, in either of these situations the use of RS Roller Chains will be much more suitable.

AL type chains are only to be used under certain conditions like for example where there are no shock loads or if wear is not a huge problem. Be certain that the number of cycles does not go over 100 per day. The BL-type will be better suited under other conditions.

If a chain with 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 somewhat easily. Performing regular maintenance is essential when operating under these kinds of conditions.

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 also called Clevis pins are made by manufacturers but usually, the user supplies the clevis. A wrongly constructed clevis could reduce the working life of the chain. The strands must be finished to length by the maker. Check the ANSI standard or call the manufacturer.