

Mast Chain

Mast Chains - Leaf Chains have several applications and are regulated by ANSI. They are used for tension linkage, forklift masts and for low-speed pulling, and as balancers between counterweight and head in some machine tools. Leaf chains are at times likewise called Balance Chains.

Features and Construction

Constructed of a simple pin construction and link plate, steel leaf chains is identified by a number which refers to the pitch and the lacing of the links. The chains have certain features like for instance high tensile strength for each section area, that enables the design of smaller mechanisms. There are B- and A+ kind chains in this particular series and both the BL6 and AL6 Series comprise the same pitch as RS60. Lastly, these chains cannot be powered utilizing 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, whereas in leaf chains, just two outer plates are press fit. The tensile strength of leaf chains is high and the most permissible tension is low. While handling leaf chains it is vital to check with the manufacturer's catalogue to be able to ensure the safety factor is outlined and use safety guards all the time. It is a good idea to exercise extreme care and utilize extra safety guards in applications where the consequences of chain failure are severe.

Using much more plates in the lacing causes the higher tensile strength. For the reason that this does not enhance the maximum allowable tension directly, the number of plates used may be restricted. The chains need frequent lubrication in view of the fact that the pins link directly on the plates, generating a very high bearing pressure. Utilizing a SAE 30 or 40 machine oil is often advised for the majority of applications. If the chain is cycled more than 1000 times every day or if the chain speed is more than 30m for each minute, it will wear really quick, even with continual lubrication. So, in either of these situations using RS Roller Chains would be much more suitable.

The AL-type of chains should only be utilized under certain conditions like for instance when wear is really not a big problem, if there are no shock loads, the number of cycles does not exceed one hundred each day. The BL-type would be better suited under various situations.

The stress load in parts would become higher if a chain with a lower safety factor is selected. If the chain is likewise utilized amongst corrosive situations, it can easily fatigue and break very quick. Performing regular maintenance is really vital when operating under these kinds of situations.

The inner link or outer link kind of end link on the chain will determine the shape of the clevis. Clevis connectors or otherwise known as Clevis pins are made by manufacturers, but the user typically supplies the clevis. A wrongly made clevis could lessen the working life of the chain. The strands must be finished to length by the maker. Check the ANSI standard or phone the maker.