

Mast Chains

Mast Chains - Leaf Chains consist of different functions and are regulated by ANSI. They are used for low-speed pulling, for tension linkage and lift truck masts, and as balancers between counterweight and head in several machine gadgets. Leaf chains are sometimes even referred to 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 certain features such as high tensile strength for every section area, that allows the design of smaller mechanisms. There are A- and B- type chains in this particular series and both the BL6 and AL6 Series comprise the same pitch as RS60. Lastly, these chains cannot be driven utilizing sprockets.

Selection and Handling

In roller chains, the link plates maintain a higher fatigue resistance because of the compressive tension of press fits, yet the leaf chain only contains two outer press fit plates. On the leaf chain, the maximum permissible tension is low and the tensile strength is high. Whenever handling leaf chains it is important to consult the manufacturer's catalogue to be able to ensure the safety factor is outlined and utilize safety measures all the time. It is a great idea to carry out extreme 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 utilization of more plates. For the reason that the use of a lot more plates does not enhance the most permissible tension directly, the number of plates can be limited. The chains require regular lubrication since the pins link directly on the plates, generating a very high bearing pressure. Utilizing a SAE 30 or 40 machine oil is normally suggested for nearly all applications. If the chain is cycled over 1000 times each day or if the chain speed is over 30m for each minute, it would wear extremely quick, even with continual lubrication. So, in either of these conditions utilizing RS Roller Chains would be much more suitable.

The AL-type of chains must only be used under certain situations like if wear is really not a big problem, when there are no shock loads, the number of cycles does not exceed a hundred on a daily basis. The BL-type will be better suited under various situations.

If a chain with a lower safety factor is selected then the stress load in components would become higher. If chains are utilized with corrosive elements, then they could become fatigued and break somewhat easily. Performing regular maintenance is really important if operating under these types of situations.

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 constructed by manufacturers, but the user usually provides the clevis. An improperly constructed clevis can lessen the working life of the chain. The strands should be finished to length by the manufacturer. Check the ANSI standard or phone the producer.