

Mast Chain

Mast Chain - Utilized in various applications, leaf chains are regulated by ANSI. They could be utilized for lift truck masts, as balancers between counterweight and heads in several machine tools, and for low-speed pulling and tension linkage. Leaf chains are sometimes even referred to as Balance Chains.

Features and Construction

Leaf chains are steel chains using a simple pin construction and link plate. The chain number refers to the lacing of the links and the pitch. The chains have specific features like for example high tensile strength for each section area, that enables the design of smaller machines. There are A- and B- type chains in this series and both the AL6 and BL6 Series contain the same pitch as RS60. Lastly, these chains cannot be driven with sprockets.

Handling and Selection

In roller chains, the link plates maintain a higher fatigue resistance because of the compressive stress of press fits, yet the leaf chain only contains two outer press fit plates. On the leaf chain, the maximum acceptable tension is low and the tensile strength is high. While handling leaf chains it is vital to consult the manufacturer's instruction booklet in order to ensure the safety factor is outlined and utilize safety guards always. It is a great idea to carry out extreme caution and utilize extra safety measures in functions where the consequences of chain failure are severe.

Higher tensile strength is a direct correlation to the utilization of a lot more plates. Because the utilization of much more plates does not enhance the most permissible tension directly, the number of plates may be limited. The chains need regular lubrication as the pins link directly on the plates, generating a really high bearing pressure. Making use of a SAE 30 or 40 machine oil is often advised for nearly all applications. If the chain is cycled more than 1000 times in a day or if the chain speed is over 30m for every minute, it would wear extremely rapidly, even with constant lubrication. So, in either of these situations the use of RS Roller Chains would be much more suitable.

AL type chains are just to be used under certain situations like for example where there are no shock loads or if wear is not a huge concern. Be positive that the number of cycles does not exceed 100 every day. The BL-type would be better suited under other conditions.

The stress load in parts would become higher if a chain utilizing a lower safety factor is chosen. If the chain is also used among corrosive conditions, it could easily fatigue and break extremely fast. Performing frequent maintenance is vital 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 Clevis pins are made by manufacturers but often, the user supplies the clevis. An improperly made clevis can reduce the working life of the chain. The strands should be finished to length by the maker. Check the ANSI standard or get in touch with the manufacturer.