

Mast Chains

Forklift Mast Chain - Used in different applications, leaf chains are regulated by ANSI. They can be utilized for lift truck masts, as balancers between counterweight and heads in some machine tools, and for tension linkage and low-speed pulling. Leaf chains are sometimes also referred to as Balance Chains.

Construction and Features

Leaf chains are steel chains utilizing a simple pin construction and link plate. The chain number refers to the lacing of the links and the pitch. The chains have particular features like for instance high tensile strength for every section area, which enables the design of smaller devices. There are B- and A+ kind chains in this particular series and both the AL6 and BL6 Series have the same pitch as RS60. Lastly, these chains cannot be powered using sprockets.

Selection and Handling

In roller chains, the link plates have a higher fatigue resistance due to the compressive stress of press fits, yet the leaf chain just has 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 essential to consult the manufacturer's handbook to be able to ensure the safety factor is outlined and use safety measures always. It is a good idea to carry out utmost caution and utilize extra safety guards in applications wherein the consequences of chain failure are severe.

Higher tensile strength is a direct correlation to the utilization of more plates. Because the use of a lot more plates does not enhance the most permissible tension directly, the number of plates may be limited. The chains require regular lubrication in view of the fact that the pins link directly on the plates, generating a very high bearing pressure. Using a SAE 30 or 40 machine oil is often suggested for the majority of applications. If the chain is cycled more than 1000 times each day or if the chain speed is more than 30m for every minute, it would wear very rapidly, even with continual lubrication. Therefore, in either of these situations using RS Roller Chains will be much more suitable.

AL type chains are just to be used under particular situations such as where there are no shock loads or when wear is not a huge problem. Be certain that the number of cycles does not exceed a hundred day after day. The BL-type will be better suited under various conditions.

If a chain with a lower safety factor is chosen then the stress load in components would become higher. If chains are used with corrosive elements, then they could become fatigued and break somewhat easily. Doing regular maintenance is essential if operating under these kinds of conditions.

The outer link or inner link kind of end link on the chain will determine the shape of the clevis. Clevis connectors or also known as Clevis pins are made by manufacturers, but the user normally provides the clevis. A wrongly constructed clevis could lessen the working life of the chain. The strands must be finished to length by the producer. Refer to the ANSI standard or contact the producer.