

Forklift Mast Chains

Mast Chains - Leaf Chains comprise several applications and are regulated by ANSI. They are used for lift truck masts, for low-speed pulling and tension linkage, and as balancers between counterweight and head in several machine devices. Leaf chains are sometimes also referred to as Balance Chains.

Construction and Features

Constructed of a simple pin construction and link plate, steel leaf chains is identified by a number that refers to the lacing of the links and the pitch. The chains have specific features like for instance high tensile strength for each section area, that enables the design of smaller mechanisms. There are A- and B- kind chains in this particular series and both the AL6 and BL6 Series contain the same pitch as RS60. Finally, these chains cannot be powered utilizing sprockets.

Handling and Selection

In roller chains, the link plates maintain a higher fatigue resistance due to the compressive tension of press fits, yet the leaf chain just contains two outer press fit plates. On the leaf chain, the maximum allowable tension is low and the tensile strength is high. When handling leaf chains it is vital to check with the manufacturer's guidebook to be able to ensure the safety factor is outlined and use safety guards all the time. It is a great idea to carry out extreme caution and use extra safety guards in functions wherein the consequences of chain failure are severe.

Utilizing more plates in the lacing leads to the higher tensile strength. Since this does not improve the maximum allowable tension directly, the number of plates used may be restricted. The chains need regular lubrication since the pins link directly on the plates, producing an extremely high bearing pressure. Using a SAE 30 or 40 machine oil is normally suggested for nearly all applications. If the chain is cycled over 1000 times every day or if the chain speed is over 30m per minute, it will wear very fast, even with continuous lubrication. Therefore, in either of these conditions using RS Roller Chains will be a lot more suitable.

The AL-type of chains must just be utilized under particular situations like if wear is not a huge problem, if there are no shock loads, the number of cycles does not exceed 100 a day. The BL-type would be better suited under different conditions.

The stress load in parts will become higher if a chain using a lower safety factor is chosen. If the chain is also utilized amongst corrosive situations, it could easily fatigue and break very fast. Performing regular maintenance is vital if operating under these types of situations.

The inner link or outer link type of end link on the chain would determine the shape of the clevis. Clevis connectors or likewise known as Clevis pins are made by manufacturers, but the user typically provides the clevis. A wrongly constructed clevis can decrease the working life of the chain. The strands should be finished to length by the producer. Check the ANSI standard or get in touch with the producer.