

Forklift Mast Chain

Mast Chains - Leaf Chains consist of several applications and are regulated by ANSI. They are utilized for low-speed pulling, for tension linkage and forklift masts, and as balancers between counterweight and head in several machine tools. Leaf chains are at times also referred to as Balance Chains.

Features and Construction

Leaf chains are steel chains with a simple link plate and pin construction. The chain number refers to the pitch and the lacing of the links. The chains have particular features like for instance high tensile strength for every section area, that enables the design of smaller machines. There are B- and A+ type chains in this particular series and both the BL6 and AL6 Series have 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 stress 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. When handling leaf chains it is essential to consult the manufacturer's instruction manual to be able to ensure the safety factor is outlined and use safety guards always. It is a better idea to carry out extreme care 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 a lot more plates. As the utilization of much more plates does not enhance the utmost acceptable tension directly, the number of plates can be limited. The chains need frequent lubrication as the pins link directly on the plates, generating an extremely 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 one thousand times each day or if the chain speed is over 30m per minute, it will wear very rapidly, even with continuous lubrication. Therefore, in either of these conditions utilizing RS Roller Chains will be much more suitable.

AL type chains are just to be utilized under particular conditions like for example where there are no shock loads or when wear is not a huge problem. Make sure that the number of cycles does not go beyond one hundred every day. The BL-type will be better suited under other situations.

The stress load in parts will become higher if a chain using a lower safety factor is selected. If the chain is even used among corrosive conditions, it can easily fatigue and break very fast. Performing frequent maintenance is really important when 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 otherwise known as Clevis pins are made by manufacturers, but the user usually provides the clevis. An improperly made clevis could reduce the working life of the chain. The strands must be finished to length by the producer. Check the ANSI standard or get in touch with the manufacturer.