Forklift Mast Chains

Forklift Mast Chains - Leaf Chains comprise several functions and are regulated by ANSI. They are designed for low-speed pulling, for tension linkage and forklift masts, and as balancers between counterweight and head in several machine tools. Leaf chains are occasionally also called Balance Chains.

Features and Construction

Leaf chains are actually 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 certain features like high tensile strength for each section area, which allows the design of smaller machines. There are B- and A+ type chains in this series and both the AL6 and BL6 Series contain the same pitch as RS60. Finally, 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 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. If handling leaf chains it is essential to check with the manufacturer's handbook to be able to ensure the safety factor is outlined and utilize safety measures at all times. It is a great idea to exercise extreme caution and use extra safety guards in applications wherein the consequences of chain failure are severe.

Higher tensile strength is a direct correlation to the use of more plates. Because the use of more plates does not improve the maximum permissible tension directly, the number of plates may be restricted. The chains require frequent lubrication since the pins link directly on the plates, generating a very high bearing pressure. Utilizing a SAE 30 or 40 machine oil is often advised for nearly all applications. If the chain is cycled more than one thousand times on a daily basis or if the chain speed is more than 30m for each minute, it will wear really rapidly, even with constant lubrication. So, in either of these situations the use of RS Roller Chains will be a lot more suitable.

The AL-type of chains should only be used under certain conditions like for instance if wear is really not a big concern, when there are no shock loads, the number of cycles does not go beyond one hundred each day. The BL-type would be better suited under other conditions.

The stress load in parts will become higher if a chain using a lower safety factor is chosen. If the chain is even used amongst corrosive situations, it can easily fatigue and break very fast. Doing frequent maintenance is vital if operating under these types of situations.

The kind of end link of the chain, whether it is an inner link or outer link, determines the shape of the clevis. Clevis connectors or likewise called Clevis pins are constructed by manufacturers but normally, the user supplies the clevis. A wrongly constructed clevis could reduce the working life of the chain. The strands must be finished to length by the maker. Refer to the ANSI standard or get in touch with the manufacturer.