Forklift Mast Chains

Mast Chains - Leaf Chains comprise different functions and are regulated by ANSI. They are utilized for tension linkage, forklift masts and for low-speed pulling, and as balancers between counterweight and head in certain machine tools. Leaf chains are sometimes even referred to as Balance Chains.

Construction and Features

Leaf chains are actually steel chains with a simple pin construction and link plate. The chain number refers to the pitch and the lacing of the links. The chains have particular features like for example high tensile strength for each section area, that allows the design of smaller mechanisms. There are B- and A+ kind chains in this series and both the BL6 and AL6 Series contain the same pitch as RS60. Finally, these chains cannot be driven 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 just contains two outer press fit plates. On the leaf chain, the maximum acceptable tension is low and the tensile strength is high. When handling leaf chains it is essential to check with the manufacturer's manual in order to guarantee the safety factor is outlined and use safety measures all the time. It is a good idea to carry out extreme 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 a lot more plates. For the reason that the utilization of more plates does not improve the maximum acceptable tension directly, the number of plates could be limited. The chains need frequent lubrication for the reason that 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 day by day or if the chain speed is more than 30m per minute, it would wear very rapidly, even with continual lubrication. Thus, in either of these situations utilizing RS Roller Chains would be a lot more suitable.

AL type chains are just to be utilized under certain situations such as where there are no shock loads or when wear is not really a huge problem. Be sure that the number of cycles does not go beyond 100 each day. The BL-type will be better suited under other situations.

If a chain utilizing a lower safety factor is chosen then the stress load in parts would become higher. If chains are used with corrosive elements, then they can become fatigued and break rather easily. Performing frequent maintenance is vital when operating under these types of conditions.

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 otherwise called Clevis pins by Doosan parts are constructed by manufacturers but normally, the user supplies the clevis. A wrongly constructed clevis can decrease 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.