Mast Chain

Mast Chains - Leaf Chains have different functions and are regulated by ANSI. They are utilized for lift truck masts, for low-speed pulling and tension linkage, and as balancers between counterweight and head in some machine tools. Leaf chains are occasionally also referred to as Balance Chains.

Features and Construction

Leaf chains are actually steel chains utilizing 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 such as high tensile strength per section area, which allows the design of smaller mechanisms. There are A- and B- type chains in this particular series and both the BL6 and AL6 Series include the same pitch as RS60. Lastly, 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 tension of press fits, yet the leaf chain just contains 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 vital to confer with the manufacturer's handbook to be able to ensure the safety factor is outlined and use safety measures at all times. It is a good idea to carry out extreme care and utilize extra safety measures in applications where the consequences of chain failure are serious.

Utilizing a lot more plates in the lacing leads to the higher tensile strength. As this does not enhance the maximum allowable tension directly, the number of plates utilized can be limited. The chains require frequent lubrication because the pins link directly on the plates, producing a very high bearing pressure. Using a SAE 30 or 40 machine oil is normally advised for the majority of applications. If the chain is cycled over one thousand times day after day or if the chain speed is more than 30m for every minute, it would wear very fast, even with continuous lubrication. Therefore, in either of these situations the use of RS Roller Chains will be a lot more suitable.

AL type chains are just to be utilized under certain conditions like for instance where there are no shock loads or when wear is not really a big issue. Be certain that the number of cycles does not exceed 100 per day. The BL-type will be better suited under different conditions.

If a chain using a lower safety factor is chosen then the stress load in components would become higher. If chains are utilized with corrosive elements, then they may become fatigued and break somewhat easily. Doing regular maintenance is really essential when operating under these kinds 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 also called Clevis pins are constructed by manufacturers but often, the user supplies the clevis. An improperly made clevis could decrease the working life of the chain. The strands must be finished to length by the maker. Check the ANSI standard or get in touch with the maker.