Mast Chains

Mast Chains - Utilized in different applications, leaf chains are regulated by ANSI. They can be used for lift truck masts, as balancers between counterweight and heads in several machine gadgets, and for low-speed pulling and tension linkage. Leaf chains are sometimes also known as Balance Chains.

Features and Construction

Made of a simple link plate and pin construction, steel leaf chains is identified by a number that refers to the pitch and the lacing of the links. The chains have specific features like for instance high tensile strength per section area, that enables the design of smaller devices. There are B- and A+ kind chains in this particular series and both the AL6 and BL6 Series contain the same pitch as RS60. Lastly, these chains cannot be powered with 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 only has two outer press fit plates. On the leaf chain, the most acceptable tension is low and the tensile strength is high. When handling leaf chains it is essential to confer with the manufacturer's catalogue so as to ensure the safety factor is outlined and use safety measures all the time. It is a good idea to carry out extreme caution and use extra safety measures in functions wherein the consequences of chain failure are severe.

Higher tensile strength is a direct correlation to the use of a lot more plates. For the reason that the use of a lot more plates does not enhance the utmost permissible tension directly, the number of plates can be restricted. The chains need frequent lubrication in view of the fact that the pins link directly on the plates, generating a very high bearing pressure. Making use of a SAE 30 or 40 machine oil is often advised for the majority of applications. If the chain is cycled over 1000 times on a daily basis or if the chain speed is more than 30m for every minute, it will wear extremely fast, even with continual lubrication. Therefore, in either of these situations utilizing RS Roller Chains will be much more suitable.

The AL-type of chains should only be used under certain conditions such as if wear is not a huge issue, when there are no shock loads, the number of cycles does not go over 100 on a daily basis. The BL-type will be better suited under various conditions.

If a chain with a lower safety factor is chosen then the stress load in components will become higher. If chains are used with corrosive elements, then they could become fatigued and break somewhat easily. Doing regular maintenance is really important when operating under these kinds of conditions.

The inner link or outer link type of end link on the chain would determine the shape of the clevis. Clevis connectors or otherwise known as Clevis pins are constructed by manufacturers, but the user usually supplies the clevis. An improperly made clevis can lessen the working life of the chain. The strands must be finished to length by the manufacturer. Check the ANSI standard or get in touch with the manufacturer.