



## Chain Hoists

There are three types of chain hoist; Differential, Lever Ratchet and Handchain. Generally speaking they all do the same thing, though there are some differences in the way they are operated, google search each of them to find out more about each type. The most important thing to remember when using any of these hoists is that they are designed to lift heavy objects. These are objects that you really wouldn't want to be dropped on your feet, and you really wouldn't want them dropped on your head! Therefore the safe use of chain hoists when rigging trussing is essential!

The first step along the road to good practice is ensuring good maintenance of the equipment. Generally speaking chain hoists are relatively low maintenance and so only regularly need: inspecting, cleaning and lubricating. I must stress how it is important to do this regularly as otherwise problems with the system may go unchecked and could potentially cause kit failure at an event. This inspection should be carried out by a person trained to do so roughly once or twice a year, though I would always recommend checking these systems every time they are used - see below for what to look for. If you are not happy, do not use the equipment and ask someone more experienced to check it and don't be afraid to say that you refuse to use it for safety reasons - even if this is going to cancel a show.

You should always look out for:

- Chains that are worn, kinked, stretched or cracked, these should be replaced before the next use.
- Load chains have gently curved sides that when overloaded become straight and sometimes stiff to flex. Stretched, straightened chains should be scraped and replaced.
- Load chains on hoists that have been stretched will not run smoothly on their blocks. Snapping or popping chains are an indication of overloaded chains.
- Rust, deep scratches and other damage to systems.

When choosing a chain hoist you will need to consider the loaded weight of your truss - that being when all lights, cables and power have been loaded on. It is recommended that you choose a chain hoist that has a SWL - Safe Working Load - of at least 1.5x the loaded weight of the truss, though if you can try to aim for around 2x the loaded weight of the truss.

For more information on how to operate chain hoists have a look on youtube as there are lots of videos that demonstrate the proper use of chain hoists, though this is no substitute to professional rigging training.

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