REVERSE ENGINEERING AND CERTIFICATION OF GIN POLE TRUCKS

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To Reverse Engineer a pole truck we will need to break down the truck to see how it is made and what it is made out of. Many items factor into this but today I will cover the basics of the process. Let's look at some components and design criteria that are critical to the truck's operation.
Manufactured Components

The components of the truck that are pre-manufactured and have manufacture specifications.
Blocks

- Due to lifting properties of the truck your blocks will be higher than previous standards. In some cases the block size will be double what the truck currently uses.
- Blocks will need Certificate of Testing, and NDT paper work.
- Keep in mind temperature specifications!
In most circumstances Line size is going to determine the WLL of a Pole truck. Good Quality 1/8” wire rope will allow for lifting of around 37,000 lbs. Mill Test Certification and wire rope inspection documents will be mandatory.
WINCH AND MOUNTING

- Make sure winch specifications meet lifting requirements
- Winch and plate need MPT, Hardness, and thickness testing.
- Detailed drawings will assist engineering to determine if the winch is mounted properly and securely
The Sheep's foot is another critical item in which NDT and drawings will be mandatory. A mild steel sheep's foot WILL NOT meet standards. Hardness testing and steel type will have to be found. Pins and surrounding plates will be included to determine strength.
Poles And Connections

- Pole types
- Pins
- Connections and surrounding plates
- Drawings
- NDT
NDT

Design and drawings

Connections
Make sure all critical areas are drawn and labeled for engineers use.

NDT for all critical areas

Is bed mounting sufficient for loads and lifting?
Good Luck! I have found that certain companies require different things. I suggest being patient and flexible as the process may take some time to work out.