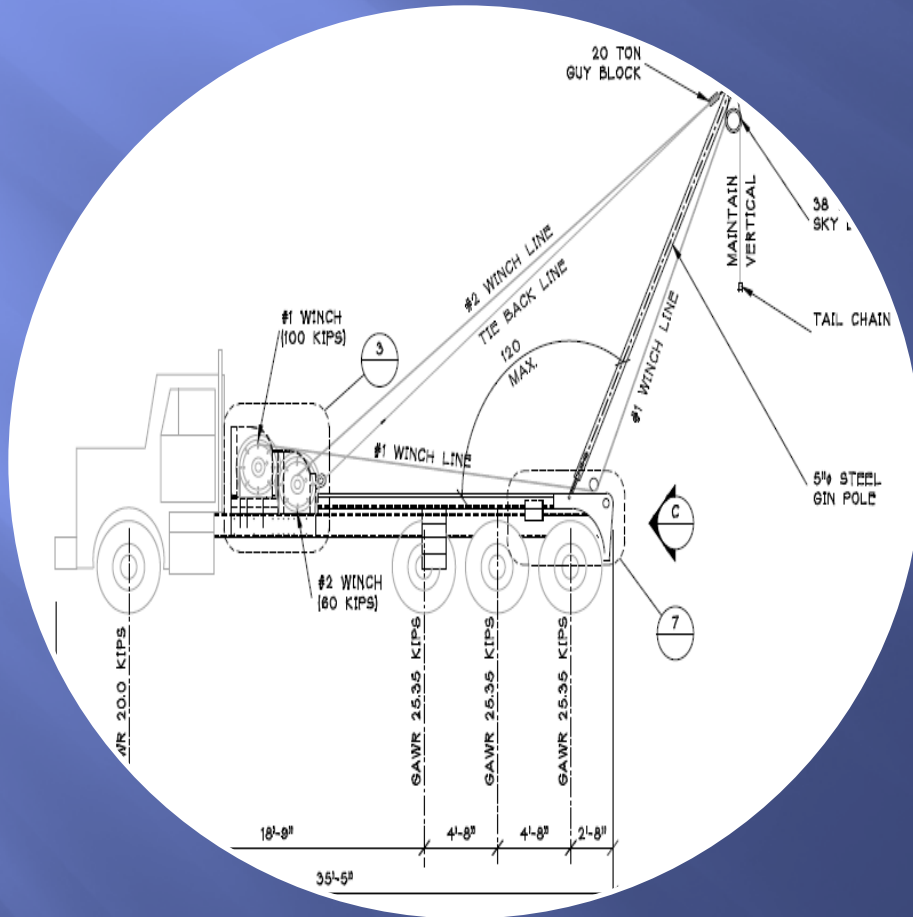


REVERSE ENGINEERING AND CERTIFICATION OF GIN POLE TRUCKS

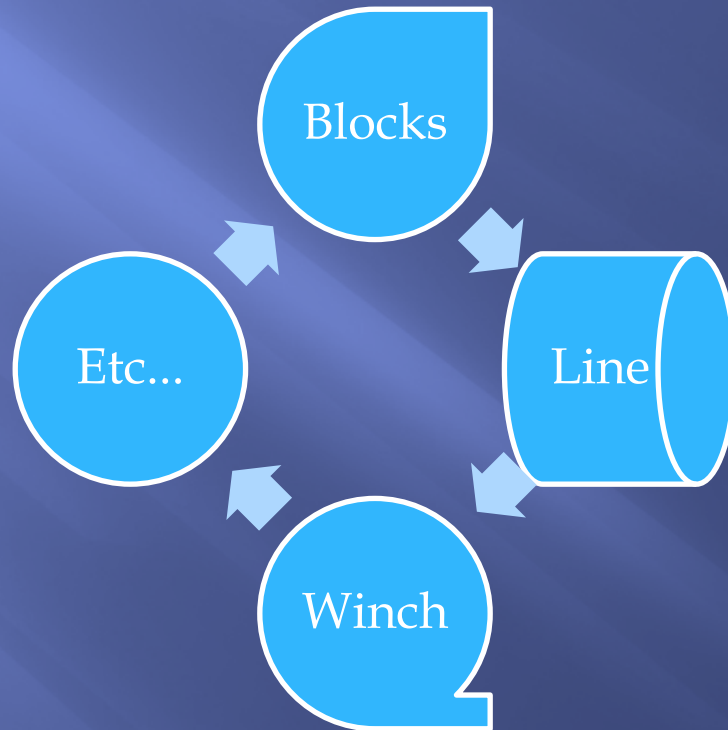
Presented by
Allen Castleman
Owner
Castleman Truck Inspection
(307) 277-9592

Reverse Engineering



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. Lets look at some components and design criteria that are critical to the trucks 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!



Line

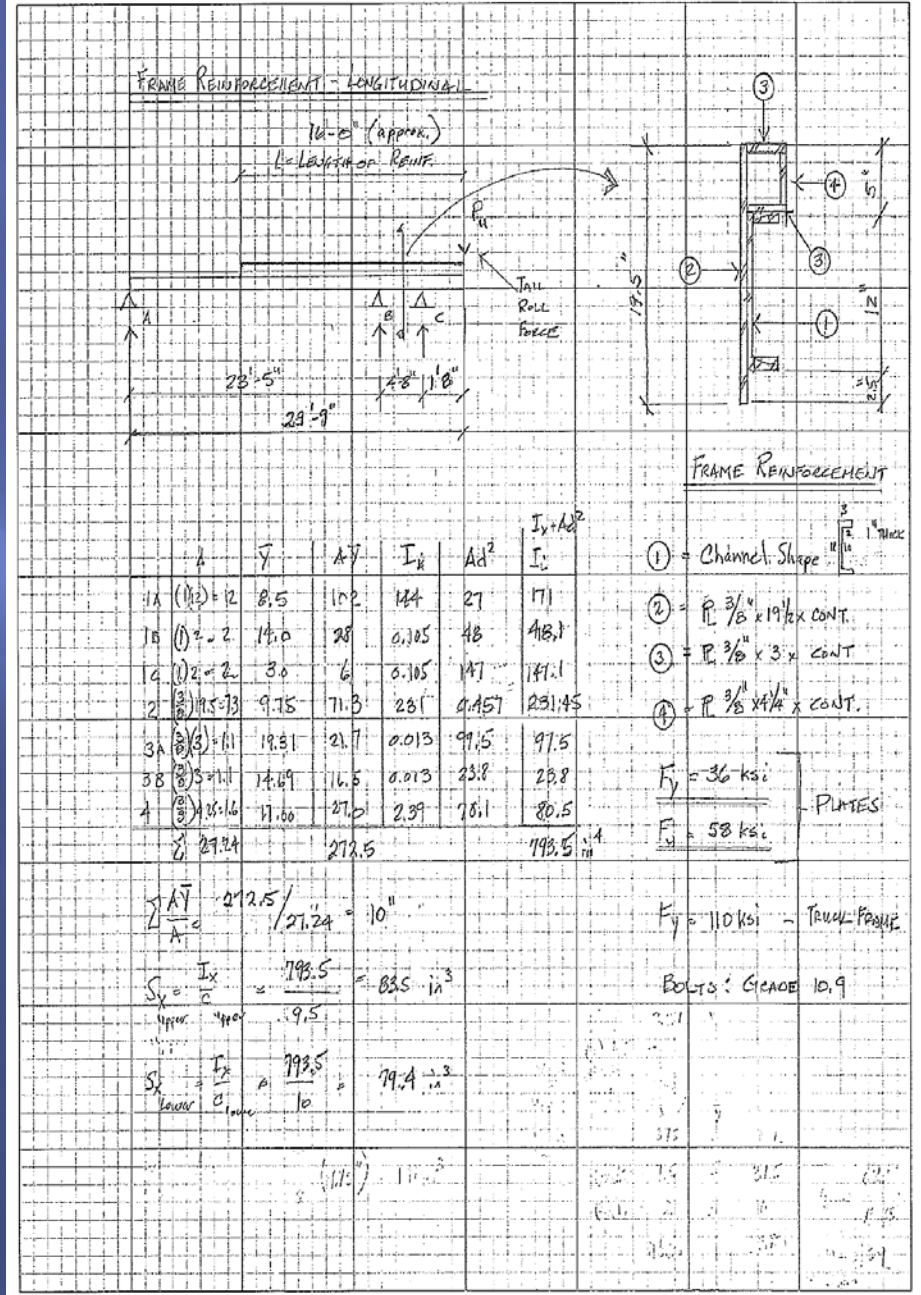
In most circumstances Line size is going to determine the WLL of a Pole truck.

Mill Test Certification and wire rope inspection documents will be mandatory

Good Quality 1 1/8" wire rope will allow for lifting of around 37,000 lbs

WINCH AND MOUNTING

CALC SET #2



- 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

Manufactured Bed and Components



Sheeps Foot

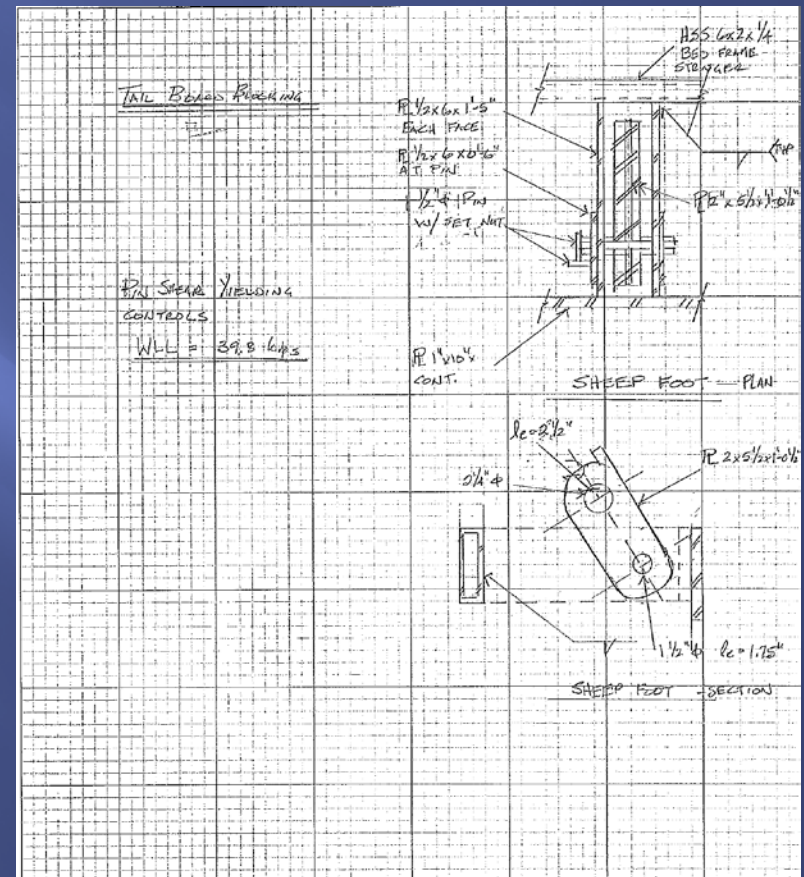
Gin poles



Truck bed

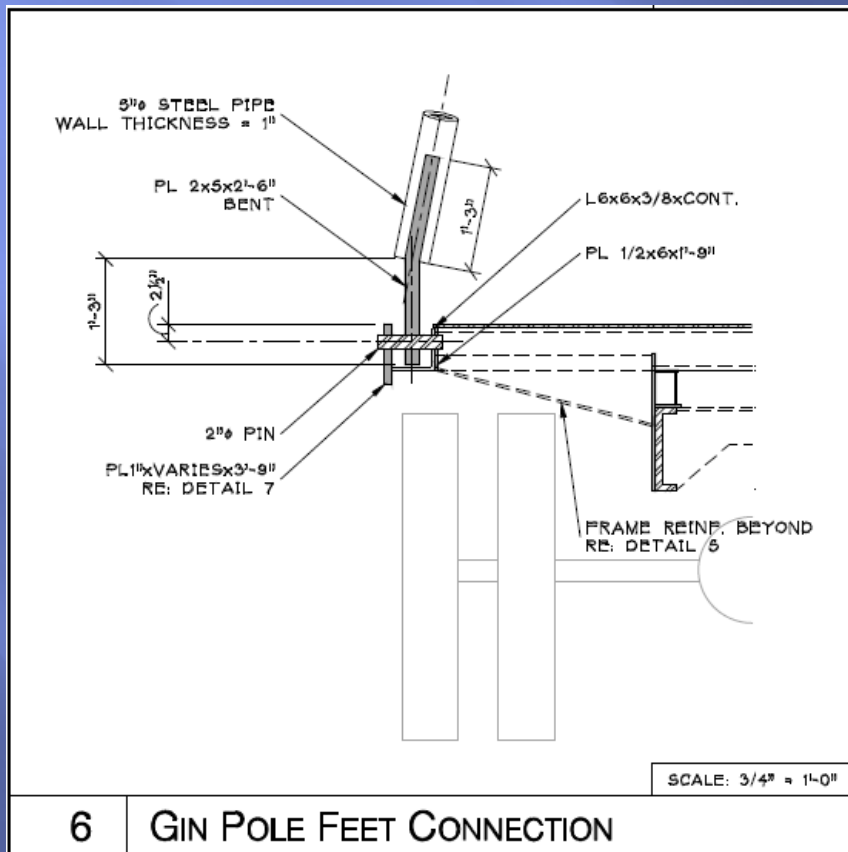
Sheep's Foot

- 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.



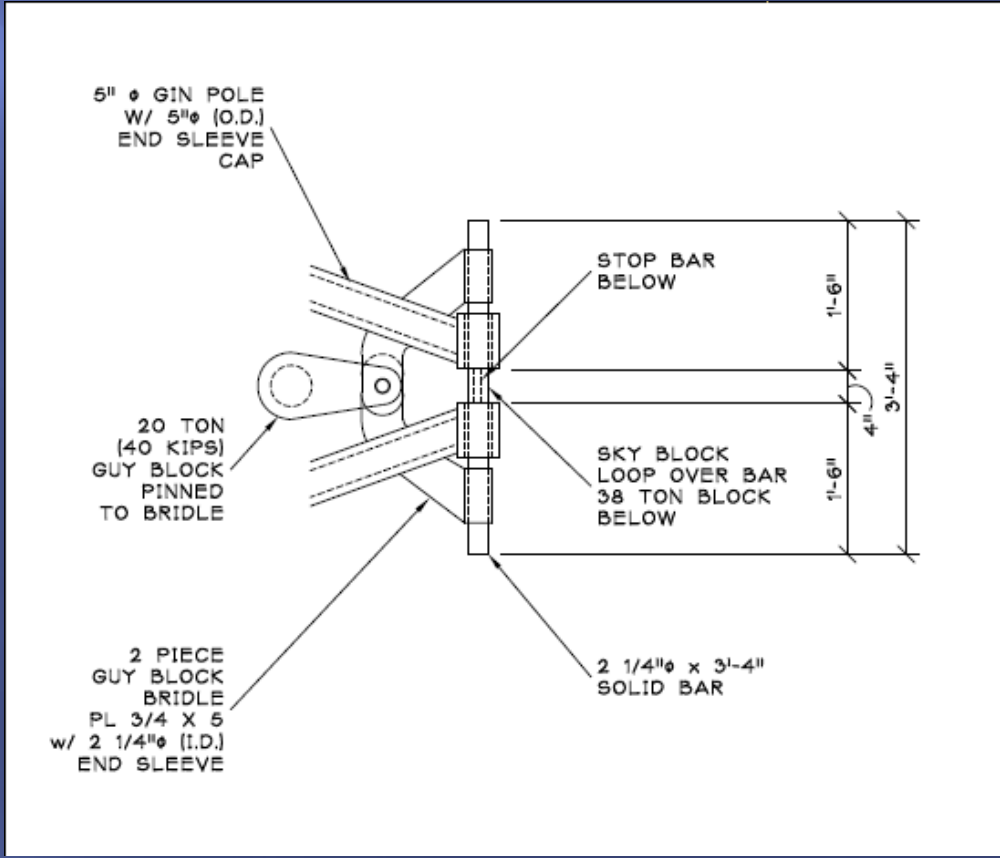
Poles And Connections

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

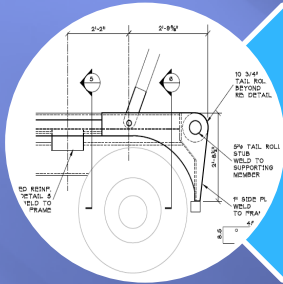


D-Bar Scissors Skypin

- ▣ NDT
- ▣ Design and drawings
- ▣ Connections



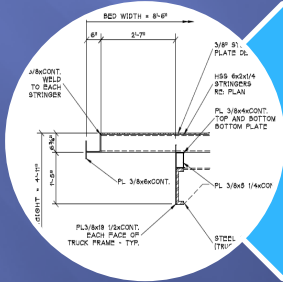
Truck Bed and Mounting



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?

A Complete List of Certification Requirements!

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.

