

WAC 296-32-24022 Gin poles—Installation. When installing gin poles, the employer shall ensure that the following requirements are met:

(1) All applicable requirements for design, construction, installation, modification, testing, inspection, maintenance, and operation of gin poles as prescribed by the manufacturer or a registered professional engineer are met.

(2) The gin pole shall be attached to a structure in an arrangement with its upper portion cantilevering above the tower top.

(3) The employer shall ensure that when the gin pole is designed, consideration shall be given to the possibility of personnel climbing the pole to perform rigging functions and for tie off points to accommodate fall protection equipment.

(4) The rooster head which is located at the top of the gin pole shall meet the following requirements:

(a) The side plates shall have bolts or pins with spacers around the sheave so the load line is held in place and side plate distance is controlled.

(b) Sheave diameter and groove shall be designed for the load line size and type being used.

(c) The distance between the sheave edge and the side plate shall not exceed twenty-five percent of load line diameter unless a mechanical means is provided to contain the load line within the sheave groove.

(5) Tracks used to guide and support gin poles during the jumping process shall not be used as a bridle or mid-level support unless specifically designed for such use.

(6) The load line is used to raise and lower the intended load. The load line shall leave the hoist at ground level, go through a block at the base of the tower, then up through the middle of the pole, through the rooster head and back down to the ground to pick up the intended load.

(7) A gin pole chart shall be provided for each pole. Gin pole charts shall contain all of the following information as a minimum:

(a) Identification number or other reference.

(b) Gin pole description.

(c) Safe lifting capacities (gross load) based on cantilever projection (L_a), overall gin pole length (L), and type of tag.

Note: (L_a) is the length of the pole that sticks up above and is not supported by the tower.

(d) Reaction forces at gin pole attachment points.

(e) A table to convert degrees to a field measurement.

(f) A warning that the load chart is for lifting loads and to reduce the safe lifting capacity by one half when lifting personnel.

(8) All lifts shall be within the ratings allowed in the "load chart." Any lift or lifting to be allowed on a special basis, which is outside of the "load chart," shall only be allowed at the direction of a registered professional engineer. Special monitoring and measuring conditions, as specified by the engineer, shall be provided and used in the field during all "special engineered lifts."

(9) Markings for gin poles shall be as follows:

(a) Each gin pole shall be permanently marked with an identification number that references a specific load chart.

(b) For proper assembly, each section and leg of the gin pole shall be marked in a specified sequence.

(10) The designer/engineer specified straightness tolerances shall be used for inspection. Minimum inspection criteria for gin poles shall be done by a qualified person as follows:

(a) A detailed documented inspection annually or within one year prior to being placed in service.

(b) A general visual inspection during assembly prior to use on a specific project.

(c) After any abnormal occurrence.

(11) Rigging equipment for the gin pole shall comply with all of the following:

(a) Wire/synthetic rope, slings, chains, shackles, turnbuckles, links, hooks, sheaves, rotating rooster heads, blocks, and hoists, used in a gin pole lifting arrangement shall meet the manufacturer's safe working load limits. In addition, each component other than chain slings, shall have a nominal breaking strength of not less than five times the static load applied. Chain slings shall have a nominal breaking strength of not less than four times the static load applied. Consideration for end fitting losses and actual positioning of connecting parts shall be given.

(b) Lugs or other devices for lifting or attaching the gin pole in position shall be designed with load and resistance factors appropriate for their intended use.

(c) Alloy chains and chain terminations shall be rated for overhead lifting. Alloy chains shall be identified with a manufacturer's mark indicating the grade of the chain.

(d) Only properly heat treated hooks and shackles shall be used. The manufacturer's load rating shall be stamped on the product.

(e) The breaking strength of the sheave shall equal or exceed the breaking strength of the wire rope intended for the sheave.

[Statutory Authority: RCW 49.17.010, 49.17.040, 49.17.050, 49.17.060, and chapter 49.17 RCW. WSR 17-20-069, § 296-32-24022, filed 10/2/17, effective 1/1/18.]