

OSHA INTERVIEW QUESTIONS - CRANE AND DERRICKS

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1. Before using the limited exception to mandatory minimum clearance, what must the employer first determine?

- A. That the utility owner/operator can immediately deenergize the line.
- B. That the specific work required to complete the project cannot be performed while maintaining the Table A clearance.
- C. That an insulating link has been installed below the load line.
- D. That a registered professional engineer has determined the absolute minimum clearance.

Correct Answer: B

2. If deenergizing, grounding, or relocating an energized power line is not feasible, what is the next mandatory step for a crane operation to use the limited exception?

- A. Appoint a Project Director immediately.
- B. Hold a planning meeting with all crew members.
- C. Have the utility owner/operator or a registered professional engineer determine the absolute minimum clearance.
- D. Install an automatically reclosing feature on the circuit interrupting device.

Correct Answer: C

3. Who must determine the absolute minimum clearance distance for a lift operating under the limited exception?

- A. The dedicated spotter and the crane operator.
- B. The Project Director and all employers involved.
- C. The power line owner/operator or a registered professional engineer who is a qualified person.
- D. The competent person conducting the shift inspection.

Correct Answer: C

4. Which of the following factors MUST be considered when determining the absolute minimum clearance?

- A. The cost of the alternative lift method.
- B. The time necessary to bring the equipment, load line, and load to a complete stop.
- C. The operator's experience level.

D. The distance of the lift from the construction site's entrance.

Correct Answer: B

5. What must be made inoperative, if the device permits, before work begins when operating under the limited exception near a power line equipped with an automatic reenergizing device?

- A. The crane's automatic range limiter.
- B. The automatic reclosing feature of the circuit interrupting device.
- C. The dedicated spotter's communication device.
- D. The crane's emergency shutdown feature.

Correct Answer: B

6. Under the limited exception, who is required to be in continuous contact with the operator to ensure the equipment does not breach the minimum clearance?

- A. The Project Director.
- B. A registered professional engineer.
- C. A dedicated spotter.
- D. The utility owner/operator.

Correct Answer: C

7. What is the required minimum distance for the perimeter barricades erected to prevent unauthorized personnel from entering the work area under the limited exception?

- A. At least 5 feet away from the equipment.
- B. At least 10 feet away from the equipment.
- C. Exactly 15 feet away from the equipment.
- D. As close to the power line as possible.

Correct Answer: B

8. What type of protective equipment must all employees who may come in contact with the equipment, load line, or load (except operators on the equipment) wear when operating under the limited exception?

- A. A full body harness.
- B. A high-visibility vest.
- C. Insulating gloves rated for the voltage involved or another effective insulating means.
- D. A nonconductive hard hat.

Correct Answer: C

9. If an operator is remotely operating the equipment from the ground under the limited exception, what is required to insulate him/her from the ground?

- A. A nonconductive tag line.
- B. Insulating line hose or cover-up.
- C. An elevated warning line.
- D. Wireless controls or insulating mats.

Correct Answer: D

10. Who must be identified and appointed to direct the implementation of the protective procedures and have the authority to stop work at any time to ensure safety?

- A. The Qualified Person.
- B. The Competent Person.
- C. The Project Director.
- D. The Lead Spotter.

Correct Answer: C

11. If electricity arcs from the power line to the equipment, what action is immediately required?

- A. Continue the operation while closely monitoring the arc.
- B. Safely stop operations and develop new, more protective procedures or have the utility deenergize the line.
- C. Have the dedicated spotter increase the minimum clearance.
- D. Call for an immediate monthly inspection.

Correct Answer: B

12. Which of the following must be installed at a point between the end of the load line (or below) and the load under the limited exception?

- A. A range limiting device.
- B. An insulating link/device.
- C. A boom angle indicator.
- D. An anti-two-block device.

Correct Answer: B

13. What type of rigging and tag lines must be used when operating under the limited exception to minimum clearance?

- A. Steel reinforced rigging and braided nylon tag lines.
- B. Conductive rigging and steel tag lines.
- C. Nonconductive rigging and nonconductive tag lines.

D. Insulated-only rigging and wire rope tag lines.

Correct Answer: C

14. Who is permitted to be in the area of the crane and load when operating under the limited exception?

- A. Only personnel essential to the operation.
- B. Only the operator and the dedicated spotter.
- C. Any worker who has completed basic electrical safety training.
- D. All personnel required for the lift, plus the Project Director.

Correct Answer: A

15. What condition is a required consideration in a shift inspection for a crane?

- A. Verification of the most recent annual load test.
- B. Proper inflation and condition of tires (when in use).
- C. Confirmation that the insulating link is correctly installed.
- D. Torque specification of all tower bolts.

Correct Answer: B

16. Who is required to conduct the shift inspection for crane and derrick equipment?

- A. A qualified person.
- B. A registered professional engineer.
- C. A competent person.
- D. The designated Project Director.

Correct Answer: C

17. Which item is NOT required to be checked during the minimum shift inspection?

- A. Hydraulic system for proper fluid level.
- B. Control mechanisms for maladjustments.
- C. Welds on structural members for cracks.
- D. Ground conditions around the equipment for proper support.

Correct Answer: C

18. What corrective action must be taken if a shift inspection shows that a required safety device is not working properly?

- A. The equipment may be used for up to 30 calendar days with temporary alternative precautions.
- B. The equipment must not be used until the deficiency is corrected.
- C. A qualified person must conduct a follow-up inspection within 7 days.

D. The deficiency must be documented and monitored in monthly inspections.

Correct Answer: B

19. If an operational aid is found not working properly during a shift inspection, for what limited time period may the equipment be used, provided specified temporary alternative precautions are taken?

- A. 30 calendar days, regardless of the aid type.
- B. 7 or 30 calendar days, depending on the type of operational aid.
- C. Only until the end of the current shift.
- D. A maximum of 3 months.

Correct Answer: B

20. What is the minimum retention period for the documentation of a monthly inspection?

- A. 6 months.
- B. 12 months.
- C. 3 months.
- D. 1 month.

Correct Answer: C

21. Who must conduct the annual/comprehensive inspection?

- A. The equipment operator.
- B. A competent person.
- C. A qualified person.
- D. The Project Director.

Correct Answer: C

22. Which item is specifically included in the annual/comprehensive inspection but NOT in the shift inspection?

- A. Hydraulic system fluid level.
- B. Structural members for deformed, cracked, or significantly corroded conditions.
- C. Control mechanisms for maladjustments.
- D. Safety devices for proper operation.

Correct Answer: B

23. During an annual inspection, what must be inspected on sheaves and drums?

- A. Proper lubrication and color coding.
- B. Cracks or significant wear.

- C. Compliance with load chart tolerances.
- D. Manufacturer's part number.

Correct Answer: B

24. What is the minimum retention period for the documentation of an annual/comprehensive inspection?

- A. 3 months.
- B. 6 months.
- C. 12 months.
- D. 24 months.

Correct Answer: C

25. What must an inspection of modified equipment assure prior to initial use?

- A. That the modification was pre-approved by the operating crew.
- B. That the modifications or additions were made in accord with the manufacturer or RPE's approval and includes functional testing.
- C. That a new annual inspection is immediately scheduled.
- D. That the load chart is visibly posted in the operator's cab.

Correct Answer: B

26. For equipment that has been idle for 3 months or more, what kind of inspection is required before being used?

- A. An annual/comprehensive inspection.
- B. A shift inspection, but with a qualified person.
- C. An inspection in accord with the requirements for monthly inspections, conducted by a qualified person.
- D. A post-assembly inspection.

Correct Answer: C

27. What type of inspection is required after equipment has had a repair or adjustment that relates to safe operation (e.g., to a braking system)?

- A. A severe service inspection.
- B. A pre-erection inspection.
- C. An inspection by a qualified person, including functional testing, before initial use.
- D. An inspection by a competent person during the next shift.

Correct Answer: C

28. For tower cranes, what is an additional item that must be included in the monthly inspection beyond the standard shift inspection items?

- A. Full disassembly of the turntable bearing.
- B. Inspection of tower (mast) bolts and structural bolts for loose or dislodged condition.
- C. A full functional load test.
- D. Gudgeon pins for cracks, wear, and distortion.

Correct Answer: B

29. What is required for a tower crane component that a qualified person determines is damaged or worn to the extent that it would create a safety hazard during a pre-erection inspection?

- A. It must be used with a warning tag.
- B. It must be repaired and reinspected by the qualified person before being erected.
- C. It must be monitored during monthly inspections.
- D. It can be erected immediately, but the load rating must be reduced.

Correct Answer: B

30. When is a load test required for a tower crane?

- A. After every lift exceeding 75% of rated capacity.
- B. After each erection.
- C. Only during the annual inspection.
- D. Every 3 months, regardless of use.

Correct Answer: B

31. Who must develop the written load test procedures for a tower crane if manufacturer's instructions are unavailable?

- A. The Project Director.
- B. A registered professional engineer familiar with the equipment.
- C. The competent person.
- D. The equipment manufacturer.

Correct Answer: B

32. If the qualified person determines a deficiency in an annual inspection needs to be monitored, even though it is not presently a safety hazard, what is the employer required to do?

- A. Take the equipment out of service immediately.
- B. Ensure the deficiency is checked in the monthly inspections.
- C. Immediately schedule a severe service inspection.

D. Document it and take no further action until the next annual inspection.

Correct Answer: B

33. When operating under the limited exception, who is prohibited from touching the load line above the insulating link/device and the crane?

- A. The dedicated spotter.
- B. Workers other than the operator.
- C. The Project Director.
- D. Only unauthorized personnel.

Correct Answer: B

34. Which type of inspection specifically requires a review of the hydraulic and pneumatic pumps and motors for performance indicators like unusual noises or low operating speed?

- A. Shift inspections.
- B. Monthly inspections.
- C. Post-assembly inspections.
- D. Annual/comprehensive inspections.

Correct Answer: D

35. In a severe service inspection, if there is a reasonable probability of damage (e.g., shock loading), what must the qualified person inspect first?

- A. The operator's training records.
- B. The equipment for structural damage to determine if it can continue to be used safely.
- C. The tires for proper inflation.
- D. The rigging for nonconductive properties.

Correct Answer: B

36. Which party must an employer consult with if they decide it is absolutely necessary to operate closer than the required minimum distance?

- A. The nearest OSHA office.
- B. The utility that owns or operates the line.
- C. The registered professional engineer for the project.
- D. The crane manufacturer.

Correct Answer: B

37. What is a consequence of a serious safety hazard being identified during a shift inspection?

- A. The equipment must be monitored in monthly inspections.

- B. The equipment can be used for a limited period (7 or 30 days).
- C. The equipment must not be used until the deficiency is corrected.
- D. The operator must be retrained immediately.

Correct Answer: C

38. When operating under the limited exception, who is responsible for installing insulating line hose or cover-up, where such devices are available?

- A. The crane operator.
- B. The Project Director.
- C. The utility owner/operator.
- D. The dedicated spotter.

Correct Answer: C

39. What must a post-assembly inspection assure before the equipment can be used?

- A. That all new parts were purchased from the original manufacturer.
- B. That the equipment is configured in accord with manufacturer equipment criteria.
- C. That the operator is a qualified person.
- D. That a Project Director has been appointed.

Correct Answer: B

40. If manufacturer equipment criteria are unavailable for a post-assembly inspection, who determines if a Registered Professional Engineer (RPE) is needed to develop the configuration criteria?

- A. The Project Director.
- B. The competent person.
- C. The qualified person conducting the inspection.
- D. The equipment owner.

Correct Answer: C

41. What must be inspected on hydraulic and pneumatic flexible hoses during an annual inspection?

- A. Only the junction with the fittings for leaks.
- B. The outer covering for blistering, abnormal deformation, or other signs of failure/impending failure.
- C. Only the color coding for proper identification.
- D. The internal fluid temperature.

Correct Answer: B

42. During a shift inspection, what must be checked on hooks and latches?

- A. Only their color and paint condition.
- B. Deformation, cracks, excessive wear, or damage such as from chemicals or heat.
- C. Only their correct attachment point.
- D. Their load capacity rating.

Correct Answer: B

43. Under the limited exception, if the equipment is equipped with a device that automatically limits range of movement, how must it be used?

- A. It must be disabled to allow for maximum flexibility.
- B. It must be used and set to prevent any part of the equipment from breaching the minimum approach distance.
- C. It must only be used if the load is over the rated capacity.
- D. It must be checked only during the annual inspection.

Correct Answer: B

44. Which employees must be trained in the topics listed in the section before working under the limited exception?

- A. Only the Project Director.
- B. Only the dedicated spotter.
- C. Each operator and crew member assigned to work with the equipment.
- D. Only employees wearing insulating gloves.

Correct Answer: C

45. What must be inspected for derricks during the shift inspection?

- A. Gudgeon pins for cracks.
- B. Foundation supports for continued ability to sustain loads.
- C. Guys for proper tension.
- D. All bolts for proper torque.

Correct Answer: C

46. What condition requires a special, severe service inspection?

- A. Operating the crane for more than 40 hours in one week.
- B. Prolonged exposure to a corrosive atmosphere.
- C. Lifts performed on a Saturday.
- D. Daily use of the maximum rated capacity.

Correct Answer: B

47. What is a key difference between a shift inspection and an annual inspection regarding required personnel?

- A. Shift is a Qualified Person; Annual is a Competent Person.
- B. Shift is a Competent Person; Annual is a Qualified Person.
- C. Shift can be the operator; Annual must be the Project Director.
- D. Shift is the utility owner; Annual is the RPE.

Correct Answer: B

48. What must be inspected on hydraulic and pneumatic cylinders during an annual inspection?

- A. The paint color.
- B. Rod seals and welded joints for leaks.
- C. The maximum lifting speed.
- D. The brand of the cylinder.

Correct Answer: B

49. If a qualified person performing an annual inspection identifies an unserviceable operator seat, what corrective action is required?

- A. The deficiency must be documented and checked in monthly inspections.
- B. The equipment must be taken out of service until the deficiency is corrected.
- C. The operator must provide their own seat.
- D. A full load test must be performed.

Correct Answer: B

50. What is the required action if an alternative method of performing a required lift, such as repositioning the crane or the load, **will enable an employer to maintain the required minimum distance from a power line?**

- A. The employer must use the alternative method and may not use the limited exception.
- B. The employer may proceed with the limited exception procedures after appointing a Project Director.
- C. The employer must still consult the utility owner/operator.
- D. The employer must hold a planning meeting but no other precautions are necessary.

Correct Answer: A

51. What must be included in the planning meeting, held as the second step of the limited exception, to prevent electrical contact and electrocution?

- A. The names of all employees on site.
- B. The procedures that will be followed to prevent electrical contact and electrocution.

- C. A full analysis of the soil conditions.
- D. A list of all previous crane accidents at the site.

Correct Answer: B
