

OSHA INTERVIEW QUESTIONS - CRANE AND DERRICKS

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1. What is the minimum width required for built-in walkways on lattice boom cranes manufactured after November 8, 2011, which have a cord centerline distance greater than six feet?

- A. 12 inches
- B. 18 inches
- C. 24 inches
- D. 6 feet

Correct Answer: A

2. When can a personal fall arrest system be anchored to a crane/derrick's hook or other part of the load line?

- A. Only when the load line is not in motion.
- B. Only if the operator is not in the cab.
- C. When no load is suspended from the load line and a qualified person has determined capacity requirements are met.
- D. Only on non-lattice boom cranes.

Correct Answer: C

3. Which measure is required to protect employees from being struck or crushed by a crane's rotating superstructure?

- A. Installing a motion-activated alarm on the superstructure.
- B. Erecting and maintaining control lines, warning lines, railings, or similar barriers to mark hazard boundaries.
- C. Ensuring all employees wear high-visibility vests.
- D. Requiring a dedicated spotter for all rotational movements.

Correct Answer: B

4. What is the exception to the requirement for using hooks with self-closing latches or their equivalent when employees are in the fall zone?

- A. When hoisting non-metallic materials.
- B. When setting wooden trusses.

- C. When connecting a load to a component more than 20 feet above the lower level.
- D. When the load is guided by two or more employees.

Correct Answer: B

5. Which option is **not a permitted method for an employer to ensure a signal person meets qualification requirements?**

- A. Documentation from a third-party qualified evaluator.
- B. Determination by the employer's qualified evaluator.
- C. Self-certification by the signal person after passing an online course.
- D. Documentation must specify each type of signaling for which the person is qualified.

Correct Answer: C

6. Controlled load lowering is required and free fall of the load line hoist is prohibited in all of the following circumstances **except when:**

- A. An employee is directly under the load.
- B. The load is over a shaft.
- C. The load is over a cofferdam where there are no employees in the fall zone.
- D. An employee is being hoisted.

Correct Answer: C

7. During non-assembly/disassembly work, what is the fall distance threshold that triggers the fall protection requirement for an employee moving point-to-point on a **horizontal lattice boom?**

- A. 6 feet or more.
- B. 10 feet or more.
- C. 15 feet or more.
- D. Fall protection is required regardless of fall distance on all lattice booms.

Correct Answer: C

8. OSHA requires that the operator's reception of signals must be by what kind of system?

- A. A visual-only display system.
- B. An analog radio system.
- C. A hands-free system.
- D. A system with a dedicated signal person line.

Correct Answer: C

9. For equipment manufactured after November 8, 2011, what is required for walking/stepping surfaces, excluding crawler treads?

- A. They must be padded for comfort.
- B. They must be covered with reflective material.
- C. They must have slip-resistant features/properties.
- D. They must be inspected daily by a competent person.

Correct Answer: C

10. Before an employee goes to a location in the superstructure's hazard area that is out of view of the operator, what must occur?

- A. The employee must wear a high-visibility vest.
- B. The employee must ensure that the operator is informed that he/she is going to that location.
- C. The work must stop until the employee is visible.
- D. The employee must first get a permit from the site supervisor.

Correct Answer: B

11. When is the use of a crane/derrick with a \"live boom\" generally **not prohibited?**

- A. When it is a land crane/derrick on a vessel/flotation device.
- B. When the equipment is capable of controlled load lowering.
- C. When the boom is less than 50 feet long.
- D. When the operator has an advanced certification.

Correct Answer: A

12. Who is responsible for initially determining if a state or local operator certification program meets the \"Federal floor\" requirements in 29 CFR 1926.1427?

- A. OSHA.
- B. The National Commission for the Certification of Crane Operators (NCCCO).
- C. The state or local governments.
- D. The crane manufacturer.

Correct Answer: C

13. What is the minimum fall distance above a lower level that triggers the requirement to provide and ensure the use of fall protection during *assembly/disassembly*** work?**

- A. More than 6 feet.
- B. More than 10 feet.
- C. More than 15 feet.
- D. More than 25 feet.

Correct Answer: C

14. Which statement is true regarding employees in the fall zone during a tilt-up or tilt-down operation?

- A. Only employees essential to the operation are permitted in the fall zone, but no employee may be directly under the load.
- B. Any employee may enter the fall zone if wearing a safety helmet.
- C. Only the load rigger and operator may be in the fall zone.
- D. Employees may be directly under the load if they are guiding it.

Correct Answer: A

15. Which part of the equipment is *not* considered a brake or locking device for the purposes of backup protection against boom free fall?

- A. A secondary friction brake.
- B. A ratchet and pawl device.
- C. Friction clutches.
- D. An integrally mounted holding device on a hydraulic drum.

Correct Answer: C

16. For lattice boom cranes manufactured *after* November 8, 2011, what characteristic mandates the requirement for built-in walkways?

- A. The boom is longer than 100 feet.
- B. The crane's rated capacity is over 50 tons.
- C. The cord centerline to cord centerline distance is more than six feet.
- D. The crane is used for assembly/disassembly more than once a month.

Correct Answer: C

17. The employer must train maintenance and repair personnel on which section's procedures, in addition to the operator, if they are authorized to start/energize equipment?

- A. Fall protection (Section 1423).
- B. Work Area Control (Section 1424).
- C. Tag-out and start-up procedures (Sections 1417(f) and (g)).
- D. Free Fall and Controlled Load Lowering (Section 1426).

Correct Answer: C

18. When a suspended load is stationary, for which employee activity is it *not* an exception to being within the fall zone?

- A. Engaged in guiding the load.
- B. Operating a concrete bucket.
- C. Supervising the site from the ground.
- D. Engaged in the initial attachment of the load to a structure.

Correct Answer: C

19. What must an operator do if they know an employee went to a location in the hazard area that is out of view?

- A. Immediately lower the boom and shut down the engine.
- B. Not rotate the superstructure until informed the employee is in a safe position.
- C. Call the site supervisor on the radio.
- D. Rotate the superstructure at a reduced speed.

Correct Answer: B

20. During non-assembly/disassembly work, fall protection is required while at a workstation on any part of the equipment, *except* in which location?

- A. On a horizontal lattice boom.
- B. At or near draw-works when the equipment is running.
- C. On a non-lattice boom.
- D. On a tower crane walkway.

Correct Answer: B

21. Hydraulic telescoping booms are required to have which device to prevent the boom from retracting in the event of hydraulic failure?

- A. A counterbalance valve.
- B. An external pressure gauge.
- C. An integrally mounted holding device.
- D. A mechanical locking pin.

Correct Answer: C

22. What is the minimum fall protection clearance that must be considered when anchoring a personal fall arrest system to the crane's hook, load line, or rigging?

- A. The requirements in 29 CFR 1926 subpart M.
- B. The requirements in the manufacturer's manual.
- C. A 6-foot free fall distance.
- D. A 15-foot clearance distance.

Correct Answer: A

23. What is the purpose of Section 1423 in the standard?

- A. To regulate crane load charts.
- B. To protect employees who work on elevated parts of equipment from falling.
- C. To specify training requirements for riggers.
- D. To establish communication protocols between the operator and signal person.

Correct Answer: B

24. When employees in the fall zone are engaged in hooking, unhooking, or guiding the load, the materials being hoisted must be rigged by which type of person?

- A. A certified operator.
- B. A competent person.
- C. A qualified rigger.
- D. The job site superintendent.

Correct Answer: C

25. What is the required alternative to erecting control lines or barriers for marking the hazard boundaries of the rotating superstructure when such barriers are demonstrated to be infeasible?

- A. Posting a dedicated flagger with a warning sign.
- B. Clearly marking the hazard areas by a combination of warning signs and high visibility markings on the equipment.
- C. Implementing a continuous radio watch between the operator and all employees.
- D. Using a safety net around the perimeter of the swing area.

Correct Answer: B

26. If a signal person's subsequent actions indicate they do not meet the qualification requirements, what must the employer do?

- A. Immediately terminate the employee.
- B. Require a one-week suspension.
- C. Not allow the individual to continue working as a signal person until retraining and reassessment confirms they meet the requirements.
- D. Report the signal person to OSHA.

Correct Answer: C

27. In a tilt-up or tilt-down operation, which group of employees is permitted in the fall zone (but not directly under the load)?

- A. Only the operator and rigger.

- B. Only employees who are guiding the load, monitoring its movement, or attaching/detaching the load.
- C. Any employee who has completed crush/pinch point training.
- D. Employees on a safety platform.

Correct Answer: B

28. Which piece of equipment is *not* required to be retrofitted with devices like steps, handholds, or guardrails, according to the standard, if it was not originally equipped with them?

- A. Equipment manufactured after November 8, 2011.
- B. Existing equipment.
- C. Equipment used for assembly/disassembly.
- D. Any tower crane.

Correct Answer: B

29. Who must be at the work site and informed when the crane/derrick's hook is being used to anchor a personal fall arrest system?

- A. The site supervisor.
- B. The equipment operator.
- C. A qualified rigger.
- D. The employer's safety officer.

Correct Answer: B

30. For friction drums that must have backup protection for the boom hoist, what secondary device is required to back up the primary brake while the boom is held?

- A. A separate emergency braking system controlled by the operator.
- B. A load-sensing hydraulic valve.
- C. A secondary braking or locking device, which is manually or automatically engaged.
- D. A remote-controlled dynamic brake.

Correct Answer: C

31. What is required of the employer with respect to the cost of training for an employee under the standard?

- A. The cost must be split between the employer and the employee.
- B. The training must be provided at no cost to the employee.
- C. The cost must be reimbursed after six months of employment.
- D. The cost must be covered by a union training fund.

Correct Answer: B

32. Which group of employees must be trained in how to recognize struck-by and pinch/crush hazard areas posed by the rotating superstructure?

- A. Only the operator and signal person.
- B. Only the maintenance and repair crew.
- C. Each employee assigned to work on or near the equipment.
- D. All employees on the job site.

Correct Answer: C

33. In which circumstance is the use of equipment with a live boom specifically *prohibited*, even if the equipment otherwise qualifies for the live boom exceptions (pre-1984 or on a vessel)?

- A. When the load is being lowered to the deck of the crane.
- B. When the load is over a power line or its clearance distance area.
- C. When the crane is operating in a remote, unpopulated area.
- D. When the wind speed is below 20 mph.

Correct Answer: B

34. To confirm an employee understands the information provided in training under the standard, what must the employer do?

- A. Obtain a signature on a training log.
- B. Evaluate each employee.
- C. Provide a certificate of completion.
- D. Have the employee verbally repeat the information.

Correct Answer: B

35. During non-assembly/disassembly work, what is the height threshold above a lower level that generally triggers the fall protection requirement for an employee on a walking/working surface with an unprotected side or edge?

- A. More than 4 feet.
- B. More than 6 feet.
- C. More than 8 feet.
- D. More than 10 feet.

Correct Answer: B

36. When can a maintenance or repair employee operate the equipment for diagnostic purposes without meeting the operator qualification/certification requirements of Section 1427?

- A. If the operation is limited to functions necessary to perform maintenance, inspect, or verify performance.

- B. If the operation is performed after normal working hours.
- C. If the equipment is stationary.
- D. Never, they must always be Section 1427 qualified.

Correct Answer: A

37. Which type of hoisting route is required to be used where available?

- A. Routes that maximize visibility for the operator.
- B. Hoisting routes that minimize the exposure of employees to hoisted loads.
- C. The shortest route possible to save time.
- D. Routes that avoid residential areas.

Correct Answer: B

38. For a boom more than six feet from cord centerline to cord centerline, what must be true about the built-in walkway regarding guardrails?

- A. The walkways must be protected by guardrails at all times.
- B. The walkways need not be protected by guardrails, railings, or other permanent fall protection attachments.
- C. Guardrails are only required if the walkway is above 15 feet.
- D. Guardrails must be provided if the boom is non-lattice.

Correct Answer: B

39. Which of the following is **not a specific qualification requirement for a signal person?**

- A. Be competent in the application of the type of signals used.
- B. Know and understand the Standard Method for hand signals if hand signals are used.
- C. Have an advanced degree in mechanical engineering.
- D. Have a basic understanding of equipment operation and limitations.

Correct Answer: C

40. Which safety measure is required when employees are in the fall zone and engaged in hooking, unhooking, or guiding the load?

- A. The load must be lowered at a speed no greater than 10 feet per minute.
- B. A secondary safety line must be attached to the load.
- C. The materials being hoisted must be rigged to prevent unintentional displacement.
- D. The operator must maintain continuous eye contact with the signal person.

Correct Answer: C

41. OSHA's general fall protection standard for construction work, 29 CFR 1926 subpart M, applies to work on cranes under which condition?

- A. It applies at all times unless contradicted by Subpart CC.
- B. It only applies when Section 1423 explicitly refers to a provision in that subpart.
- C. It only applies for heights greater than 30 feet.
- D. It applies only during assembly and disassembly.

Correct Answer: B

42. Load line free fall is prohibited and controlled load lowering is required when the load is over a cofferdam, unless what condition is met?

- A. The cofferdam is less than 20 feet deep.
- B. The load is less than 50% of the crane's capacity.
- C. There are no employees in the fall zone of the load.
- D. A qualified person is monitoring the lift.

Correct Answer: C

43. For maintenance and repair personnel to operate equipment without full operator certification, if they are *not* under the direct supervision of a certified operator, what must they be familiar with?

- A. Advanced calculus and physics principles.
- B. The operation, limitations, characteristics, and hazards associated with the type of equipment.
- C. OSHA's entire standard on cranes and derricks.
- D. The full history of the equipment.

Correct Answer: B

44. During non-assembly/disassembly work, fall protection is required when moving point-to-point on which type of boom that is *not* horizontal?

- A. Non-lattice booms only.
- B. Lattice booms only.
- C. Both non-lattice and lattice booms.
- D. Fall protection is never required on a non-horizontal boom.

Correct Answer: C

45. For hydraulic drums that require backup protection, what is the required mechanism to prevent boom hoist movement in the event of hydraulic failure?

- A. A counterbalance chain.
- B. An external hydraulic pump.
- C. An integrally mounted holding device or internal static brake.

D. A manual gear lock.

Correct Answer: C

46. What must an employer do to ensure the competency of equipment operators *before* the operator certification requirements go into effect?

A. Conduct a background check on all operators.

B. Ensure that equipment operators are competent through training and experience to operate the equipment safely.

C. Require all operators to pass a drug test.

D. Verify the operator has a valid driver's license.

Correct Answer: B
