

Crawler Tractor/Side Boom

A35

Technical Test – Theory

Roles and responsibilities	1. What is the definition of, or how can a hazard be described?
	A
	2. What is the purpose of a risk assessment?
	A
	3. List SIX typical subject areas that should be covered in a site induction.
	A
	4. What THREE main duties of The Health and Safety at Work Act must employees follow?
	A
	5. What does The Health and Safety at Work Act require employers to do with regards specifically to plant?
	A
	6. a) What is the purpose of a Method Statement and b) what is required of the operator?
	A
	7. Name FOUR different types or levels of sanctions that can be applied (by employers and judicial bodies) to plant operators who do not comply with, or follow legislation and regulations?
	A
8. Sideboom operators are generally regarded as 'safety-critical' workers. What does this mean?	
A	

continued...

Roles and responsibilities continued	9. Name THREE ways in which an operator can minimise their impact upon the environment whilst using the machine.
	A
	10. State the functions or job role of the following personnel: a) Appointed Person, b) Crane Supervisor, c) Slinger, d) Signaller
	A
	11. In what situation does a hard hat NOT need to be worn when operating a sideboom?
	A
	12. The operator has to use a new model of sideboom that they are unfamiliar with. What do Regulations (i.e. LOLER 98) and other guidance require the operator to have?
	A
	13. What are the possible outcomes if being prosecuted for not complying with legislation and regulations?
	A
	14. Give TWO examples of where The Work at Height Regulations may apply to sideboom operations.
	A
	15. How can a qualification or card benefit a sideboom operator?
	A
	16. Name THREE ways that a sideboom operator can contribute in ensuring repeat business with the client or main contractor.
	A

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Preparing for work	17. Where should the Operator’s Manual be kept and why?
	A
	18. What is the difference between a contract lift and a ‘standard’ hire?
	A
	19. a) What is meant by the lifting capacity of the sideboom and b) who determines it?
	A
	20. What is the purpose of a roll or ROPS frame?
	A
	21. List FIVE checks that should be made to the tracks and running gear.
	A
22. What are the THREE actions or stages that a side boom operator undertakes during pre-use inspections?	
A	
For questions 23 and 24 the Operator’s Manual for the machine being used for the test MUST be available for reference by the candidate	
23. Using the Operator’s Manual, state the figure for setting the track tension.	
A	
24. Using the Operator’s Manual, state the cold-starting procedure for the machine.	
A	
25. What is the purpose of extending the counterweight?	
A	
26. A sideboom has been delivered to site, assembled and configured for lifting. What must be carried out before lifting starts and by whom?	
A	

continued...

Preparing for work continued	27. If checking the oil level using a dipstick, why must gloves be worn?
	A
	28. Apart from the operator, who else may need to use the machine's Operator's Manual?
	A
	29. a) How does the number of lines or falls of rope affect the lifting capacity for the sideboom and b) how is hoist speed affected when the number of lines (or falls of rope) is reduced?
A	
Travelling and manoeuvring	30. During work, the engine starts to overheat. Explain the danger if someone tries to remove the radiator or expansion tank cap.
	A
	31. If the sideboom has to cross the public highway, the Road Traffic Act applies. a) What type of licence and which classes should the operator hold and b) what is the minimum age allowed?
	A
	32. a) What is the minimum distance allowed near open trenches when travelling the sideboom and b) explain why.
A	
Setting up for work	33. When MUST a banksman or signaller be used before moving a sideboom?
	A
	34. Why must the seat belt be worn if a ROPS frame or cab is fitted?
	A
	35. a) Which part of the sideboom applies loading or pressure to the ground and b) name TWO ways that pressure can be reduced.
A	
Setting up for work	36. If a load of 20 tonnes is lifted on 4 falls or lines of rope, what is the tension in each fall or line?
	A

continued...

Setting up for work continued	37. When travelling with a suspended load, name FIVE factors that must be taken into account by the operator before moving.
	A
	38. What is meant by load overhang?
	A
	39. Wind speeds can be variable throughout the working day. What action must be taken to ensure safe working conditions are maintained?
	A
	40. What is the main purpose of the Rated Capacity Indicator (RCI)?
	A
	41. a) What is the recommended minimum distance to be kept away from overhead power lines mounted on metal pylons when setting up the machine and b) explain why a distance should be kept.
A	
42. On a busy site, how would the slinger/signaller be identified to the sideboom operator?	
A	
Working tasks	43. The number of falls has been changed on the hook block. How has this action affected the RCI?
	A
	44. The safe working load or working load limit (SWL/WLL) of a multi-leg sling only applies in what TWO conditions or configuration?
	A
	45. Name TWO things that happen if the hoist rope is not vertical when lifting a load.
A	
46. Give FOUR reasons that may cause the sideboom to overturn.	
A	

continued...

Working tasks continued	47. If radios are to be used during the lifting operations, what FIVE actions and checks must be made by the sideboom operator before use?
	A
	48. What makes up the total (or gross) weight of a load that is to be lifted?
	A
	49. During the lifting operation, part of the task cannot be carried out as detailed in the lift plan. a) What initially must happen to the lifting operation and b) who authorises any changes?
	A
	50. If the hook block inadvertently (accidentally) lands, what course of action should be taken?
	A
	51. What effect can a swinging load have on a sideboom?
	A
	52. If the words STOP NOW are given to the sideboom operator by radio during the lift, what action must the operator take?
	A
	53. Only two legs of an 8 tonne 4 legged chain sling are being used. What is the maximum load that can be lifted?
	A
54. State the possible effect of lifting downhill on a slope.	
A	
55. Sidebooms are working in the same vicinity that encroach the operating radius of a crawler crane. What actions would the lift plan or method statement normally specify?	
A	
Completing work	56. Before leaving the cab for a rest break, after parking and switching off the machine, what final action must be carried out?
	A

Shutdown	57. When parking the machine at the end of the shift, name THREE places where the machine should NOT be parked.
	A
	58. The operator has been asked to drive the machine onto a transporter/trailer. a) Who is responsible for the loading operations and b) state FOUR actions to be considered by the operator before loading commences.
	A
	59. If the operator has loaded the machine onto a transporter/trailer on behalf of a driver, what checks must be carried out before they leave the cab?
	A
	60. Why should the sideboom be re-fuelled at the end of the day?
	A