

# Technical Test Theory

## Crawler - Tractor/Side Boom A35



No.	Question
1	Using the Operator's Manual, state the figure for setting the track tension. Note: The Operator's Manual for the machine being used for the test MUST be available for reference by the candidate.
2	If the hook block inadvertently (accidentally) lands, what course of action should be taken?
3	The operator has to use a new model of side boom that they are unfamiliar with. What do Regulations (i.e. LOLER 98) and other guidance require the operator to have?
4	Why are plant operators generally regarded as 'safety-critical' workers?
5	On a busy site, how would the slinger/signaller be identified to the side boom operator?
6	Name THREE ways in which an operator can minimise their impact upon the environment whilst using the machine.
7	Where should the Operator's Manual be kept and why?
8	What THREE main duties of The Health and Safety at Work Act must employees follow?
9	Why must the seat belt be worn, even though a ROPS frame or cab is fitted?
10	If a load of 20 tonnes is lifted on four falls or lines of rope, what is the tension in each fall or line?
11	Only two legs of an 8 tonne four-legged chain sling are being used. What is the maximum load that can be lifted?
12	In what situation does a hard hat NOT need to be worn when operating a side boom?

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13	<p>If the side boom has to cross the public highway, the Road Traffic Act applies.</p> <p>a) What type of licence and which classes should the operator hold and b) what is the minimum age allowed?</p>
14	<p>What is the purpose of extending the counterweight?</p>
15	<p>What are the THREE actions or stages that a side boom operator undertakes during pre-use inspections?</p>
16	<p>a) How does the number of lines or falls of rope affect the lifting capacity for the crane and b) how is hoist speed affected when the number of lines (or falls of rope) is reduced?</p>
17	<p>The safe working load or working load limit (SWL/WLL) of a multi-leg sling only applies in what TWO conditions or configuration?</p>
18	<p>a) What is meant by the lifting capacity of the side boom and b) who determines it?</p>
19	<p>Using the Operator's Manual, state the cold-starting procedure for the machine. Note: The Operator's Manual for the machine being used for the test MUST be available for reference by the candidate.</p>
20	<p>The operator has been asked to drive the machine onto a transporter/trailer.</p> <p>a) Who is responsible for the loading operations and b) state FOUR actions to be considered by the operator before loading commences?</p>
21	<p>Name FOUR different types or levels of disciplinary actions or sanctions that can be applied (by employers and judicial bodies) to operators of plant who do not comply with, or follow legislation and regulations.</p>
22	<p>What is the difference between a contract lift and a 'standard' hire?</p>
23	<p>a) What is the minimum distance allowed near open trenches when travelling the side boom and b) explain why?</p>
24	<p>State the functions or job role of the following personnel:</p> <p>a) appointed person, b) crane supervisor, c) slinger,</p>

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25	If the words STOP NOW are given to the side-boom operator by radio during the lift, what action must the operator take?
26	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?
27	Name TWO things that happen if the hoist rope is not vertical when lifting a load.
28	What is the main purpose of the Rated Capacity Indicator (RCI)?
29	Give TWO examples of where The Work at Height Regulations may apply to side-boom operations.
30	If checking the oil level using a dipstick, why must gloves be worn?
31	The number of falls has been changed on the hook block. How has this action affected the RCI?
32	Give FOUR reasons that may cause the side boom to overturn.
33	What does The Health and Safety at Work Act require employers to do with regards specifically to plant?

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34	When parking the machine at the end of the shift, name THREE places where the machine should NOT be parked.
35	What effect can a swinging load have on a side boom?
36	What is the definition of, or how can a hazard be described?
37	Side booms 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?
38	State the possible effect of lifting a load downhill on a slope.
39	What are the possible outcomes of facing prosecution for not complying with legislation and regulations?
40	What is the purpose of a roll or ROPS frame?
41	a) What is the purpose of a Method Statement and b) what is required of the operator?
42	How can a qualification or card benefit a side-boom operator?
43	A side boom has been delivered to site, assembled and configured for lifting. What must be carried out before lifting starts and by whom?
44	a) What determines the minimum distances that any part of plant and machinery has to be kept from over head electricity lines and b) explain why a distance should be kept.
45	When travelling with a suspended load, name FIVE factors that must be taken into account by the operator before moving.

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46	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?
47	During work, the engine starts to overheat. Explain the danger if someone tries to remove the radiator or expansion tank cap.
48	List SIX typical subject areas that should be covered in a site induction.
49	What makes up the total (or gross) weight of a load that is to be lifted?
50	a) Which part of the side boom applies loading or pressure to the ground and b) name TWO ways that pressure can be reduced.
51	What is the purpose of a risk assessment?
52	Apart from the operator, who else may need to use the machine's Operator's Manual?
53	Wind speeds can be variable throughout the working day. What action must be taken to ensure safe working conditions are maintained?
54	When MUST a banksman or signaller be used before moving a side boom?
55	Before leaving the cab for a rest break, after parking and switching off the machine, what final action must be carried out?
56	Why should a side boom be re-fuelled at the end of the day?
57	List FIVE checks that should be made to the tracks and running gear.

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58	What is meant by load overhang?
59	If radios are to be used during the lifting operations, what FIVE actions and checks must be made by the side-boom operator before use?
60	Name THREE ways that a side-boom operator can contribute in ensuring repeat business with the client or principal contractor.