

A04 Tower Crane

IMPORTANT NOTICE PLEASE READ CAREFULLY TO ENSURE SITE MEETS SPECIFICATION REQUIREMENTS

Experienced Workers (must be 21 years of age or over, with at least 3 years general plant-operating experience of which 2 years must be on the category of plant /equipment applied for, if candidates are not English speaking then an interpreter must be present.

Equipment Specification

1. Serviceable machine meeting current legislation which must be a cab controlled, assisted erect design of not less than 20 metres under-hook height, and must be of the following:
 - i) Trolley equipped jib,
 - ii) Luffing jib.

with the operator's and other appropriate manuals.
2. Suitable loads of known weights, being:
 - Load A
1 x load which must be a minimum of 75% of the cranes maximum working capacity at full radius.
 - Load B
1 x load which must be within the duties chart for 2 falls of rope.
 - Load C
1 x load which must be within the duties chart for 3 falls of rope.
3. A test area with a high structure between the lifting and landing places having have a minimum height of 5 metres, and able to carry out 'blind' lifts.
4. A safety harness to carry out a jib inspection.
5. An anemometer or other device to check the wind speed.
6. Slinger and Signaller assistance.
7. Suitable certificated lifting accessories for all loads.

Exercise Specification

The candidate is required to:

1. Carry out full pre-use checks as required by the manufacturer.
2. Carry out a jib inspection.
3. Put the tower crane into service.
4. Set the crane to lift Load A. The load is to be positioned at a distance of not less than 90% of the full radius of the crane. Lift Load A and slew for a minimum of 90 degrees. Place the load at minimum radius. When landed detach the load.
5. Set the crane to lift Load B. The load is to be positioned at mid radius. Lift Load B and place into a given position at least 75% of full radius. The route is to include lifting over a high structure of not less than metres in height. Once landed return the load back to its start point and detach.
6. Set the crane to lift Load C. The load is to be positioned at minimum radius. Lift Load C and rotate the crane through a minimum of 360 degrees. Once landed detach the load.
7. Set the crane to lift a load from a designated position, and land in a position out of sight of the candidate. On completion lift and land the load at the original start point.
8. Demonstrate changing the number of falls on the hook block from 2 to 4, or 4 to 2.
9. Put the crane out of service in the correct order and secure.

Note:

- Before carrying out any lifts, the candidate must confirm the total weight of the load with the instructor and ensure that the Rated Capacity Indicator (R.C.I.) is programmed correctly for the falls of rope, radius, boom length etc. The instructor must confirm that the R.C.I, programming is correct.
- All loads must be placed within 500 mm of a given position. The instructor will determine that position.
- All lifting and landing movements to be under directions of a signaller.
- Items 4, 5 and 6 may be carried out in any order.
- Items 7 and 8 may be combined with items 4, 5 or 6.