Practical Test
N102 Tower Crane

Test sequence	**ACTIVITY GUIDELINES** **The learner must: -** • All pre-start and running checks must be completed before any activity takes place • The shutdown procedures must only be completed by the learner at the end of the test • All additional test requirements can be completed over the period of the test duration
Operator safety and observations	• The lift plan, method statement and risk assessment must be followed at all times • The tower crane must be supplied with the correct operator's manual, be serviceable, certificated, meet the current legislation and fitted with the manufacturers LMI / RCI device • Radio communications and signals must be agreed between the slinger signaller and operator before the test starts • The instructor and learner should check that there are fire / evacuation and rescue / emergency procedures in place before any activity takes place • The anemometer or other wind speed indicator must be included in the daily pre-use checks
Specified loads	• **Load 1** 1 x load which is 75% of the cranes rated capacity at full radius with 2 falls of rope • **Load 2** 1 x load consisting of a structure or a tube no less than 5 metres in length • **Load 3** Should consist of a general purpose concrete pouring skip or a suitable and sufficient substitute that can be used to simulate a concrete pour
Setting up in preparation for work	• Prepare and set the crane for each lift • Flat area to allow lifting and placing of load • Area and obstacles suitable for out of sight lifts
Carry out lifting tasks	• **Lift 1:** Lift load 1 and position at least 90% of the maximum radius, rotate 180º stop then land the load at minimum radius. Lift and land the load at a designated position at mid-radius. On completion lift the load at mid radius and set it at 75% of the cranes radius and rotate 90º over a structure and land the load in the original position • **Lift 2:** Lift load 2 from minimum radius, rotate at least 360°keeping the load at a constant height and land in a designated place, then re-lift and return and land in original position. On completion lift the load and land at a designated out of sight position, re-lift and return and land in original position • **Lift 3:** Lift load 3 and simulate pouring a wall keeping in a straight line for at least 6 meters
Shutdown procedures	Put the crane in the out-of-service condition ensuring that the jib is free to "weather vane". On luffing jib tower cranes it is also important that the jib is left at the correct out of service radius (specified by the crane manufacturer) with the hook fully raised

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Additional notes specifications	• The tower crane selected must be fully erect and cab controlled, in a serviceable condition and conform with current legislation • Full radius equates to the configuration of the crane being used for the test • The slinger signaller used to attach loads must be certificated with a recognised in-date qualification • All lifting accessories must be certificated and fit for purpose • All loads to be landed within 100mm of designated landing point • Hand signals shall conform with the current BS 7121(if applicable) • The weight of all loads must be known and clearly marked on the load • It is imperative that the NPORS instructor checks that their learner has programmed the RCI / LMI correctly before carrying out each activity • All loads must be made safe and secure after landing • When simulating pouring a wall on lift 3 the slew and radius change functions are used simultaneously • Lift 2 should follow the ground contours and able to be handled by the slinger signaller
Test timings	The full test must be completed within 1hr 30 min
Note	It is recommended that all learners completing basic training receive a minimum 7hr Health, Safety, Environment and Induction Training