



Site Report

PRACTICAL EXAMINATION—TOWER CRANES

NCCCO has established specific conditions and guidelines that each Practical Examination Test Site must adhere to. This *Site Report* is designed to ensure these conditions are met. The Examiner is required to perform a site inspection prior to the start of the first examination and complete this *Site Report* form. The Examiner must arrive at the Test Site in sufficient time to verify, by measuring with a tape, the accuracy of the course layout with respect to the NCCCO Test Site Layout (CAD). The Examiner must also conduct a visual inspection of the crane for proper setup prior to testing any applicant. This *Site Report* must be presented on demand to any Practical Exam Auditor.

Please type or print neatly.

| | |
|-------------------------------|------|
| TEST SITE | DATE |
| NAME OF TEST SITE COORDINATOR | |

CRANE TYPE: HAMMERHEAD LUFFING JIB SELF-ERECTING

Check the following items for compliance:

PRE-TEST CANDIDATE BRIEFING AREA

An indoor facility suitable for the Pre-Test Briefing of exam candidates, to include:

- Sufficient tables and chairs to seat candidates for the Pre-Test Briefing
- A DVD player and television or computer for candidates to watch the CCO Practical Exam video
- A location so that waiting candidates are unable to observe other candidates being tested

Candidate materials available:

- A written description of the examination (*NCCCO Tower Crane Operator Candidate Handbook*)
- A plan view of the Test Site Layout (CAD)
- Operator's manual(s) and load chart(s) for all cranes to be tested on
- Instructions for the LMI system, if the crane is so equipped

This section is to be completed for each crane used during the testing session:

| | |
|------------------------|-------------------------|
| MAKE / MODEL OF CRANE: | SERIAL NUMBER OF CRANE: |
|------------------------|-------------------------|

TEST SITE SETUP

- Entire course is level within five percent of true level
- Zigzag Corridor has no more than a 6 in. maximum change in elevation
- Zigzag Corridor set up on asphalt, concrete surface, or firm and compacted sand, dirt, or gravel (free of vegetation), with a sufficiently uniform surface to permit the poles to stand vertical and slide freely; *grass surfaces are not acceptable*
- Site is free of debris, stored materials, surface irregularities, or hazards such that could interfere with test maneuvers
- No obstructions are within 5 ft. of the test course in any direction

Using the Test Site Layout (CAD), verify the following measurements:

- Distance from the center of rotation of the crane to the center of the Stop Circle (± 1 in.)
- Distance from the center of rotation of the crane to the center of the Test Weight Circle (± 1 in.)
- Distance from the center of rotation of the crane to the center of the Start Circle (± 1 in.)
- Distance from the center of rotation of the crane to the center of the Load Circle (± 1 in.)
- Distance from the centerline of the crane to the second leg of the Zigzag Corridor (± 1 in.)
- Distance from the centerline of the crane to the first leg of the Zigzag Corridor (± 1 in.)
- Length of all six sides of the Zigzag Corridor ($\pm \frac{1}{2}$ in.)
- Width of the Zigzag Corridor is 7 ft. ($\pm \frac{1}{2}$ in.)
- Distance between consecutive poles (2 ft. $\pm \frac{1}{2}$ in.)

SITE REPORT (CONT'D)

PRACTICAL EXAMINATION—TOWER CRANES

Test Site #: _____

PAGE 2 of 3

POLES

- 64 poles, made of 1½-inch, white PVC pipe (SCH 40), each 3 ft. long, ball on each pole (one inside splice per 3 ft. pole permitted; outside splices of PVC pipes NOT permitted; see page 10 for illustration)
- Top 12 in., painted or taped orange or red
- Mounted to a platform made of two layers of ¾-inch, CDX-grade (or better) plywood or one layer of 1-inch high density polyethylene (HDPE), cut 12 in. square; must weigh 5 lb. ± 10%
- A taut, longitudinal string line placed on the ground through the centerline of each pole base. A cut concrete line may be used in lieu of a string line; no other materials are acceptable.
- Spare poles and bases available

CIRCLES

- Start Circle has a 7 ft. 4 in. outside diameter (±½ in.) with a clearly marked inside line at least 2 in. wide and is located per the Test Site Layout (CAD)
- Start Circle is in line with the centerline of the mast and due left of the Test Weight Circle
- Stop Circle has a 7 ft. 4 in. outside diameter (±½ in.) with a clearly marked inside line at least 2 in. wide and is located per the Test Site Layout (CAD)
- Test Weight Circle has a 7 ft. 4 in. outside diameter (±½ in.) with a clearly marked inside line at least 2 in. wide and is located per the Test Site Layout (CAD)
- If marking circles on plywood or mats, the borders must be marked with materials with a flat, uniform surface and a lip variance not to exceed ¾ in. Any materials used may not interfere with the free movement of the pole bases. Wire rope is not permitted to be used as a course material.

CRANE SELECTION AND SETUP

- Crane as identified in the Test Site Layout (CAD)

TEST CRANE

- This crane has a current annual inspection with supporting documentation
- Set up and leveled, in the location specified, ready for operation, with engine running, in accordance with the manufacturer's recommendations
- Jib or boom length minimum 70 ft.

LOAD HOOK

- Height 60–200 ft.
- A length of 3/8- or 5/16-inch chain that can be quickly and easily attached and detached from hook:
 - Chain is painted orange or red
 - Chain attaches to bottom center of load hook (recommend using approx. 6-inch diameter ring on end of chain). Adding another ball/block for additional downhaul weight is not allowed. All tasks must be performed with the crane's load hook; any additional weight added to the block/ball must be above the hook.
- Chain measures 36 in. from bottom of hook

TEST WEIGHT

- Gross weight of 1,500 to 2,000 lb., verified by a weight ticket, crane's load indicating device (LMI, RCI, RCL), or other type of certification documenting the actual load weight available to the Examiner
- Cylindrical in shape and no protruding edges
- The diameter of the Test Weight is 3 ft.
- Height is 2–5 ft.
- Picking ears are mounted inside the Test Weight, or if mounted on the outside of the Test Weight the bottom of ears are at least 3 ft. 6 in. above the bottom of the weight
- Method of attachment: Test Weight rigging is 2–4 ft. in length (load-bearing point to load-bearing point); if using multiple sling legs, recommend 60-degree sling angles (minimum 30 degrees required)
- Four 36 in. lengths of 3/8- or 5/16-inch chain located inside rim at 0, 90, 180, and 270 degrees
NOTE: To measure the chain length, attach the Test Weight to the crane hook. Raise the Test Weight until the chain barely touches the ground and measure from the lowest point of Test Weight (including feet) to ground.
- Chains are painted orange or red
- If the Test Weight has feet attached, they do not extend more than 4 in. below the bottom of the Test Weight

SITE REPORT (CONT'D)

PRACTICAL EXAMINATION—TOWER CRANES

Test Site #: _____

PAGE 3 of 3

BLOCKING

- Matting or cribbing installed, as necessary, to provide a sound foundation for the crane

LOAD INDICATORS

- If the crane is equipped with a load indicator or load moment indicating (LMI) system, the system must be programmed for the proper load ratings, parts of line, and other settings prior to the beginning of any testing. A representative of the host organization who is familiar with the operation of the crane—and specifically with any LMI system on the crane—must be available near the test area during the times testing is being conducted.

TEST WEIGHT RIGGING

- All load-supporting components must be assembled in accordance with proper rigging practice and working load limits for the hardware used. Any specially fabricated structural components that are part of the load-supporting system must be designed and fabricated in accordance with the requirements of current applicable industry standards.

TEST COURSE SETUP

- The Practical Examiner whose signature appears at the end of this Site Report attests that he/she has set up the course. *(Check only if the Practical Examiner has set up the test course.)*
- The Examiner must have the following items for conducting the Practical Exam:
 - Two stopwatches
 - Clip board
 - Anemometer (wind meter)
 - Pen or pencil
 - Spirit level (2 ft. minimum)
 - Two 100 ft. measuring tapes
 - Test Site Layout (CAD)
 - Proctor
 - Verbatim instructions
 - Notification of test email (new Test Sites, if applicable)
 - Personal protective equipment (hard hat, work boots)
 - 30 ft. measuring tape

Deviations from the above-noted requirements are not allowed without written consent from the NCCCO Western Regional Office.

PRACTICAL EXAMINER ATTESTATION *(Examiner signature required)*

I attest that this is a true and accurate report of the above named Test Site.

| | |
|--------------------------|-------------------------------|
| SIGNATURE OF EXAMINER | DATE |
| PRINTED NAME OF EXAMINER | EXAMINER ACCREDITATION NUMBER |

This Site Report is to be completed by the Examiner prior to each testing session and sent with the candidate score sheets, applications, and other supporting documentation to: practicals@nccco.org.