



Ready Reference Checklist

PRACTICAL EXAMINATION—MOBILE CRANES

YOU WILL NEED A MOBILE CRANE IN AT LEAST ONE OF THE FOLLOWING CATEGORIES:

- Lattice Boom Crane (truck or crawler)
- Telescopic Boom Crane—Fixed Cab
- Telescopic Boom Crane—Swing Cab

THE FOLLOWING IS REQUIRED FOR EACH CRANE:

- A cylindrical Test Weight, diameter 2 ft. to 4 ft., weight (including rigging, overhaul ball, and any ancillary equipment hanging below the hook) to be calculated at 20 to 30 percent of maximum permissible single line pull for the crane as configured (in cases where 20 percent of the crane's line pull exceeds 2,000 lb., the minimum permitted test weight will be lowered to 2,000 lb.); weight 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

NOTE: 55-gallon drums do not meet NCCCO Test Weight requirements and MAY NOT be used.

- If a hook block is present on the crane, the crane must be equipped with an auxiliary boom head and the line used for testing must be reeved over the auxiliary boom head; otherwise the hook block must be removed
- Two lengths of 3/8-inch or 5/16-inch chain, painted orange or red, each 3 ft. long (\pm one chain link); one attaches to the crane hook (recommend using a 6-inch minimum diameter ring) and is measured from the bottom of the crane hook; the other is measured from the lowest point of the Test Weight (including feet)
- Overhaul ball, spherical in shape, smooth, constructed out of steel or iron, 30–48 in. circumference ($9\frac{1}{2}$ –15 in. diameter), with a hook attached to the bottom of the ball and a 2 in. wide horizontal line of contrasting color painted or taped around the center. The overhaul ball must satisfy OSHA and/or ASME requirements.
- 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)
- 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" above the bottom of the weight
- Two empty steel drums approximately 22 in. outside diameter and 34 in. high (e.g., 55-gallon drum), open at one end
- For lattice boom crane only:** 40 lb. of non-permeable ballast for ballasting the barrels (20 lb. each)
- PVC pipe, white, 1½ in. (SCH 40), sufficient to make 42 three-foot-long poles
- Two 4 ft. \times 4 ft. sheets of ¾-inch CDX-grade (or better) plywood, placed under barrels and secured or weighted as necessary to prevent movement
- ¾-inch, CDX-grade (or better) plywood or 1-inch high density polyethylene (HDPE)*, sufficient to create 42 pole bases, 12 in. \times 12 in. (nominal); must weigh 5 lb. \pm 10%
- 42 tennis balls
- 42 ft. of nylon string, to attach tennis balls to poles (optional)
- 84 1¼-inch zinc-plated (galvanized) screws, or equivalent, to secure nylon string to tennis balls and poles (optional)
- 500 ft. brightly colored string line (for Zigzag Corridor and Test Site layout use) **NOTE: Chalk line may NOT be used**
- Spirit level to verify levelness (minimum 2 ft. length)
- Paint (orange or red) for painting the tops of the poles and chain **NOTE: Red tape may be used for the poles**
- Paint of contrasting color for identifying the barrels, marking the overhaul ball, and circles
- Handheld wind speed indicator (anemometer)
- Two 100 ft. tape measures and one 30 ft. steel tape
- Stopwatches and clipboards for Examiner(s) and Proctor(s)

*EQUIPMENT SOURCES

NCCCO does not endorse or recommend specific vendors of any equipment, but the following sources may be helpful in finding required materials and equipment:

- **HDPE bases:** House of Plastics (part number HOP01-055), 2580 S. Orange Blossom Trail, Orlando, FL 32805, 407-843-3290, plastics@hopu.com