

## **Ready Reference Checklist** overhead cranes

## YOU WILL NEED AN OVERHEAD CRANE THAT MEETS THE FOLLOWING CRITERIA:

- □ Three ton minimum lifting capacity, with powered functions for *hoist, bridge,* and *trolley*
- □ Minimum bridge span of 25 ft.
- □ Minimum hook height of 13 ft.

## YOU WILL NEED THE FOLLOWING FOR EACH CRANE TO BE TESTED ON:

- □ A 3 ft. diameter cylindrical Test Weight, 2–5 ft. tall, weighing between 1,500 and 2,000 lb. (including rigging), 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
- One 3 ft. length of 3/8-inch or 5/16-inch chain, painted orange or red, measured from the lowest point of the Test Weight (including feet), and attached to the center of the Test Weight
- 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
- 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)
- D PVC pipe, white, 1½ in. (SCH 40), sufficient to make 54 three-foot-long poles
- □ 3/4-inch, CDX-grade (or better) plywood or high density polyethylene (HDPE)\*, sufficient to create 54 pole bases,  $1\frac{1}{2}$  in. ( $\pm\frac{1}{2}$  in.) × 12 in. × 12 in. (nominal)
- □ 54 tennis balls
- □ 54 ft. of #18 nylon string, to attach tennis balls to poles (optional)
- 🗇 108 1¼-inch zinc-plated (galvanized) screws, or equivalent, to secure nylon string to tennis balls and poles (optional)
- 🗇 Two horizontal poles, made of 1½-inch PVC pipe, painted red or orange 12 in. on both ends and 12 in. in the middle
- □ 500 ft. brightly colored string line (for Right Angle Corridor and CAD layout use) *NOTE: Chalk line may be used on concrete floors*
- D Paint (orange or red) for painting the poles and chain *NOTE: Red tape may be used for the poles*
- □ Rubber mats or paint to mark circular designated areas
- $\square~$  15 ft.  $\times\,27$  in. carpet runner, with three 9 in. painted square targets per diagram
- □ 13 ft.–15 ft. Chain-and-Ring Assembly per diagram
- Pin Assembly per diagram
- □ Handheld wind speed indicator (anemometer) for outside testing only
- □ 100 ft. tape measure
- □ 30 ft. steel tape (e.g., carpenter's)
- □ Stopwatches and clipboards for Examiner(s) and Proctor(s)
- Two-way communications devices (for cab-operated exams)
- □ *Cab-operated cranes with cab floor/platform more than 25 ft. above ground only:* Four lengths of 3/8- or 5/16-inch chain, painted red or orange, each 3 ft. long when measured from the lowest point of the Test Weight (including feet); attached around the perimeter of the Test Weight at 0, 90, 180, and 270 degrees

## \*EQUIPMENT SOURCES

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