

Hoisting Equipment Operator Examination Study Guide



FOR THE WRITTEN TEST THE HOISTING EQUIPMENT OPERATOR MUST BE ABLE TO:

- Determine weight of loads by use of simple mathematics and unit weights.
- Know basic rigging:
 - Hardware - wedge sockets, shackles, clips, thimbles, eyebolts, etc.
 - Wire rope - parts of, inspection
 - Different types of slings - effects of sling angle
 - Effects of center of gravity when rigging a load
 - Types of hitches to hold and control loads
 - Be able to size slings and hardware given tables
 - Safety rules - do's and don'ts
 - Definitions: rated strength, ultimate strength, etc.
 - Hand signals:
 - Equipment inspection: pre operation, daily, etc.
 - Load Charts: know how to use and interpret to determine capacity, structural strength vs. stability, determine hook height at various radiuses, pick and carry capacities if any.
 - Quadrants of operation and their adverse effects: "working over side", "over rear" or 360°
 - Operating procedure near power lines and safe working distance
 - Know general safety rules - shock and dynamic loading, swing out, consideration of weather conditions, items which could cause reductions in rated capacity, net capacity vs. gross capacity.
 - Know and understand OSHA 1910 General Industry Standard and 1926 Construction Industry Standards pertaining to hoisting and related items.
 - Know OSHA laws pertaining to soil excavations, classifications, and sloping/shoring.
 - Know "Call Before You Dig" requirements

SUGGESTED TECHNICAL READING/STUDY MATERIAL:

Training & Inspection Resource Center

9428 Old Pacific Hwy, Woodland, WA 98674

Telephone: (order desk) (888)567-8472 (info line) (360)225-5858 FAX: (360)225-5666

www.tirc.net

ASME/ANSI B30 STANDARDS (specifically B30.9, B30.26, B30.23, B30.20, ASME B30.10)

American Society of Mechanical Engineers

22 Law Drive, Box 2900, Fairfield, New Jersey 07007-2900

Telephone: 1-800-843-2763 FAX: (973)882-8113

ISO (International Standards) 7135, 10567, 10567.2

www.iso.org

OSHA Regulations (CFR) 1926.550 Construction 1910.180 General Industry

Local OSHA Area Offices

www.osha.gov

SAE International (hand signals)

400 Commonwealth Drive, Warrendale, PA 15096

Telephone: (724)776-4841 FAX: (724)776-0790

www.sae.org

"Call Before You Dig"

2040 Whitney Ave., Hamden, CT 06517

Telephone: 1-800-922-4455

www.cbyd.com