

Boom Truck Crane
AEN21BTC04
Updated March 2024

Focus Statement

Boom truck operators will know and implement the rules and regulations set forth by ASME B30.5 and will safely apply those standards in daily operations. Operators will read, know, and apply all information provided in the manufacturer’s operator manual and will be able to interpret load charts, load testing, LMIs, and any safety instrumentation of each crane. Crane operators will know machine conditions, operational limitations, and load limitations for situations in which the operator may be involved. The operators will conduct all hoisting operations in a safe manner. Operators will be able to effectively communicate with riggers, signal persons, and other site personnel involved with hoisting operations.

Overview

- Three-hour closed-book examination
- May use a basic function, non-printing calculator
- No extra papers, books, notes or study materials are allowed
- The following load charts below will be measured in this assessment (as available item content allows):
 - Altec AC26-103B
 - IMT
 - National-55
 - Manitex 2892S

Minimum passing score is 80.

Written Assessment Contents:

| Content Domain | Number of Questions |
|--|---------------------|
| Topic Area: Crane Set-up and Assembly | 16 |
| Assembly of Crane | 5 |
| Placement of Matting | 3 |
| Lubrication of Crane Components | 3 |
| Review of Lift Requirements | 5 |
| Topic Area: Calculate Crane Capacity | 12 |
| Verify Gross Capacity | 4 |
| Calculate Net Capacity | 8 |

Practical Examination

A corresponding hands-on Practical Examination is available and required to earn a certified credential.

ANSI Accreditation

NCCER’s Mobile Crane Operator Certification Program is accredited by the American National Standards Institute (ANSI). Details are available on NCCER’s website.

Assessment Development

All questions are developed and approved by subject matter experts under the direction of NCCER.

Credentials

Upon successful completion of the certification requirements, credentials can be viewed and printed by the individual or assessment program through their NCCER Account.

Score Report and Training Prescription

Each candidate will have online access through their NCCER Account to their assessment results including their overall score and pass or training recommended status.

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Written Assessment Contents:

| Content Domain | Number of Questions |
|---|---------------------|
| Topic Area: <i>Crane Operations</i> | 20 |
| <i>Crane Function Controls</i> | 6 |
| <i>Determine Crane Functions</i> | 3 |
| <i>Load, Unload, or Lift</i> | 5 |
| <i>Operational Aids (LMI, OLP, and Stability)</i> | 6 |
| Topic Area: <i>Emergency Procedures</i> | 3 |
| Topic Area: <i>Ensure Safety of the Lifting Area</i> | 3 |
| Topic Area: <i>Standard Hand Signals</i> | 13 |
| Topic Area: <i>Verification of Rigging</i> | 5 |
| Topic Area: <i>Verify Load and Rigging Weights</i> | 3 |

Total Number of Items **75**