

NCCER™

National Center for Construction
Education and Research



MOBILE CRANE OPERATOR

CERTIFICATION PROGRAM

CANDIDATE HANDBOOK

January 2024 | www.nccer.org | 888-622-3720

Table of Contents

Purposes of the Program	1
Development of the Program	1
Objectives of Mobile Crane Operator Certification	1
Mobile Crane Endorsed Accredited Assessment Program	1
NCCER Secure Credential Database	1
Certification Policies	2
Confidentiality of Information	2
Methods of Evaluation	2
Mobile Crane Operator Certification Criteria	3
Testing Accommodations	3
Assessment	3
Practical Examination	4
Scoring	5
Retest Policy	5
Certification and Testing Timeframes	5
Recertification	5
Certification Action	5
Changes During Period of Certification	6
Complaints	6
Revocation of Certification	8
Reapplication	8
Appeal	8
Resources and Forms	10
Assessment Specifications	10
Mobile Crane Operator Affirmation for Certification	10
User Terms and Conditions	10
Incident Report Form	10
Mobile Crane Certification Matrix	10
Paths to NCCER Mobile Crane Operator Credentials	10

13614 Progress Boulevard
Alachua, FL 32615
Phone: (888) 622-3720 Fax: (386) 518-6303
support@nccer.org

Copyright © 2024 by NCCER. All rights reserved. Manufactured in the United States of America. This publication is protected by Copyright, and permission should be obtained from NCCER prior to any prohibited reproduction, storage in a retrieval system, or transmission in any form or by any means, electronic, mechanical, photocopying, recording, or likewise. To obtain permission(s) to use material from this work, please submit a written request to NCCER, Attn: Legal Department, 13614 Progress Blvd., Alachua, FL 32615.

Purposes of the Program

The goals of the NCCER Mobile Crane Operator Certification Program are:

- ◆ Enhance the practice and profession of mobile crane operation through validated and reliable certification instruments.
- ◆ To directly promote competency of operation and a safer work environment.
- ◆ Organize and implement a comprehensive program for the certification of mobile crane operators.
- ◆ Promote the development of knowledge and skills of those interested in the mobile crane operating and hoisting profession.
- ◆ Provide technical assistance to agencies having regulatory authority applicable to testing and certification of mobile crane operators.

Development of the Program

NCCER developed a Mobile Crane Operator Certification Program which meets or exceeds current ASME B30 standards and OSHA regulations. Assessments were developed following strict professional testing guidelines endorsed by the American Psychological Association. All development phases involved subject matter experts (SMEs) who represented their respective technical areas. NCCER's Test Development team includes psychometricians who monitor test development and performance on an ongoing basis.

Objectives of Mobile Crane Operator Certification

The Mobile Crane Operator Certification Program was developed to identify those individuals with the professional knowledge and skills worthy of being designated as a Certified Mobile Crane Operator. Therefore, the Mobile Crane Operator Certification Program is intended to accomplish the following objectives:

- ◆ Identify mobile crane operators who meet minimum criteria for certification.
- ◆ Stimulate the improvement of crane operation and establish it as a certifiable profession.

Mobile Crane Endorsed Accredited Assessment Program

The NCCER Mobile Crane Operator Certification program can only be administered through an NCCER Mobile Crane Endorsed Accredited Assessment Program. Each endorsed program determines the schedule and cost of services to be provided. Visit www.nccer.org or call NCCER customer support at 888-622-3720 to locate a Mobile Crane Endorsed Accredited Assessment Program in your area.

NCCER Secure Credential Database

NCCER Secure Credential Database maintains records of assessment and practical examination results. Credentials may be printed on demand by the candidate or the Accredited Assessment Program. Traditional, printed credentials can also be requested from NCCER to be sent to the Accredited Assessment Program or directly to the candidate.

Certified Mobile Crane Operators receive an NCCER card which includes their photo and a card number. This number is used to access online verification of your credentials through the NCCER Learning Platform. This process can also be used to allow employers and inspectors to verify your credentials.

Certification Policies

Through continuing and careful study of mobile crane operator qualifications, NCCER has developed the following basic policies:

- ◆ For a candidate to be certified, all parts of the certification process must be successfully completed.
- ◆ The candidate shall acknowledge, by affidavit, that he/she has been found physically qualified to operate mobile cranes per *ASME B30.5* and that he/she has passed a substance abuse test. Physical examinations and substance abuse tests shall be required, as a minimum, every three years.
- ◆ To certify mobile crane operators within the specified crane type(s) as outlined in the current *ASME B30* standards as well as federal, state, and local requirements.
- ◆ To deny certification to candidates who lack understanding in any subject area in which mobile crane operators, in their field, are expected to have competence.
- ◆ To ensure NCCER's Mobile Crane Operator Certification Program keeps pace with the constantly changing crane operation environments.
- ◆ To assess qualitative as well as quantitative factors in making the certification decision.
- ◆ To maintain a secure database of certified mobile crane operators' assessment and practical exam records.

Confidentiality of Information

Records of all examiners and candidates in the program will be confidentially maintained.

- ◆ Information supplied by a candidate, and not by the individual's employer, is for the confidential use of the Accredited Assessment Program and NCCER and will not be disclosed without the specific written permission of the individual candidate concerned.
- ◆ Information supplied by the employer company is for the confidential use of the Accredited Assessment Program and NCCER and will not be disclosed without the specific written permission of the employer concerned.

All candidates are required to create an NCCER account and agree to the User Terms and Conditions allowing NCCER to verify a candidate's status with the Accredited Assessment Program, if requested.

Methods of Evaluation

Because qualitative factors can be more important than the numbers of hours an operator has spent in the seat, the general principles outlined in the criteria will be checked closely by analyzing each candidate. The prime considerations in evaluating a candidate for certification as a mobile crane operator are as follows:

1. That the results of examination of his/her knowledge and skills are considered satisfactory as a mobile crane operator in general, in addition to whatever specific requirements of the mobile crane type(s) for which certification is sought, and,
2. That the depth of his/her understanding in these same areas merits the designation "Certified Mobile Crane Operator."

Crane Operator Certification Criteria

NCCER's primary objective is to assure that the specific competencies identified in the *ASME B30* standards have been achieved. The decision to certify or re-certify will be based on an evaluation of the degree to which the mobile crane operator has achieved these competencies. The mobile crane operator must provide, through assessment and practical examination, clear and convincing evidence to NCCER that such competencies have been achieved.

The candidate must fulfill all the following prior to issuance of certification:

1. Demonstrate the ability to read, write, comprehend and exhibit mathematical skills, in the language of the crane manufacturer's operations and maintenance instructional materials.
2. Pass a mobile crane assessment.
3. Pass an applicable mobile crane practical examination.
4. Complete and submit the Mobile Crane Operator Affirmation for Certification via the NCCER Assessment Platform which includes an affirmation that a medical professional has found him/her physically qualified to operate mobile cranes per *ASME B30.5* and that he/she has successfully passed (negative result) a substance abuse test, as specified in the current *ASME B30.5* standards, and will continue to comply.
5. Upload a photo to their NCCER account.

Upon satisfaction of the above requirements, certifications will be posted and tracked in NCCER's secure credential database. Credentials may be printed on demand by the candidate or the Accredited Assessment Program. Traditional, printed credentials can also be requested from NCCER to be sent to the Accredited Assessment Program or directly to the candidate.

Candidates meeting the above requirements will be granted certified status for a period of five years from issuance of certification.

Testing Accommodations

To request testing accommodations on a written assessment or practical examination which are not otherwise permitted by the NCCER Standards for the NCACP, candidates should submit written documentation from a professional qualified to diagnose the disability to NCCER at support@nccer.org. NCCER will review and either approved or deny requests for testing accommodations upon receipt and review of the documentation.

Assessment

There are four written assessments for mobile crane operator certification:

- ◆ Boom Truck Crane
- ◆ Industrial/All Purpose Crane
- ◆ Telescopic Boom Crane
- ◆ Lattice Boom Crane

NOTE: The content of the Industrial/All Purpose Crane and Boom Truck Crane assessments are included in the Telescopic Boom Crane assessment. A candidate may satisfy multiple categories by taking the Telescopic Boom Crane assessment. If a candidate desires certification on Boom Truck Crane only or Industrial/All Purpose Crane only, then only the respective assessment may be taken.

The following topics are included in all mobile crane assessments:

- ◆ Operational characteristics
- ◆ Limitations
- ◆ Standard hand signals
- ◆ Pre-start inspections
- ◆ Post-start inspections
- ◆ General safety knowledge
- ◆ Gross and net capacities
- ◆ Gross and net loads
- ◆ Control functions
- ◆ Response to crane/control malfunction
- ◆ Capacity chart knowledge
 - Load chart calculations involving simple math
 - Gross and net capacities
 - Gross and net loads
 - Capacity reductions
 - Boom length, boom angle, and load radius

The assessment must be delivered through a Mobile Crane Endorsed Accredited Assessment Program by a certified assessment proctor.

Practical Examination

There are four practical examination categories resulting in 13 equipment-specific mobile crane operator certifications:

- ◆ Industrial/All Purpose
- ◆ Rubber Tire Truck Mount
- ◆ Rough Terrain/All Terrain
- ◆ Crawler Mount

The following topics are included in all mobile crane practical examinations:

- ◆ Pre-operational inspection
- ◆ Machine set-up
- ◆ Outrigger deployment (where applicable)
- ◆ Crane levelness
- ◆ Maneuvering skills
- ◆ Securing procedures
- ◆ Operational skills
 - Booming
 - Hoisting
 - Swinging
 - Simultaneous control of multiple functions
 - Following standard hand signals
 - Using and applying operational aids (where applicable)

The practical examination must be administered by a certified mobile crane practical examiner.

The Mobile Crane Operator Affirmation for Certification must be completed and submitted by the candidate via the NCCER Assessment Platform prior to taking the practical exam.

Scoring

Both assessments and practical examinations are scored by computers. Scores are available immediately upon test submission.

Retest Policy

If the passing score is not attained on the initial mobile crane assessment or practical exam, a retest may be taken following a two-day waiting period. Subsequent retests (after two attempts) require a 30-day waiting period with no more than four attempts within 365 days.

Certification and Testing Timeframes

Mobile crane operator candidates have 12 months from passing either the assessment or practical examination to complete the other. Results expire if both the assessment and applicable practical exam are not successfully completed within 12 months.

A candidate may obtain subsequent certification by passing additional practical examinations that are associated with the assessment used to obtain the initial certification. If subsequent certifications are achieved during the five-year certification period as a result of additional practical exam(s), these certifications will assume the same expiration date as the initial certification.

Example: Bob Operator takes Telescopic Boom Crane assessment and Rough Terrain/All Terrain, Fixed Controls practical examination. Certification is issued on 7/30/18. Certification expires 7/30/23. Bob Operator takes Rough Terrain/All Terrain, Rotating Controls practical exam on 2/15/20. Certification is issued on 2/15/20. Certification expires 7/30/23.

Recertification

In order to obtain recertification, a candidate must repeat the initial certification requirements. Mobile crane operators must recertify every five years.

IMPORTANT! Recertification testing (knowledge and practical exams) must be done within 180 days of expiration date for recertification to be generated

Knowledge and practical exams completed more than 180 days prior to the expiration date will be processed as additional certifications and will be set to expire on the same date as the candidate's other active mobile crane-related certification(s).

Certification Action

Certification is granted for a specific period of five years from the date of certificate issuance. The term of

certification is subject to review for cause at any time during the period of certification. Certification is granted if current conditions are judged to be meeting or exceeding the minimum criteria requirements. If, for any reason, the future of an operator's abilities appears precarious or weak, certification may be revoked.

A "Not to Certify" action is effective immediately after exhausting the appeal procedures. The notification to the operator, employer, or the Mobile Crane Endorsed Program when applicable, shall indicate the following:

- ◆ The termination supersedes the certification status of the mobile crane operator, and
- ◆ The Certifier expects the certified individual to notify his/her employer of the termination of the certified status.

The Mobile Crane Endorsed Program is restricted by NCCER policies and procedures in the granting of certification. The Mobile Crane Endorsed Program has no authority to impose any restrictions or standards upon mobile crane operators or their employers.

Changes During Period of Certification

It is the obligation of the Certified Mobile Crane Operator to notify the Certifier of any accidents/incidents (an event that results in injury or property damage) the individual has had with the crane type(s) for which certification has been obtained, or any significant changes in the medical, physical or other abilities of the operator that would affect certification status during the period of certification. Notification of the above-described accident/incident or changes in abilities must be made to NCCER within 48 hours of said incident or change in ability; failure to do so will result in immediate revocation of all certification types.

NCCER reserves the right to obtain and review feedback from Mobile Crane Endorsed Programs on those operators certified in the program (to monitor individuals that have completed the program).

Certified Mobile Crane Operators must submit the "Incident Report" (available on NCCER's website) and report changes in medical, physical, or other abilities by emailing support@nccer.org.

Complaints

Complaints regarding any aspect of NCCER's Mobile Crane Operator Certification Program or any certified person may be made to NCCER by the following means:

In the event a mobile crane operator candidate feels he/she has experienced any testing irregularities or has a complaint or appeal, the candidate may complete the Candidate Grievance Form. This form is located on the NCCER website under Support > Forms and Resources. The candidate will fill in the date, their name, and candidate ID and then write a detailed description of their grievance. Once completed, the candidate will forward the form to Program Director for the Accredited Assessment Program where the incident occurred. The Program Director will fill in the name of the examiner who proctored the assessment/practical exam, assessment key number, sign and date the form and then forward it to NCCER's Compliance Department via email at support@nccer.org or mail to NCCER directly.

Candidates can submit a computerized comment during a written assessment by completing a Question/Comment Submission in the NCCER Assessment Platform. These comments are received by the NCCER Product Development team. If unable to resolve on their own, the Product Development team will assemble a group of Subject Matter Experts (SMEs). This group of SMEs will then review the comment and their investigation results will be reflected in the item bank or answer key. All comments are securely recorded and stored within the Assessment Platform and by the Product Development team as part of their respective participation in the review process.

Candidates can submit a complaint or grievance against certified personnel, accredited locations, certification activities, and other certified individuals by completing the Candidate Grievance Form. Candidates may also call/email Customer Support to create a ticket including the the same information as the Candidate Grievance Form. These tickets are assigned to the NCCER Director of Compliance and the information is kept confidential from anyone outside of NCCER. To maintain confidentiality, under no circumstances will NCCER share the information submitted as a grievance or complaint by the candidate. The Director of Compliance will designate a knowledgeable and impartial NCCER employee to investigate, document, and recommend resolutions/corrective action(s) for complaints. The NCCER employee will perform the procedure as outlined in Section 9.9.3 of the MCOCP Management System document. At the end of the complaints handling process, the investigation results will be communicated by formal notice to the complainant. All complaints, investigation results, and resolutions/corrective actions are securely recorded and stored by NCCER in its support ticket system.

In the event any other person has a complaint about a certified person or about any aspect of NCCER's Mobile Crane Operator Program, a complaint may be made by contacting NCCER by any normal business means or method. Contact information is publicly available without request on the NCCER website

Upon receipt of a complaint, NCCER shall undertake the following procedure:

- ◆ NCCER's Director of Compliance shall designate a knowledgeable and impartial employee of NCCER to investigate, document and recommend resolution of complaints, including any corrective actions to be taken by a certificant and/or an accredited organization.
- ◆ The appointed investigator shall request written statements from all parties involved and conduct interviews, if applicable, with both the proctor/practical examiner and the candidate.
- ◆ The appointed investigator shall provide a summary report of evidence, recommendations for resolution, and clear copies of all evidence gathered to the Director of Compliance for review and decision.
- ◆ NCCER shall maintain the following documentation:
 - Original or clear copy of the complaint
 - Evidence or supporting documentation provided by complainant, certified operator, candidate or any interested party
 - Decision of NCCER
 - Recommendations of NCCER, including corrective action(s)(if any)

Upon receipt of a complaint, NCCER shall confirm whether the complaint relates to certification activities for which it is responsible, and if so, shall respond in accordance with the procedures set forth in this Handbook. If a complaint is determined not to be related, the complainant shall be notified.

Whenever possible, NCCER shall acknowledge receipt of a complaint and shall provide the complainant with progress reports, as applicable, and the decision of NCCER. Whenever possible, NCCER shall give formal notice of the end of the complaints-handling process to the complainant. This notice may be part of the same document as the decision of NCCER referenced above.

NCCER shall be responsible for gathering and verifying all necessary information to validate the complaint as per this Section. Any substantiated complaint about a certified person shall also be referred by NCCER to the certified person in question at an appropriate time.

The complaints-handling process shall be subject to requirements for confidentiality, integrity, impartiality and conflicts of interest set forth in NCCER's Mobile Crane Operator Certification Program Procedure Manual. The decision to be communicated to the complainant shall be made by, or reviewed and approved by, personnel not previously involved in the subject of the complaint.

Revocation of Certification

NCCER reserves the right to revoke certifications for reasons including, but not limited to:

- ◆ Any misrepresentation or fabrication of documents submitted to NCCER regarding the Mobile Crane Operator Certification Program.
 - ◆ Failed substance abuse test as required in the Mobile Crane Operator Certification Program.
 - ◆ Any documented recordable crane accident/incident (an event that results in injury or property damage) that is submitted to the Crane Operator Certification Board whereby crane operator error is determined to be the cause of the accident.
- Certified Mobile Crane Operators are required to notify the Certifier of a documented, recordable crane accident/incident within 48 hours of the accident. Failure to do so will result in revocation of certification without appeal. Certified Mobile Crane Operators must submit the “Incident Report” to NCCER at support@nccer.org
 - The Certifier must document the reasons for proposed revocation and submit them to the Crane Operator Certification Board. The Crane Operator Certification Board will render a final decision and notify the Certifier. The Certified Mobile Crane Operator is promptly notified by the Certifier of the Board action and is at that time given the right to an appeal. Certification is continued until the appeal procedure has been exhausted.

Reapplication

If an operator’s credentials are revoked due to a failed substance abuse test the operator may reapply for certification 12 months after the date of the revocation. If an operator’s credentials are revoked two or more times (for any reason) the operator may not apply for recertification. If an operator’s credentials are revoked because of an accident that was determined to be operator error, the operator candidate may reapply for certification 12 months after the date of the revocation.

All reapplications must go before and be considered by the Crane Operator Certification Board for review. Reapplication may require additional documentation/verification.

If an operator’s credentials are revoked because of misrepresentation or fabrication of documentation, the operator may not apply for recertification.

Reapplication means that a candidate must complete all requirements for certification.

Appeal

A person whose certification has been suspended, withdrawn, or reduced may appeal the decision of the Revocation Board. In the event a mobile crane operator wishes to appeal revocation of certification actions taken by NCCER, notice of intent to appeal must be received in writing within 30 days of the date of revocation notification. NCCER will forward the appeal to the Appeals Committee. Appeals shall be made in writing to the Appeals Committee, and should include any available evidence relevant to the revocation action. The Appeals Committee is responsible for review and decisions for all appeals, including certification revocation, policies, procedures, or other criteria established by the Crane Operator Certification Board. Upon receipt of the appeal, the Committee will review the appeal and make its decision in a timely manner. The Appeals Committee will

make decisions based on evidence presented. The findings of the Committee will be reported to the Certifier, who will report back to the operator and Accredited Assessment Program (where applicable).

Appeals shall be considered by the Scheme Committee, acting in its capacity as the Appeals Committee. The Appeals Committee shall consult and consider any available historical documentation of similar cases, and the outcome of those cases.

The appellant and any interested parties shall be notified of the Appeals Committee's decision without delay. A "revocation" action is effective immediately after exhausting the appeals process. The notification to the operator or the Accredited Assessment Program, when applicable, shall indicate the following:

- ◆ The termination supersedes the certification status of the mobile crane operator, and
- ◆ The Certifier expects the certified individual to notify his/her employer of the termination of the certified mobile crane operator status.

Decisions by the Appeals Committee are final.

The Appeals Committee shall maintain the following documentation:

- ◆ Original or clear copy of the appeal
- ◆ Evidence or supporting documentation provided by appellant or any interested party
- ◆ Decision of the Appeals Committee
- ◆ Recommendations of the Appeals Committee (if applicable)

Appeals shall be dealt with in a constructive, impartial, and timely manner.

Any members of the Appeals Committee who are, may be, or may appear to be involved with the appellant to a degree that would compromise impartiality or create a conflict of interest shall recuse themselves from the appeal deliberations or decision. If less than a majority of members remain, the President of NCCER shall nominate temporary replacements from qualified persons until a quorum is reached.

The appeals committee shall render a decision within 30 calendar days. Should the collection of evidence or deliberation require more time, the Appeals Committee shall inform the appellant, the Revocation Board, and any interested parties in writing with an expected date of decision.

NCCER is responsible for all decisions at all levels of the appeals-handling process. Appeals to decisions by the Revocation Committee are handled by the Appeals committee, which is made up of personnel not on the Revocation Committee.

Submission, investigation, and decision on appeals shall not result in any discriminatory actions against the appellant. The Appeals Committee shall acknowledge receipt of any appeal and shall provide the appellant with progress reports as applicable and the outcome of the appeal. The Appeals Committee shall give formal notice to the appellant of the end of the appeals-handling process. This notice shall include a statement pertaining to the appellant's ability to regain certification if applicable.

Resources and Forms

The following resources/forms are included in this section for reference only. Updated copies and information can be found on NCCER's website at www.nccer.org.

Assessment Specifications

Specifications list the topics, number of questions, time allowed and passing scores of each assessment.

Mobile Crane Operator Affirmation for Certification

All candidates must submit this affirmation in the NCCER Assessment Platform prior to taking the practical examination.

The Mobile Crane Operator Affirmation for Certification must be completed for credentials to be issued.

User Terms and Conditions

The User Terms and Conditions release and hold NCCER harmless for the disclosure of any information in connection with the verification process of the individual's training and/or assessment records. Acceptance of the User Terms and Conditions occurs during the NCCER online account creation process. All candidates must accept the User Terms and Conditions before any testing activity takes place.

Incident Report Form

This form is used by the Certified Mobile Crane Operator to report any accident/incident for the crane type(s) for which certification has been obtained and must be submitted to NCCER at (support@nccer.org) within 48 hours of the accident/incident.

Mobile Crane Certification Matrix

This form shows the combinations of mobile crane assessments and practical examinations required to obtain certification for certain equipment types.

Paths to NCCER Mobile Crane Operator Credentials

The safety-related aspects of crane design are established by the American Society of Mechanical Engineers in the volume *ASME B30.5-2007 Mobile and Locomotive Cranes*. Therefore, NCCER has structured the credentialing process for Certified Mobile Crane Operators based on the various "paths" determined by various combinations of assessments and practical examinations, as shown in the flow-chart diagram (which corresponds with the Mobile Crane Certification Matrix). The content and titles of NCCER's mobile crane operator assessments are dependent upon each crane's boom types while the content and titles of the practical examinations are grouped by the mount, or carriage, that is used with each crane.