Purposes of the Program

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

- Enhance the practice and profession of tower 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 tower crane operators.
- Promote the development of knowledge and skills of those interested in the tower crane operating and hoisting profession.
- Provide technical assistance to agencies having regulatory authority applicable to testing and certification of tower crane operators.

Development of the Program

NCCER developed a Tower 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. Prov, NCCER's test-development partner, provides psychometricians who monitor test development and performance on an ongoing basis, in conjunction with NCCER.

Objectives of Tower Crane Operator Certification

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

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

Tower Crane Endorsed Accredited Assessment Center

The NCCER Tower Crane Operator Certification program can only be administered through an NCCER Tower Crane Endorsed Accredited Assessment Center (AAC). Each AAC determines the schedule and cost of services to be provided. Visit www.nccer.org or call NCCER customer service at 888-622-3720 to locate a Tower Crane Endorsed AAC.

NCCER Registry System

The Registry System maintains records of assessment and practical examination results and issues credentials for successful completions through a network of Accredited Assessment Centers (AACs). All records are stored securely in the Registry System.

Certified tower crane operators receive an NCCER card which includes a card number. This number is used to access online verification of your credentials through the Registry System. This process can also be used to allow employers and inspectors to verify your credentials.
Certification Policies

Through continuing and careful study of tower 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 tower cranes per ASME B30.3 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 tower 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 tower crane operators, in their field, are expected to have competence.
◆ To ensure NCCER’s Tower 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 securely maintain a registry of certified tower 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 AAC and NCCER and it 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 AAC and NCCER and it will not be disclosed without the specific written permission of the employer concerned.

All candidates are required to sign an NCCER Registration & Release form allowing NCCER to verify a candidate’s status with the AAC, 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 tower crane operator are as follows:

1. That the results of examination of his/her knowledge and skills are considered satisfactory as a tower crane operator in general, in addition to whatever specific requirements of the tower 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 Tower Crane Operator.”
Tower 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 recertify will be based on an evaluation of the degree to which the tower crane operator has achieved these competencies. The tower 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 the tower crane assessment.
3. Pass a tower crane practical examination.
4. Complete and submit the Application for Tower Crane Practical Examination in the Registry System, which includes an affidavit that a medical professional has found him/her physically qualified to operate tower cranes per ASME B30.3 and that he/she has successfully passed (negative result) a substance abuse test, as specified in the current ASME B30.3 standards and will continue to comply.
5. Have photo submitted to and approved by the AAC and NCCER.

Upon satisfaction of the above requirements, results will be posted in Registry System. Credentials will be forwarded to the AAC for distribution.

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

Assessment

There is one written assessment for tower crane operator certification.

The following topics are included in all Tower 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
The assessment must be delivered through a Tower Crane endorsed AAC by a certified assessment proctor or assessment administrator.

**Practical Examination**

There are three practical examination categories resulting in 13 equipment-specific tower crane operator certifications:

- Luffer
- Hammer Head
- Self Erect

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

- Pre-operational inspection
- Machine set-up
- Outrigger deployment (where applicable)
- Crane levelness (as applicable to the Self Erect crane)
- Maneuvering skills
- Securing procedures
- Operational skills
  - Hoisting
  - Booming (luffing boom)
  - 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 Tower Crane Practical Examiner (TCPE). The Application for Tower Crane Practical Examination must be completed, electronically in the Registry System, by the candidate prior to taking the practical exam and approved by the AAC.

**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 tower 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

Tower 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.

Recertification

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

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 Tower Crane Endorsed AAC when applicable, shall indicate the following:

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

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

Changes During Period of Certification

It is the obligation of the Certified Tower 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 constitutes immediate revocation of all certification types.

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

Certified Tower 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.
Revocation of Certification

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

- Any misrepresentation or fabrication of documents submitted to NCCER regarding the Tower Crane Operator Certification Program.
- Failed substance abuse test as required in the Tower 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 tower 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 tower 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 tower 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.

Reaplication

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 reaplications must go before and be considered by the Crane Operator Certification Board for review. Reaplication 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.

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

Appeal

In the event a certified tower crane operator wishes to appeal revocation of certification actions taken by NCCER, notice of intent to appeal must be received within 30 days of the date of revocation notification. NCCER will forward the appeal to the Crane Scheme Committee. Upon receipt of such notice, the committee will review the appeal and make its decision in a timely manner. The findings of the committee will be reported to the Certifier, who will report back to the operator and Certification Program Endorsed AAC (where applicable).
The “revocation” action is effective immediately after exhausting the appeals process. The notification to the operator or the Tower Crane Endorsed AAC when applicable shall indicate the following:

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

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.

Application for Tower Crane Practical Examination

All candidates must submit this form, electronically, in the Registry System prior to taking the practical examination. The Application for Tower Crane Practical Examination must be approved by the AAC for credentials to be issued.

Registration & Release Form

This form releases and holds NCCER harmless for the disclosure of any information in connection with the verification process of the individual’s training and/or assessment records. The Registration & Release Form can be completed in paper form and kept on file by the AAC or completed electronically in the Registry System. All candidates must complete the Registration & Release form before any testing activity takes place.

Incident Report Form

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