

**1. SCOPE**

This scheme defines the requirements and methods used by Carl Stahl for certifying persons in the field of Lifting equipment operator whose task is to operate, rig and signal safely.

**2. TERMS AND DEFINITIONS**

Terms included in this document are defined as follows:

**PHSD**

Public Health and Safety Department of Dubai Municipality

**DAC**

Stands for Dubai Accreditation Center of Dubai Municipality

**CS**

Carl Stahl

**Lifting Equipment**

Any lifting equipment as described in DAC REQ NO. 6

**Lifting Equipment Operator**

Any person who are qualified and certified to operate certain type of lifting equipment

**Rigger**

A certified rigger is a person who has been trained and certified to handle and move loads. The level of certification depends upon the individual's training, knowledge, skill base and ability to perform functions related to the selection, inspection and proper use of rigging equipment

**Rigger Level II**

Person who is qualified and certified to lead and supervise the whole lifting activity

**Examiner**

Person competent to conduct and score an examination, where the examination requires professional judgment (assessment)

**Decision Maker**

Authority who makes the decision regarding the issuance of certification, complaints and appeals

**Signal Person/Signalman**

A person whose job to signal to the lifting equipment operator or the rigger or another signal man during any lifting operation as per the approved standard set of signals by Dubai Municipality

**Examination**

Mechanism that is part of the assessment which measures a candidate's competency by one or more means, such as written, oral, practical and observational defined in this document

**Assessment**

Process that evaluates a person's fulfillment of the requirements defined in this document

**3. GENERAL**

CS provides certification in the following areas/specialties:

1. Lifting Equipment Operator
2. Rigger (Level I & II)
4. Signalman/Signalperson

The process of certification of persons is generally summed up in six steps:

1. Application
2. Review
3. Examination
4. Examination Evaluation
5. Decision making and Certification
6. Recertification

**4. CERTIFICATION PROCESS REQUIREMENT****4.1 APPLICATION PRE-REQUIREMENTS**

Before any certificate may be issued, a written application shall be in place. This application shall as a minimum contain:

- the scope of the application
- the applicant's full name
- company name and address
- examination type and category
- a statement that the applicant agrees to comply with the certification scheme requirements and to supply any information needed for the assessment

UAE based candidates shall submit the following documents along with the above application:

- a Passport copy
- b Valid residence visa copy
- c Labor card copy
- d Colored photograph (not older than 6 months)
- e Proof of training (if relevant)
- f Evidence of work experience (minimum 1 year experience for mobile & tower crane operators)
- g Valid driving license (for mobile crane operators)

**4.2 ELIGIBILITY**

To be eligible for certification, the candidate must:

- Be at least 18 years of age
- Have valid occupational health card issued by relevant department (see clause 3.4).
- Have valid driving license from the relevant authority (for mobile crane operator)
- Able to read load chart (for crane operators)
- Comply with CS Substance Abuse Policy
- Comply with CS code of ethics
- Pass Written/Oral Examination(Core exam and at least one speciality exam) with score not less than 80%
- Pass Practical Examination(s) with score not less than 75%

## 4.3 EXPERIENCE

Lifting equipment operator certification examinations are designed for operators who are trained and who currently work in lifting equipment operation.

Rigger Level I and Level II certification examinations are designed for persons who have been trained to handle and move loads.

Signalman certification examinations are designed for signalpersons who are trained and who use hand and voice signals in crane operations.

## 4.4 OCCUPATIONAL HEALTH EVALUATION

Certified crane operators, riggers and signalpersons must continue to meet occupational health card requirements throughout their certification periods. It is the responsibility of the employer to ensure that the candidates are meeting this requirement.

## 4.5 APPLICATION REVIEW

A review and verification of the application and the submitted documentation shall be conducted by CS Engineer co-coordinator, confirming that the applicant satisfies the pre-requirements according to the certification scheme.

If the applicant found not eligible as per the above requirements, CS Engineer Co-ordinator shall notify the applicant or concerned personnel immediately.

## 5. EXAMINATION PROCESS

CS conducts examination(written/oral and practical) and certification in the following areas/specialties:

1. Lifting Equipment Operator (Mobile Crane, Overhead Crane, Tower Crane, Forklift truck etc.)
2. Rigger Level I
3. Rigger Level II
4. Signalman/Signalperson

Candidates meeting the eligibility requirements may take the written/oral and practical examinations in any order

## 5.1 WRITTEN/ORAL EXAMINATION OUTLINE

The Lifting equipment operator, rigger and signalman written/oral examinations are carried out by multiple choice questions, which shall be developed as fair and objective assessments of the essential skills a lifting equipment operator needs to operate, rig and signal safely. Each examination shall contain a unique combination of questions taken from the question bank. Questions are selected for examinations based on the content area and specialties applied by the candidate

### 5.1.1 Lifting Equipment Operator (Core and Specialty exams):

The Core Examination shall include at least **30 multiple-choice questions**. Each Specialty Examinations consists of **20 multiple-choice questions** covering general and speciality knowledge areas including but not limited to Site, hazard identification, Operations, Technical, Load Charts etc.

### 5.1.2 Rigger Level I: The certified rigger Level I Written/Oral examination will consist of **30 multiple choice questions** covering areas from identifying rigging activity, hazards, selection of rigging components, technical knowledge, pre-use inspection requirements, hand signals etc

### 5.1.3 Rigger Level II: The certified Rigger Level II examination will consist of **40 multiple choice questions** covering additional knowledge areas apart from rigger level I examination including but not limited to technical calculations, estimation of weight, execution of rigging activities etc.

### 5.1.4 Signalman/Signalperson: The Written/Oral examination for the signalman/signalperson consists of **30 multiple choice questions** covering all major hand signals, basic crane operation knowledge etc.

## 5.2 PRACTICAL EXAMINATION OUTLINE

Candidates must pass a Practical Exam to be certified. Candidates may take their Written/Oral and Practical Exams in either order.

Candidate minimum passing score is 75%.

### 5.2.1 Lifting Equipment Operator (Mobile Crane, Tower Crane, Overhead Crane):

- The crane Operator Practical Examination demonstrates crane operation proficiency. It is comprised of 4 main tasks that increase progressively in the skill level tested.
- An optimum time limit shall be set by the examiner for all the tasks assigned. Based on the lifting equipment type the examiner may modify the tasks
- The practical test is structured in such a way that it enable the operator to demonstrate safe and controlled operation in all circumstances, regardless of prior knowledge of the crane he carries out pre start up checks
- That he follows signals correctly and does not preempt or assume actions or direction to be taken
- That he can estimate heights of surrounding structures relative to his crane and the load path and in the case of a tower crane accurately judge the distance of the floor or loading point
- Has good hook/load control

### 5.2.3 Rigger Level - 1:

Rigger Level 1 practical test is comprised of 4 main tasks that increase progressively in the skill level tested

- TASK-1: PRE USE RIGGING INSPECTION  
 TASK-2: RIGGING HITCHES  
 TASK 3: RIGGING CONNECTIONS

Candidates will be required to complete all phases of the test in sequence. There are no time limits for the Certified Rigger Level I Practical Examination.

In all tasks, examiner will brief the candidates on their rules and directions and performance requirement and when and how to start and stop.

### 5.2.4 Rigger Level - 2:

Rigger Level 2 practical test is consist of 2 main tasks

- TASK-1: LEVEL LIFT  
 TASK-2: RIGGING FRAME ROTATION

Candidates will be given an optimum time to complete each tasks

**5.2.5 Signalman / Signalperson:**

The Signalman/Signalperson Practical Examination requires the candidate to demonstrate proficiency in giving both hand signals and voice commands as follows:

1. In order to demonstrate proper hand or voice signals, two types of scenarios to be followed:
  - a **Match Scenario**
  - b **Candidate-Initiated Scenario.**
2. All signals must be given in accordance with current standard signals (e.g., the swing signal is: Arm extended, point with finger in direction of swing of boom), see construction code of practice, hand signal.
3. The candidate shall be assessed in maintaining constant communication if they use voice signals.

In scenarios where multiple signals are required, candidates must give all signals correctly, examiners to assess each signal and it's relevant to the move.

**5.2.6 Forklift / Reach truck Operator:**

Forklift/reach truck practical test is comprised of 4 main tasks that increase progressively in the skill level tested  
TASK-1: PRE USE INSPECTION  
TASK-2: MANOEUVRE THROUGH NARROW PATH  
TASK 3: NEGOTIATE ZIG ZAG CORRIDOR  
TASK 4: STACKING AND OFF STACKING

Candidates will be given an optimum time to complete each tasks

In all tasks, examiner will brief the candidates on their rules and directions and performance requirement and when and how to start and stop.

**6 EVALUATION OF EXAMINATION**

CS Examiner shall evaluate/correct the written/oral examination using the pre-defined answers given in the question bank. Practical examination shall be evaluated based on the evaluation criteria mentioned in 5.2. Thereafter, all the examination records shall be submitted to Engineer Coordinator for proceeding with certificate issuance

**7 DECISION MAKING AND CERTIFICATE ISSUANCE**

**7.1 DECISION ON CERTIFICATION**

- 7.1.1 Prior to the issuance of certificates, Engineer Coordinator shall submit all the candidate examination records and other relevant documents to the Decision maker for review and to take a decision on whether the certificate shall be issued to the candidate
- 7.1.2 The decision on certification of candidate shall be made solely by CS on the basis of the information gathered during the certification process. Personnel who make the decision on certification will not have participated in the examination of the candidate
- 7.1.3 Decisions for granting, maintaining, recertifying, extending, reducing, suspending or withdrawing certification shall be done by the CS and shall not be outsourced

**7.2 ISSUENCE OF CERTIFICATES**

If CS finds that all requirements are in compliance such as application form, complete documentation of pre-requirements and documentation of passed exam(s), decision maker approval, a certificate and a competency card shall be issued. Certificates are printed on Carl Stahl certificate paper and shall be signed by the examiner and certification decision maker.

All CS certificates shall as a minimum contain the following information;

1. A unique certificate number and Work order number
2. Name of the certified person
3. Photo of the certified individual
4. Machine type that the individual certified to operate
5. The scope of certification, including range of validation and limitations
6. Date of issue and expiry date

All certified persons will receive a photo ID card at no extra cost when they certify for first time and when they complete the requirements of recertification along with the certificates.

Engineer/Examiner coordinator has the overall responsibility of establishing and maintaining a list of valid certificates.

**8 CERTIFICATION TIME FRAME**

Candidates must pass Written/Oral Exam and a Practical Exam in the category(s) for which they seek certification. Candidates may take their Written/Oral and Practical Exams in any order.

Candidates have one month after they pass their first exam (Written/Oral or Practical) to pass the corresponding Written/Oral or Practical Exam(s) in the same category(s).

If a certified operator subsequently becomes certified in additional Specialties by taking the appropriate written and practical exams, the one-year certification period for the additional Specialties begins at the same time as he/she was originally certified (i.e., all specialties expire on the same date, regardless of when in the one-year certification period the candidate passed them).

**9 RECERTIFICATION REQUIREMENTS**

Certification is valid for one year. Recertification candidates must complete all recertification requirements prior to their certification's expiration date. This includes:

- Passing the Recertification Written/Oral Examination(s)
- Continuing to meet Occupational Health card requirements
- Have valid driving license from the relevant authority where applicable
- Compliance with Substance Abuse Policy
- Compliance with the Code of Ethics

Recertification candidates must take both practical and written/oral exams, however, must do so before their certification expires.

Recertification candidates may take their Recertification Written/Oral and practical Examinations up to one month prior to their certification's date of expiration. Regardless of the date of the Recertification Examination, the new one-year certification period begins from the date of expiration of the candidate's initial certification.

Candidates who are not certified in all Specialties may add a new Specialty at the same time as they take their Recertification Examinations by taking the full examination in that Specialty.

**10 TRAINING REQUIREMENTS**

Candidate who fails in either one or both written/oral or practical examination twice (two times in roll) shall not undertake any further assessment until undertake a relevant training.

Training shall not be less than:

Lifting equipment operator, 3 days-5-7 hours a day.

Rigger Level I, 1 day 5-7 hours a day.

Rigger Level II, 1 day 5-7 hours a day.

Signalman, 1 day 4-6 hours.

The regulatory authority will assess the knowledge and competencies of the operator's onsite randomly to insure the regulation is being followed.

**11 SUSPENDING, WITHDRAWAL OR REDUCING THE SCOPE OF CERTIFICATION**

If a certified person does not follow the terms of condition for maintaining the certificate, or in any other way misuses his/her certificate, this shall be immediately reported to CS in a written manner and achieved.

Such a report shall as a minimum contain, but not be restricted to the following information:

- Name and address of certified person
- Certificate number
- Employer's name and address
- Reason for and degree of breach

If a certified person is accounted by any govt. authority for violating rules such as the following, the certification status shall be suspended or withdrawn immediately by CS until the same is resolved and written approval from concerned govt. Authority is received. This shall include but not limited to:

1. Period of certification exceeded without renewal
2. Evidence of falsification of any submitted information on any documents
3. Evidence of non-compliance with Substance Abuse Policy
4. Evidence of culpability in an accident during certification period
5. Evidence of non-compliance with medical requirements required for the Occupational Health Card issuance.
6. Evidence of non-compliance with the Code of Ethics

The defendant shall in a written letter/email be informed about the complaint(s) or non-conformity and, when applicable, the reason for the suspension/withdrawal.

Immediately after the decision of suspension or withdrawal is made, CS shall make sure that the certified person is removed from CS's list of certified persons. In the above mentioned letter, the certified person shall return CS certificate and refrain from promotion of the certification.

Whether the certificate should be suspended or withdrawn depends upon the gravity of the violation/misuse.

In the case of a suspension a time frame shall be established by CS providing the certificate holder with the opportunity to resolve the issues that have led to the suspension. In failure to do this in the given time frame the certificate will be revoked.

**12 CODE OF ETHICS**

Certified lifting equipment operators, riggers, Riggers and signalman must comply with Code of Ethics during their certification, as set below:

1. Free of bias with regard to religion, ethnicity, gender, age, national origin, and disability
2. So as to place the safety and welfare of workers associated with the lifting operation above all other considerations
3. So as to protect nearby general public property and the environment
4. Make management aware if he have safety concerns relating to the lifting operations that he is performing
5. Not knowingly violate safety-related regulations, warnings, or instructions set forth by the authority, recognized safety standards, the lifting equipment manufacturer, or relevant department.
6. Not misrepresent or knowingly deceive others concerning the experience or the capabilities of himself or the crane he is operating
7. Not misrepresent or misuse his certification card, both of which are the property; and understand that he must return the card to the issuing authority immediately if required to do so.

**13 SUBSTANCE ABUSE POLICY**

It is the policy of CS that crane operators shall not use prescribed or over-the-counter substances that would impair their ability to operate cranes safely. This includes illegal drugs, controlled substances (including trace amounts), look-alike drugs, designer drugs, or any other substance that may have an effect on the human body of being a narcotic, depressant, stimulant, or hallucinogen. An exception to this rule is that an operator may use such a substance or drug if it is prescribed by a licensed medical practitioner who is familiar with the operator's medical history and all assigned duties, and who has advised the operator the prescribed substance will not adversely affect the operator's ability to operate a crane safely.

**14 CANDIDATE ID AND SIGNATURE**

Prior to beginning of examination, the examiner must ask the candidate(s) for a photo identification such as a labour card and collect his signature.

**15 CERTIFICATION CARDS**

Certified operators, Rigger Level IIs, rigger and signalman will receive a photo ID card at no extra cost when they certify for first time and when they complete the requirements of recertification.

They shall keep their original card with them all the time for review and checking from the relevant authorities during inspection.

**16 IMPARTIALITY AND INDEPENDANCE**

CS ensures Impartiality and Independence throughout its process. A documented Procedure CB-QP-1 is in place for the management of impartiality, which is available without request in our website [www.carlstahl.ae](http://www.carlstahl.ae)

**17 COMPLAINTS AND APPEALS HANDLING PROCESS**

Registrations and treatment of complaints and/or appeals shall be managed according to CS Procedure CB-QP-2, which is available without request in our website [www.carlstahl.ae](http://www.carlstahl.ae)

These are owned and managed by the Decision Maker and are reviewed by scheme committee as part of their impartiality review.

**18 REFERENCES:**

1. **BS EN ISO/IEC 17024:2012:** Conformity assessment – General requirements for bodies operating certification of persons
2. **DAC-REQ-14:** Accreditation requirements of Certification bodies of certification of persons
3. **PHSD Scheme outline document:** DAC email dated 29-10-2012
4. **CS-QM3:** Carl Stahl Quality Manual for certification of persons