

# Construction Skills Certification Scheme

## Candidate Pack for the Programme – CSCS Mobile Crane

Please read this document carefully. Further information and clarification may be obtained from the CSCS Operations Unit, phone 01 533 2500

### Guidance Notes for Candidates

The following documents are also attached:

- Part 1 – Skills Self-Analysis
- Part 2 – Applicant Details
- Part 3 – Endorsement of Operating Competence
- Part 4 – Practical Test Criteria

### Aim of Programme

The CSCS crane training and assessment programme enables trained construction crane operators to gain recognition for their achievements by the way of certification, and provide an opportunity for participants to demonstrate their skills, knowledge and attitudes associated with plant operations, which provides suitable certification.

### Candidate Profile

Candidates for this programme must:

- Have at least six months full time experience operating as a trainee Mobile Crane operator in construction in accordance with the 5<sup>th</sup> Schedule – of the Safety, Health and Welfare at Work (Construction) Regulations 2013 – S.I. No. 291 of 2013. The six months experience must be within the last two years.
- Possess a valid 'Safe Pass' registration card
- Be in possession of a valid CSCS Slinger/Signaller card
- Be at least 18 years of age

Note: The above items must be verified by the current or previous employer (Part 3 of this pack)

### Application Requirements

- Approved Training organisations must send the Candidate Pack and Course Notes to the Candidate in good time prior to the course date.
- Sections A B and C of Part 2 need to be completed by the applicant with Part 3 completed by the employer.
- Section C of part 2 must list at least six months full time experience operating as a trainee Mobile Crane operator.
- Part 1 - Skills Self-analysis, Part 2 Applicant Details and Part 3 - Endorsement of Operating Competence must be completed and submitted to the chosen Approved Training Organisation at least one-day prior to attending the one-day training and assessment programme. Failure to do so will result in the candidate being unable to complete the programme.

**Candidates must bring with them on the day:- a passport sized photograph, their Safe Pass card, CSCS Slinger Signaller card plus safety helmet, safety boots, reflective 'hi-viz' jacket and gloves.**

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## Candidate Pack for the Programme – CSCS Mobile Crane

### One Day Programme Content

#### Induction

Registration and induction will be undertaken at the start of the day. Candidates **must** present their Safe Pass and Slinger Signaller cards and photograph to the assessor. Parts 1, 2 and 3 must be already submitted.

#### Skills Validation Session

Candidates will undertake a minimum of a 3 hour Skills Validation Session with the course instructor. The Skills Validation Session cannot give skills and knowledge not held, but allows trained operators to eliminate 'bad habits' gained on site.

Please note that the instructor has the right to refuse the candidate access to the test if they have demonstrated dangerous operating skills that contravene any part of the Safety, Health and Welfare Regulations.

#### Theory Test

On completion of the Skills Validation Session, candidates are allowed 45 minutes to undertake a multi-choice question paper. Questions will be based on the following:

- Legislation and regulations
- Employer and employee responsibilities
- Safe working practices
- Crane components and functions
- Correct operating techniques
- Pre-use checks and basic maintenance
- Types and characteristics of materials and loads
- Site safety
- Shut down and securing procedures

Subjects that the questions will be based on will be covered during the Skills Validation Session.

To be successful on the theory test, candidates must achieve a minimum of 70% of the total available marks. Candidates who achieve a minimum of 85% will be awarded a credit.

#### Practical Test

On the test the candidate will demonstrate tasks with the Crane. The tasks to be undertaken, equipment required and a sample grading sheet is contained in Part 4 of this pack – Practical Test criteria. Part 4 of this pack details the equipment and resources needed for the test and the tasks the candidate will be expected to carry out with a Mobile Crane.

The grading sheet is divided into essential items and scored marks. Scored marks allow a limited number of minor errors to be made. To succeed, the candidate must achieve all essential items and not exceed the maximum score. Candidates who score no penalty marks as well as all the essential marks will be awarded a credit. The practical test has a maximum time of 1 hour and 15 minutes in which all tasks must be completed.

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### Candidate Pack for the Programme – CSCS Mobile Crane

#### Feedback and Certification

If a candidate meets the required standard, the approved training organisation will send the relevant assessment documentation to SOLAS for certification and registration. The CSCS card is printed and posted to the training provider for distribution. A QQI certificate will also be awarded as a result of a pass on the one-day programme.

Candidates who achieve a credit in the theory test **and** practical test will be awarded an overall credit.

Candidates who are referred will receive written feedback from the assessor, and may be advised to undertake further training and/or site experience.

If a candidate is successful in the theory but not the practical part of the test, then they may re-attempt just the practical part. If the candidate has not been successful in the theory test, then they may not attempt the practical test.

This concession may only occur if the candidate returns to the same approved trainer and training organisation within 9 months. If they choose to go to a different organisation, they will have to do both the practical and theory parts again.

For learners who do not reach the required standard, a period of 5 days must elapse before they can retake the test.

#### Registration Card Duration

CSCS registration cards are valid for five years and can be renewed up to six months before the expiry date

#### Cancellation of Certificates and Cards

Where it is discovered that the information provided by the Candidate was incorrect or the programme was not delivered in accordance with SOLAS specifications the Certification and registration card may be withdrawn and the relevant authorities notified.

## PARTICIPANT DATA PROTECTION NOTICE

### 1. PERSONAL DATA COLLECTED AND OBTAINED

This Data Protection Notice ("**Notice**") sets out the basis on which SOLAS ("**SOLAS**", "**we**", "**our**" or "**us**") of Block 1, Castleforbes House, Castleforbes Road, Dublin 1 will use the personal details ("Personal Data") you will provide when completing the participant application form (the "**Form**") to be registered as a CSCS/QSCS cardholder. This Notice also details how SOLAS will process your Personal Data for the purpose of assessing your Form and, if successful, issuing your CSCS/QSCS card to you ("**Card**"). The Personal Data we obtain from you will be held by SOLAS as a controller.

SOLAS will collect and process the Personal Data that you provide in the Form (e.g. name, contact details, PPSN, address, photograph, occupation and employer details.).

**IMPORTANT:** where you provide Personal Data about other individuals (eg your existing/previous employer or endorsers), you agree that you are responsible for ensuring that such individuals know their Personal Data will be used by SOLAS accordance with this Notice.

### 2. HOW AND WHY WE PROCESS YOUR PERSONAL DATA

This section details how ("**legal basis**") and why ("**purposes**") we process your Personal Data:

**Legal basis:** it is necessary to process your Personal Data to enter into and perform our contract with you including for the following purposes: (a) to process your Form; (b) to issue you with a Card; (c) to verify your Card on an ongoing basis; (d) to renew your Card where you ask us to do so; and (e) to respond to you when we receive any correspondence from you. **IMPORTANT:** If you do not provide us with your Personal Data so that we can process it for the above purposes, we will not be able to assess or process your Form, issue you with or renew your Card and/or communicate with you as necessary in relation to your Form and/or your Card.

**Legal basis:** it is also necessary to process your Personal Data for the purpose of complying with legal obligations to which we are subject including to fulfil our statutory functions.

### 3. DISCLOSURE OF YOUR PERSONAL DATA

We may disclose some or all of your Personal Data to the following parties: SOLAS business units, SOLAS agents or service providers including CSCS/QSCS trainers, your existing or potential employers, government and state authorities including in particular the Construction Industry Federation (CIF), Credit Card Systems Ireland Ltd and Quality and Qualifications Ireland. We may also disclose your Personal Data to third parties if we are under a legal duty to disclose or share your Personal Data in order to comply with any legal or regulatory obligation or request or to perform a public function.

### 4. KEEPING YOUR PERSONAL DATA

We will keep your Personal Data for the period for which your Card is valid and/or renewed and for a period of 7.5 years from when your Card expires and/or is not renewed. In some cases, we will need to retain your Personal Data for longer periods for compliance with legal obligations imposed on us or where we are a party to legal proceedings with you, and to ensure you a continued client service. Such Personal Data will be securely retained in line with the SOLAS records retention and disposal Procedure.

### 5. YOUR RIGHTS

This subsection sets out the rights which you have to address any concerns or queries with us about our processing of your Personal Data:

Right	Further Information
Right to be Informed	<ul style="list-style-type: none"> <li>You have the right to know whether your Personal Data are being</li> </ul>

	processed by us, how we use your Personal Data and your rights in relation to your Personal Data. We comply with this by way of this Notice.
<b>Right of Access</b>	<ul style="list-style-type: none"> <li>You have the right to request a copy of the Personal Data held by us about you.</li> <li>We will only charge you for making such an access request where we feel your request is unjustified or excessive.</li> </ul>
<b>Right to Rectification</b>	<ul style="list-style-type: none"> <li>You have the right to request that we amend any inaccurate Personal Data that we have about you.</li> </ul>
<b>Right to Erasure</b>	<ul style="list-style-type: none"> <li>You have the right to ask us to erase your Personal Data where:             <ol style="list-style-type: none"> <li>it is no longer necessary to perform your contract with us;</li> <li>you object to the processing and we have no overriding legitimate grounds;</li> <li>your Personal Data has been unlawfully processed; or</li> <li>it must be erased to comply with a legal obligation.</li> </ol> </li> </ul>
<b>Right to Restriction of Processing</b>	<ul style="list-style-type: none"> <li>You have the right to ask us to restrict processing your Personal Data in the following situations:             <ol style="list-style-type: none"> <li>where you contest the accuracy of your Personal Data;</li> <li>where the processing is unlawful and you do not want us to delete your Personal Data; or</li> <li>where we no longer need your Personal Data for the purposes of processing but you require the data in relation to a legal claim.</li> </ol> </li> <li>When you exercise this right we may only store your Personal Data.</li> <li>We may not further process the data unless you consent or the processing is necessary in relation to a legal claim or to protect the rights of another person or legal person or for reasons of important public interest.</li> <li>We will inform you before the processing restriction is lifted.</li> </ul>
<b>Right to Data Portability</b>	<ul style="list-style-type: none"> <li>You may request us to provide you with your Personal Data which you have given us, in a structured, commonly used and machine-readable format and you may request us to transmit your Personal Data directly to another controller, where this is technically feasible. This right only arises where:             <ol style="list-style-type: none"> <li>we process your Personal Data on the legal basis that it is necessary to perform our contract with you; <b>and</b></li> <li>the processing is carried out by automated means.</li> </ol> </li> </ul>

You can exercise any of these rights by submitting a request to **the Data Protection Officer, SOLAS, Castleforbes House, Dublin 1**. We will provide you with information on any action taken upon your request in relation to any of these rights without undue delay and at the latest within one month of receiving your request. We may extend this by up to 2 months if necessary, however we will inform you if this arises.

You have the right to lodge a complaint with the Data Protection Commission with regards to our processing of your Personal Data.

## 6. CHANGES TO THIS NOTICE

We may amend this Notice from time to time, in whole or part, at our sole discretion. Any changes to this Notice will be posted on the SOLAS CSCS/QSCS website at <http://www.solas.ie/Pages/CSCS.aspx>

If at any time we decide to use your Personal Data in a manner significantly different from that stated in this Notice, or otherwise disclosed to you at the time it was collected, we will notify you by e-mail, and you will have a choice as to whether or not we use your information in the new manner.

## 7. CONTACT US

If you have questions or concerns about this Notice, please contact the SOLAS Data Protection Officer at SOLAS Data Protection Officer, SOLAS, Castleforbes House, Dublin 1.

## Construction Skills Certification Scheme

### Skills Self-Analysis CSCS Mobile Crane - Part 1

#### Introduction

The aim of this form is to allow applicants to measure their knowledge and experience on the safe use of a Mobile Crane against the questions below. This is to ensure that all those attending the One-day Trained Operator Programme have sufficient skills and knowledge to comfortably meet the required standards. This section **must** be completed and returned to the chosen Approved Training Organisation prior to attending the one-day training and assessment programme.

#### Instructions to the Applicant

Please take your time and answer all questions honestly, as dishonest answers mean that you may be un-successful on the course programme. On completion, add up the total number of questions you have scored as 'yes' and refer to the Assessment Grading which will analyse your knowledge and experience

Please answer **all** questions as indicated:

	Yes	No
1. Can you identify and use all the controls correctly?	<input type="checkbox"/>	<input type="checkbox"/>
2. Can you extract information from the operators handbook?	<input type="checkbox"/>	<input type="checkbox"/>
3. Do you correctly carry out all pre-use and running checks?	<input type="checkbox"/>	<input type="checkbox"/>
4. Can you correctly configure the crane for site and road travel?	<input type="checkbox"/>	<input type="checkbox"/>
5. Have you travelled over differing types of terrain, rough, undulating ground?	<input type="checkbox"/>	<input type="checkbox"/>
6. Can you set the crane up correctly in order to lift various loads?	<input type="checkbox"/>	<input type="checkbox"/>
7. Do you know the purpose of an anemometer?	<input type="checkbox"/>	<input type="checkbox"/>
8. Do you know how to read and interpret load or duties charts correctly?	<input type="checkbox"/>	<input type="checkbox"/>
9. Can you explain the different methods of determining the weight of a load?	<input type="checkbox"/>	<input type="checkbox"/>
10. Do you know what the recommended minimum distance is when working near power lines?	<input type="checkbox"/>	<input type="checkbox"/>
11. Can you explain the purpose of the outriggers and when they should be used?	<input type="checkbox"/>	<input type="checkbox"/>
12. Can you lift and place various loads very accurately in confined spaces?	<input type="checkbox"/>	<input type="checkbox"/>
13. Do you know how to set up an RCI/ASLI?	<input type="checkbox"/>	<input type="checkbox"/>
14. Have you lifted and placed various loads using the crane's full working height?	<input type="checkbox"/>	<input type="checkbox"/>
15. Do you know what is meant by 'load centre'?	<input type="checkbox"/>	<input type="checkbox"/>
16. Can you recognise the approved hand signals?	<input type="checkbox"/>	<input type="checkbox"/>
17. Can you explain how to control a load swing?	<input type="checkbox"/>	<input type="checkbox"/>
18. Do you know when to use a fly jib or extension and where it is fitted to?	<input type="checkbox"/>	<input type="checkbox"/>
19. Can you shut down and secure the crane correctly after work?	<input type="checkbox"/>	<input type="checkbox"/>

Yes total \_\_\_\_\_

Candidate Name: ..... Date: .....

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## Assessment Grading

### If you have scored 15 – 19

You appear to have a good understanding of Mobile Crane operations to comfortably participate on the trained operator course programme.

### If you have scored 10 – 14

Your understanding of Mobile Crane operations is limited and we advise that you acquire further knowledge before attending the trained operator course programme. Remedial training and further site experience is advised.

### Less than 10

Your supposed understanding of Mobile Crane operations is very limited and we strongly advise you not to attend the course until you have undertaken remedial or full training.

## Assessment Requirements

Should a candidate have any particular assessment requirements i.e. need a translator or reader/writer or any other form of special needs, the approved training organisation **must** be informed well in advance of attending the one day programme so that the appropriate help may be sourced.

Information regarding a candidate's particular requirements will be treated with the strictest confidence by the approved training organisation.

## REMINDER

**Candidates must bring with them on the day:**

- **Passport sized photograph** .....
- **Safe Pass card** .....
- **Safety helmet** .....
- **Safety boots** .....
- **Reflective 'hi-viz' jacket** .....
- **Gloves** .....

**Further information and clarification may be obtained from the CSCS Unit Office or phone 01 5332500**

**Application Details CSCS Mobile Crane - Part 2**

## Construction Skills Certification Scheme

### Section A Applicant Details

Surname ..... Forenames.....

Address .....

.....

..... Date of Birth: .....

Tel: ..... PPS Number .....

Safe Pass Expiry Date: .....

### Candidate Profile

Candidates for this programme must:

- Have at least six months full time experience operating as a trainee Mobile Crane operator in construction in accordance with the 5<sup>th</sup> Schedule – of the Safety, Health and Welfare at Work (Construction) Regulations 2013 – S.I. No. 291 of 2013. The six months experience must be within the last two years.
- Possess a valid 'Safe Pass' registration card
- Possess a valid CSCS Slinger/Signaller registration card
- Be at least 18 years of age

### Section B Applicant Declaration

I confirm that the information detailed in this application, and any submitted information is valid, genuine and correct.

- I have as least six months full time experience operating as a trainee Mobile Crane operator in construction within the last two years
- I am in possession of a valid 'Safe Pass' registration card
- I am in possession of a valid CSCS Slinger Signaller registration card
- I am at least 18 years of age

Please sign

Date: .....



## Construction Skills Certification Scheme

### Application Details - CSCS Mobile Crane - Part 2

#### Section C Applicant Experience

Please briefly list work carried out with a Mobile Crane for at least six months, including dates and location of work.

Dates from/to	Machine make & model	Location and brief details of work done
<i>Example</i>  <i>9 Jan</i> <i>14- 22</i> <i>May</i> <i>2015</i>	<i>Liebherr 1055</i> <i>CKE 700</i>	<i>Barron Construction, Kilty Street, Dublin.</i> <i>Lifting and placing steel beams for new warehouse build</i>
		<i>(continue on a separate sheet if needed)</i>

### Endorsement of Operating Competence - Mobile Crane - Part 3

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Applicant Name.....

This endorsement of operating competence must be completed by an existing or previous employer. This part can only be completed by a supervisor or line manager of the employer. The endorsing individual should only initial the statements where they can confirm that the applicant can carry out the work. Some endorsements may require the initials of more than one endorser. Copies of this form may be made if there are more than two endorsers signing.

Each statement must be initialled by the endorser. The applicant can only be considered competent providing **all** statements are signed by one or more endorsers in the Endorsers details section.

I consider that the above named applicant is able to competently:	Initials
1. Check, inspect and maintain the mobile crane for efficient and safe use under construction site conditions	
2. Understand and interpret duties/load charts and safe load indicators	
3. Manoeuvre the mobile crane around the site with loads, and with if applicable	
4. Understand and establish safe use of lifting gear	
5. Lift and place a variety of loads accurately and safely using the full radius and working range of the mobile crane	
6. Follow given instructions and signals when working with the mobile crane	
7. Shut down, secure and leave the mobile crane in a safe condition	
8. Follow manufacturers requirements when working with the mobile crane	

<b>Endorsers Details</b>	
Full Name: .....	
Company name and address: .....	
.....	
Position: .....	Contact Tel no: .....
Relationship to Applicant.....	
<i>The named individual signing this section must be in a supervisory or managerial position, nominated by the employer organisation.</i>	
<b>Declaration</b>	
We/I the employer confirm that:	
<ul style="list-style-type: none"> <li>• the applicant has at least six months full time experience operating as a trainee Mobile Crane operator in construction within the last two years</li> <li>• the applicant is in possession of a valid CSCS Slinger Signaller registration card</li> <li>• the applicant is in possession of a valid 'Safe Pass' registration card</li> <li>• the information detailed in this application, and any submitted information is valid, genuine and correct.</li> </ul>	
Signature	Date:

**Practical Test Specifications - Mobile Crane - Part 4**

## Construction Skills Certification Scheme

### Equipment and Resources

- Wheeled mobile crane which meet current legislative requirements
  - not less than 20 tonne lifting capacity,
  - is serviceable and meets current legislation,
  - has a minimum of 4 outriggers and a lattice extension/fly jib,
  - plus the operator's manuals for the crane and carrier vehicle.
- Suitable loads of known weights, being:
  - 1 x load which must be a minimum 50% load at 75% full radius of the crane (excluding the lattice extension/fly jib) - **Load 1**
  - 1 x load which must be within the duties chart for 2 falls of rope - **Load 2**
  - 1 x load which must be within the duties chart for the lattice extension/fly jib - **Load 3**
  - 1 x load being a tube or similar not less than 5 metres in length with two lift points, one at each end. This load must be capable of free-standing on one of its ends. **Load 4**
- A measuring tape of sufficient length, able to measure the maximum radius of the crane.
- Two-way radios
- Assistance from a Slinger and Signaller who is competent and in possession of a relevant CSCS card
- Suitable certificated lifting gear for all loads.
- An area with facilities for:
  - crane travel and parking
  - a structure(s) to place loads at a height of at least 2 metres
  - structure to allow placing of loads out of sight of the operators cab ('blind' lift)
- Equipment to create restrictions for travelling and manoeuvring.

### Tasks

The Candidate needs to:

1. Carry out full pre-start and running checks on the crane and carrier vehicle in accordance with manufacturer's requirements.
2. Prepare the crane for road travel, and drive to the lifting area.
3. Position and set the crane to lift and move **Load 1 which** must be located at minimum radius. Keep the load at 1 metre above ground level and place in a position which requires the crane to be at 80% of maximum reach.
4. Position and set the crane to lift and move **Load 2** from ground level, and land in a designated position at least 2 metres above ground level. There must be a change in radius. On completion land the load at the original start point completing 360 degrees of rotation.
5. Set the crane to lift and move **Load 3** from a designated position, rotate for at least 240 degrees, and land at a designated point.

### Practical Test Specifications - Mobile Crane - Part 4

## Construction Skills Certification Scheme

6. Position and set the crane to lift **Load 4** using the hitch point(s) at the end. Lift **Load 4** to stand vertically on one of its ends. When vertical to the satisfaction of the examiner, replace back to ground level and detach the load.
7. Position and set the crane to lift and move a load from a designated position, and land in a position out of sight of the candidate.
8. Retrieve a 2 metre swing that has been induced, for a minimum of 1 x swing in a left to right plane and a minimum of 1 x swing in a forward to reverse plane.
9. On completion of all the lifting tasks, configure the crane for travel.
10. Reverse the crane into the confined space, being no wider than the width of the crane plus 900mm
11. Travel the crane to a park position, shut down and secure.

### Time Allowed

The candidate must complete all tasks within 2 hours

### Notes

- Verbal questions may be used for task 1, but **only** on items not able to be checked due to heat of the engine, i.e. coolant, oil level etc.
- Before carrying out each lift, the instructor must ensure that the candidate has programmed the ASLI/RCI correctly for the falls of rope, radius, boom length etc.
- All lifting and landing movements to be under directions of a signaller who must be competent and CSCS certificated.
- Tasks 3 to 8 may be undertaken in any order during the test.
- All loads must be placed within 200 mm of a given position. The instructor shall determine each position.
- Tasks 7 and 8 may be incorporated with tasks 3, 4, or 5.
- Care must be taken to ensure that the lifting gear for Load 4 is secure form horizontal to upright.
- At least one lift must be under the direction of hand signals and one lift using radios.

candidates will be assessed under the following headings

1. Carry out pre-start and running checks (verbal questions answered if engine hot)
2. Mount and dismount the cab(s) correctly
3. Carry out full observation before moving and reversing the vehicle
4. Maintain full observation when travelling the vehicle
5. Place all loads at the given points within the given tolerance
6. Keep the hoist rope vertical
7. Conform correctly to given hand signals and verbal communications
8. Correctly carry out shut down and securing procedures
9. Conform with legislation and manufacturer's instructions
10. Complete the test in the given time