



## National Unit Specification: general information

**UNIT** Receiving and Transporting Loads: An Introduction (SCQF level 5)

**CODE** F6R2 11

### SUMMARY

This Unit provides candidates with an introduction to the key principles and techniques of receiving and transporting loads within a construction environment. On completion of this Unit, candidates will be able to identify the correct machinery required, check and prepare the work area before then receiving and transporting loads in a secure and stable manner. They will carry this out whilst understanding and complying at all times with the relevant safety requirements. This Unit is suitable for candidates working towards a Modern Apprenticeship in the Construction Operative and Specialist suite.

### OUTCOMES

- 1 Establish correct machinery required for receiving and transporting loads according to the work specification.
- 2 Conduct pre-operational checks of machinery and the work area in preparation for receiving and transporting loads.
- 3 Receive and transport the specified load, discharging it safely in the correct location.

### RECOMMENDED ENTRY

While entry to this Unit is at the discretion of the centre, candidates undertaking a National Progression Award at SCQF level 5, as part of a Modern Apprenticeship, must meet the necessary criteria which includes being employed in the relevant industry.

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#### Administrative Information

**Superclass:** TK

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## **National Unit Specification: general information (cont)**

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### **CREDIT VALUE**

1 credit at SCQF level 5 (6 SCQF credit points at level 5\*).

*\*SCQF credit points are used to allocate credit to qualifications in the Scottish Credit and Qualifications Framework (SCQF). Each qualification in the Framework is allocated a number of SCQF credit points at an SCQF level. There are 12 SCQF levels, ranging from Access 1 to Doctorates.*

### **CORE SKILLS**

There is no automatic certification of Core Skills in this Unit.

This Unit provides opportunities for candidates to develop aspects of the following Core Skills:

- ◆ *Numeracy* (SCQF level 3)
- ◆ *Communication* (SCQF level 3)
- ◆ *Working with Others* (SCQF level 3)
- ◆ *Problem Solving* (SCQF level 3)

## **National Unit Specification: statement of standards**

### **UNIT      Receiving and Transporting Loads: An Introduction (SCQF level 5)**

Acceptable performance in this Unit will be the satisfactory achievement of the standards set out in this part of the Unit Specification. All sections of the statement of standards are mandatory and cannot be altered without reference to SQA.

#### **OUTCOME 1**

Establish correct machinery required for receiving and transporting loads according to the work specification.

##### **Performance Criteria**

- (a) Interpret accurately the drawings and/or work specification for the task.
- (b) Identify the key characteristics of the load to be transported.
- (c) Select the correct machinery to use for the task.
- (d) Identify components and controls of machinery selected, using correct terminology.
- (e) Select appropriate personal protective equipment (PPE) for the specified task, in accordance with organisational requirements.

#### **OUTCOME 2**

Conduct pre-operational checks of machinery and the work area in preparation for receiving and transporting loads.

##### **Performance Criteria**

- (a) Identify any potential hazards, including underground and overhead utilities apparatus to avoid within the work area.
- (b) Inspect and confirm machinery is safe for operational use.

#### **OUTCOME 3**

Receive and transport the specified load, discharging it safely in the correct location.

##### **Performance Criteria**

- (a) Operate machinery in accordance with manufacturer's guidelines and the operator's handbook.
- (b) Receive and transport the load stably and securely.
- (c) Discharge materials safely in the designated area.
- (d) Park, shut down and secure machinery on completion.
- (e) Comply with all current workplace safety and legislative requirements.
- (f) Dispose of waste in accordance with legislative requirements.

## **National Unit Specification: statement of standards (cont)**

### **UNIT        Receiving and Transporting Loads: An Introduction (SCQF level 5)**

#### **EVIDENCE REQUIREMENTS**

Candidates are required to produce evidence to confirm that they have achieved all Outcomes and Performance Criteria outlined in this Unit.

Performance evidence is required to demonstrate the candidate has achieved the standard specified in the Outcomes and Performance Criteria for Outcomes 1, 2 and 3. Performance evidence should be supplemented with an assessor observation/operational checklist and produced at an appropriate interval in training, under supervised conditions, once the candidate has developed the necessary skills and knowledge required to carry out the work.

Performance evidence should be demonstrated by the candidate using one of the following items of machinery:

- ◆ Truck mounted boom concrete pump
- ◆ Forward tipping dumper (wheeled or tracked)
- ◆ Agricultural tractor
- ◆ Trailer mounted concrete pump
- ◆ Dump truck — articulated chassis (all sizes)
- ◆ Dump truck — rigid chassis (all sizes, wheeled or tracked)
- ◆ Bowser

The candidates should be required to use the correct terminology at all times when identifying components and controls of machinery, and carrying out any practical assignments (Outcomes 1, 2 and 3).

As part of the assessment for this Unit, the candidate may also submit written product evidence such as a works checklist or completed risk assessment form. Oral evidence of knowledge and understanding may be demonstrated by the candidate during practical assignments set for all Outcomes and noted at the time by the observer.

## **National Unit Specification: support notes**

### **UNIT      Receiving and Transporting Loads: An Introduction (SCQF level 5)**

This part of the Unit Specification is offered as guidance. The support notes are not mandatory.

While the exact time length allocated to this Unit is at the discretion of the centre, the notional design length is 40 guided learning hours.

#### **GUIDANCE ON THE CONTENT AND CONTEXT FOR THIS UNIT**

The Outcomes and Performance Criteria for this Unit can be demonstrated by the candidate using one of the following items of machinery:

- ◆ Truck mounted boom concrete pump
- ◆ Forward tipping dumper (wheeled or tracked)
- ◆ Agricultural tractor
- ◆ Trailer mounted concrete pump
- ◆ Dump truck — articulated chassis (all sizes)
- ◆ Dump truck — rigid chassis (all sizes, wheeled or tracked)
- ◆ Bowser

The Unit has been designed as an optional Unit as part of the National Progression Award in Plant Operations, but can also be delivered as a standalone Unit.

The content and context of this Unit has been set at an introductory level so that the candidate can develop a basic knowledge and ability in receiving and transporting loads within a construction environment.

Health and Safety are vital to working practices within the construction industry and therefore, emphasis will be placed wherever appropriate during the delivery of this Unit on the correct application of Health and Safety principles and processes, in accordance with current codes of practice and legislation.

#### **GUIDANCE ON LEARNING AND TEACHING APPROACHES FOR THIS UNIT**

These notes are for guidance purposes only, but are not to be considered as complete guidance to learning and teaching approaches.

Delivery may be integrated with all mandatory Units.

The introductory training for this Unit should take place in a separate training area independent of the productive work environment and using dedicated equipment and resources and cover underpinning and practical principles before any practical application of knowledge is carried out by candidates.

## National Unit Specification: support notes (cont)

### UNIT Receiving and Transporting Loads: An Introduction (SCQF level 5)

Delivery of this Unit will be focussed on enabling candidates to know and understand the key principles and techniques required for receiving and transporting materials safely, before they are given the opportunity to do so within the workplace environment. This will include ensuring candidates learn about the different components and controls of the machinery, using the correct terminology and understanding the necessary procedures for checking and configuring machinery before any work is carried out (eg setting the correct driving position). Emphasis will also be placed on the importance of candidates accurately understanding and interpreting the information provided within work specifications and drawings, and ensuring the integrity and security of a load before it is transported to a new location.

During delivery of the practical components of this Unit, candidates should understand the importance of ensuring good visibility at all times when manoeuvring machinery, that reversing should only be undertaken under the guidance of a nominated vehicle marshal on site, and checking the ground to identify where materials may need to be discharged carefully onto unstable or inclined surfaces. Candidates should know how to adhere to relevant Health and Safety regulations and legislation relating both to working practices within the construction environment, as well as those specific to any practical task they are requested to carry out (such as emphasising the importance of selecting and using the correct PPE at all times).

E-learning approaches may be appropriate to help tailor delivery to suit the individual needs or learning styles of candidates. This might include, for example, encouraging learners to use electronic resources to conduct research into a specific knowledge area.

### OPPORTUNITIES FOR CORE SKILL DEVELOPMENT

Critical Thinking, Planning and Organising (all components of the Core Skill of *Problem Solving* SCQF level 3) will be developed by candidates as they undertake this Unit. Candidates will need to consider a number of factors and create a suitable plan when deciding upon the appropriate action to take and equipment to use during the given task (Outcomes 1 and 2).

Candidates will need to apply the Core Skill of *Numeracy* (SCQF level 3), such as measuring and weighing, in order to accurately calculate the size of the load to be received and transported (Outcomes 1 and 2).

Opportunities for *Working with Others* (SCQF level 3) will be provided as candidates confirm whether equipment has been inspected for safe use, as well as ensuring the safety of others as they comply with codes of practice and working regulations (all Outcomes). Throughout this Unit, candidates will be expected to develop the Core Skill of *Communication* (SCQF level 3) within the work environment, for example to inform others of any safety considerations, using the correct terminology and a tone appropriate to their audience. In addition, assessment processes may enable candidates the opportunity to develop their Written Communication skills.

## National Unit Specification: support notes (cont)

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#### GUIDANCE ON APPROACHES TO ASSESSMENT FOR THIS UNIT

Centres may use the Instruments of Assessment they consider to be most appropriate, and the following notes are given as guidance only.

Assessment may be integrated with all mandatory Units.

Underpinning and practical knowledge of receiving and transporting loads should be assessed before any practical assignments are carried out by candidates. This will include assessment of a candidate's ability to select the machinery for a specified task. Assessment of practical performance should take place under supervised conditions and confirm a candidate's ability to carry out basic procedures using the machinery correctly and safely, whilst adhering to Health and Safety regulations and legislation.

For Outcomes 1 and 2, candidates may be assessed by centres setting a series of questions designed to ensure candidates have developed the required standard of knowledge for this Unit. Any oral responses given by candidates will be recorded by an observer at the time of assessment — this may be an appropriate method when the candidate carries out any practical assignments.

Outcomes 1, 2 and 3 may be assessed by centres setting candidates a series of appropriate practical assignments carried out under supervised conditions and recorded in an assessor's observation/operational checklist. Practical assignments undertaken by a candidate will be assessed according to their ability to carry out the task safely, using appropriate machinery according to manufacturer's guidelines.

Adherence to appropriate working regulations and Health and Safety procedures will be observed during the practical exercise carried out by the candidates towards all three Outcomes.

E-assessment may be appropriate for some assessments in this Unit. By e-assessment we mean assessment which is supported by Information and Communication Technology (ICT), such as e-testing or the use of e-portfolios or e-checklists. Centres which wish to use e-assessment must ensure that the national standard is applied to all candidate evidence and that conditions of assessment as specified in the Evidence Requirements are met, regardless of the mode of gathering evidence. Further advice is available in *SQA Guidelines on Online Assessment for Further Education (AA1641, March 2003)*, *SQA Guidelines on e-assessment for Schools (BD2625, June 2005)*.

#### DISABLED CANDIDATES AND/OR THOSE WITH ADDITIONAL SUPPORT NEEDS

The additional support needs of individual candidates should be taken into account when planning learning experiences, selecting assessment instruments, or considering whether any reasonable adjustments may be required. Further advice can be found on our website [www.sqa.org.uk/assessmentarrangements](http://www.sqa.org.uk/assessmentarrangements)