



QCF Unit and Assessment Specification

Unit title	Preparing and Operating Trailer Mounted Concrete Pumps to Receive, Pump and Discharge Materials in the Workplace
Ofqual Unit code	Y/600/8005
SQA Unit code	FC9W 66
SSC Ref	VR 391E

QCF Unit specification

Title:	Preparing and Operating Trailer-mounted Concrete Pumps to Receive, Pump and Discharge Materials in the Workplace	
Level:	2	
Credit value:	18	
Learning Outcomes <i>The learner will be able to:</i>	Assessment Criteria <i>The learner can:</i>	
1 Interpret the given information relating to the use of concrete pumps to carry out pumping and discharging operations.	1.1	Interpret and extract information from drawings, specifications, schedules and manufacturers' information.
	1.2	Comply with information and/or instructions derived from risk assessments and method statements.
	1.3	State the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented.
	1.4	Describe different types of information, their source and how they are interpreted in relation to: <ul style="list-style-type: none"> ◆ drawings, specifications, schedules, manufacturers' information, method statements and regulations and guidance applicable to concrete pumping operations.
2 Organise with others the sequence and operation in which concrete pumping operations using concrete pumps are to be carried out.	2.1	Organise the work according to given information or instructions.
	2.2	Describe how to communicate ideas between team members.
	2.3	Organise and communicate with team members and other associated occupations.
	2.4	State how to organise resources prior to and during concrete pumping operations.

Learning Outcomes <i>The learner will be able to:</i>	Assessment Criteria <i>The learner can:</i>
3 Know how to comply with relevant legislation and official guidance to carry out concrete pumping operations with concrete pumps.	3.1 Describe their responsibilities under current legislation and official guidance whilst working: <ul style="list-style-type: none"> ◆ in the workplace, below ground level, at height, in confined spaces, with tools and equipment, with materials and substances, with movement/storage of materials and by manual handling and mechanical lifting.
	3.2 Describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative.
	3.3 State what the accident reporting procedures are and who is responsible for making reports.
4 Maintain safe working practices when preparing for and carrying out pumping operations using concrete pumps.	4.1 Use personal protective equipment (PPE) to safely carry out the activity in accordance with legislation and organisational requirements during concrete pumping operations.
	4.2 Explain why and when personal protective equipment (PPE) should be used, relating to concrete pumping operations, and the types, purpose and limitations of each type.
	4.3 State how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries and other task-related hazards.
5 Request and select the required quantity and quality of resources to prepare for and carry out pumping operations using concrete pumps.	5.1 Describe the characteristics, quality, uses, limitations and defects associated with the resources, and how they should be used correctly, relating to: <ul style="list-style-type: none"> ◆ consumables, lubricants and fuels ◆ attachments, pumping and discharging aids ◆ hand tools, ancillary equipment and/or accessories.
	5.2 Request and select resources associated with concrete pumps in relation to consumables, materials, attachments, tools, accessories and/or ancillary equipment.
	5.3 State how the resources should be used correctly, how problems associated with the resources are reported and how the organisational procedures are used.
	5.4 Outline potential hazards associated with the resources and method of work.

Learning Outcomes <i>The learner will be able to:</i>	Assessment Criteria <i>The learner can:</i>
	5.5 Describe how to calculate quantity, weight, length and area associated with the method/procedures to carry out concrete pumping operations.
6 Minimise the risk of damage to the work and surrounding area when pumping materials using concrete pumps.	6.1 Protect the work and its surrounding area from damage. 6.2 Minimise damage and maintain a clean work space. 6.3 Describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions. 6.4 Dispose of waste in accordance with legislation. 6.5 State why the disposal of waste should be carried out safely in relation to the work.
7 Complete the work within the allocated time when preparing to and pumping and discharging materials using concrete pumps.	7.1 Demonstrate completion of the work within the allocated time. 7.2 Shut down and secure trailer-mounted concrete pumps. 7.3 State the purpose of the work programme and describe why deadlines should be kept in relation to: <ul style="list-style-type: none"> ◆ types of progress charts, timetables and estimated times ◆ organisational procedures for reporting circumstances which will affect the work programme.
8 Comply with the given contract information to receive, pump and discharge materials using concrete pumps to the required specification.	8.1 Demonstrate the following work skills when preparing for and pumping and discharging materials using concrete pumps <ul style="list-style-type: none"> ◆ fitting, attaching, setting up, securing, adjusting, checking, removing, communicating, operating, manoeuvring, positioning, receiving, pumping, discharging and cleaning. 8.2 Prepare, position, set up, check the positioning of and operate trailer-mounted concrete pumps to receive, pump and discharge materials, at various locations, to given working instructions.

Learning Outcomes <i>The learner will be able to:</i>	Assessment Criteria <i>The learner can:</i>
	<p>8.3 Describe how to apply safe work practices, follow procedures, report problems and establish authority needed to rectify, to:</p> <ul style="list-style-type: none"> ◆ identify the characteristics of the concrete pumps used for pumping and discharging work ◆ carry out performance checks ◆ prepare, set up and adjust for operational requirements ◆ complete functional checks ◆ carry out pre-operational checks for obstructions, stability, safety and security of the work and surrounding area ◆ identify the area for pumping ◆ check to avoid damage to structures and utilities service apparatus ◆ receive and pump materials safely and securely ◆ shut down and secure concrete pumps ◆ use hand tools, ancillary equipment and accessories.
	<p>8.4 Safely use and store hand tools and ancillary equipment.</p>
	<p>8.5 State the needs of other occupations and how to communicate within a team when preparing to and carrying out pumping and discharging operations.</p>
	<p>8.6 Describe how to maintain the plant, tools and equipment used to pump and discharge materials.</p>

Additional information about this Unit	
Purpose and aim of Unit	The aim of this Unit is to illustrate the skills, knowledge and understanding required to confirm competence in preparing and operating trailer-mounted concrete pumps to pump and discharge materials in the workplace within the relevant sector of industry.
Unit expiry date	31/10/2014
Details of the relationship between the Unit and relevant national occupational standards or other professional standards or curricula (if appropriate)	This Unit is based on the National Occupational Standards 'Prepare Plant or Machinery for Operational Performance' (VR 386) and 'Operate Plant or Machinery to Receive and Transport Loads' (VR 391)
Assessment requirements or guidance specified by a sector or regulatory body (if appropriate)	<p>This Unit must be assessed in a work environment and in accordance with:</p> <ul style="list-style-type: none"> ◆ the Additional Requirements for Qualifications using the title NVQ in QCF ◆ the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment — Craft, Supervisory, Technical, Managerial and Professional Units and Qualifications with NVQ in the Qualification and Credit Framework (QCF) title and SVQs. <p>Assessors for this Unit must use a combination of the following assessment methods:</p> <ul style="list-style-type: none"> ◆ observation of normal work activities within the workplace that clearly confirms the required skills ◆ questioning the learner on knowledge criteria that clearly confirms the required understanding ◆ review other forms of evidence that can clearly confirm industry required skills, knowledge and understanding. <p>Assessors for this Unit must have verifiable, current industry experience and a sufficient depth of occupational expertise and knowledge of preparing and operating trailer-mounted concrete pumps to pump and discharge materials to be effective and reliable when confirming a learner's competence.</p> <p>Workplace evidence of skills cannot be simulated.</p>
Support for the Unit from a sector skills council or other appropriate body (if required)	ConstructionSkills
Location of the Unit within the subject/sector classification system	05.2 Building and Construction
Name of the organisation submitting the Unit	ConstructionSkills
Availability for use	Shared Unit

Additional information about this Unit	
Unit available from	01/09/2010
Unit review date	30/04/2011
Credit value	18
Unit guided learning hours	60

QCF Assessment specification

Assessment (evidence) Requirements

The evidence requirements for this Unit are shown in the main body of the Unit under the section titled 'Assessment requirements or guidance specified by a sector or regulatory body'.

Guidance on Instruments of Assessment

Occupational Skills (OS) Unit

This Unit is designed to assess the skills of learners in the workplace. Observation of learner performance can only be carried out on-the-job and should always be the primary and preferred source of evidence of competent performance.

Collection of supplementary evidence of performance can be used to further substantiate, support and expand the evidence base for competent performance where this is necessary. This may arise in situations where evidence from direct observation of the learners on-the-job is deemed insufficient to fully meet the required standards. Supplementary evidence may include:

- ◆ witness testimony
- ◆ questioning,
- ◆ professional discussion,
- ◆ product and photographic evidence,
- ◆ relevant active documentation, reports, presentations and
- ◆ other valid evidence which relates directly to learner performance on-the job.

SQA's Guide to Assessment is designed to provide support for everyone who assesses for SQA qualifications. It looks at the principles of assessment, and brings together information on assessment in general as well as on best practice in assessment. The Guide to Assessment can be downloaded free from SQA's website www.sqa.org.uk