



This version of this unit replaces all previously published versions with effect from January 2012. This unit should be used by all learners registering for qualifications that include it in their structure from this date.

<b>Unit title:</b>	<b>Carrying out tremie operations in the workplace</b>
<b>Unit reference number:</b>	F/503/2546
<b>QCF level:</b>	2
<b>Credit value:</b>	26
<b>Guided learning hours:</b>	87
<b>Start date:</b>	January 2012

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### Unit summary

The aim of this unit is to develop the skills, knowledge and understanding required to confirm competence in carrying out tremie operations in the workplace, within the relevant sector of industry.

### Assessment requirements/evidence requirements

This unit must be assessed in a work environment, in accordance with:

- the Additional Requirements for Qualifications using the title NVO in QCF
- the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of relevant occupational expertise and knowledge, and must use a combination of assessment methods as defined in the Consolidated Assessment Strategy.

Workplace evidence of skills cannot be simulated.

## Assessment recording

This unit is assessed in the workplace. The table on the following pages shows the learning outcomes and the assessment criteria for this unit. The table includes space for learners to enter the types of evidence they are presenting for assessment and the submission date against each assessment criterion. Alternatively, centres can use their own documentation.

## Learning outcomes and assessment criteria

Learning Outcome		Assessment Criterion		Evidence type	Portfolio reference	Date
1	Interpret the given information relating to the work and resources needed when carrying out tremie operations.	1.1	Interpret and extract relevant information from drawings, instructions, specifications, schedules, method statements, risk assessments 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"> <li>– drawings, instructions, specifications, schedules, method statements, risk assessments, manufacturers' information, concrete pour records, toolbox talks, daily briefings, certificates and permits.</li> </ul>			

Learning Outcome		Assessment Criterion		Evidence type	Portfolio reference	Date
2	Know how to comply with relevant legislation and official guidance when carrying out tremie operations.	2.1	Describe their responsibilities under current legislation and official guidance whilst working: <ul style="list-style-type: none"> <li>– in the workplace, below ground level, in confined spaces, at height, with tools and equipment, with materials and substances, with movement/storage of materials and by manual handling and mechanical lifting.</li> </ul>			
		2.2	Describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative.			
		2.3	Explain what the accident reporting procedures are and who is responsible for making reports.			
3	Maintain safe working practices when carrying out tremie operations.	3.1	Use health and safety control equipment safely to carry out the activity in accordance with legislation and organisational requirements when carrying out tremie operations.			
		3.2	Explain why and when health and safety control equipment, identified by the principles of protection, should be used relating to carrying out tremie operations, and the types, purpose and limitations of each type, the work situation and general work environment, in relation to: <ul style="list-style-type: none"> <li>– collective protective measures</li> <li>– personal protective equipment (PPE)</li> <li>– respiratory protective equipment (RPE)</li> <li>– local exhaust ventilation (LEV).</li> </ul>			

Learning Outcome		Assessment Criterion		Evidence type	Portfolio reference	Date
		3.3	Describe how the relevant health and safety control equipment should be used in accordance with the given instructions.			
		3.4	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.			
4	Select the required quantity and quality of resources for the methods of work to carrying out tremie operations.	4.1	Select resources associated with own work in relation to materials, components, fixings, tools and equipment.			
		4.2	Describe the characteristics, quality, uses, sustainability, limitations and defects associated with the resources in relation to: <ul style="list-style-type: none"> <li>– tremie systems</li> <li>– concrete</li> <li>– hand and/or powered tools, machinery and ancillary equipment.</li> </ul>			
		4.3	Describe how the resources should be used correctly and how problems associated with the resources are reported.			
		4.4	Explain why the organisational procedures have been developed and how they are used for the selection of required resources.			
		4.5	Describe any potential hazards associated with the resources and method of work.			

Learning Outcome		Assessment Criterion		Evidence type	Portfolio reference	Date
		4.6	Describe how to determine quantity, length, volume and wastage associated with the method/procedure to carry out tremie operations.			
5	Minimise the risk of damage to the work and surrounding area when carrying out tremie operations.	5.1	Protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures.			
		5.2	Minimise damage and maintain a clean work space.			
		5.3	Dispose of waste in accordance with legislation.			
		5.4	Describe how to protect work from damage and the purpose of protection in relation to general workplace activities, others involved with the work and adverse weather conditions.			
		5.5	Explain why the disposal of waste should be carried out safely in accordance with environmental responsibilities, organisational procedures, manufacturers' information, statutory regulations and official guidance.			
6	Complete the work within the allocated time when carrying out tremie operations.	6.1	Demonstrate completion of the work within the allocated time.			
		6.2	State the purpose of the work programme and explain why deadlines should be kept in relation to: <ul style="list-style-type: none"> <li>– types of progress charts, timetables and estimated times</li> <li>– organisational procedures for reporting circumstances which will affect the work programme.</li> </ul>			

Learning Outcome		Assessment Criterion		Evidence type	Portfolio reference	Date
7	Comply with the given contract information to carry out tremie operations to the required specification.	7.1	Demonstrate the following work skills when carrying out tremie operations: <ul style="list-style-type: none"> <li>– measuring, cleaning, inspecting, preparing, assembling, fitting, sampling or inspecting, positioning, placing, monitoring, extracting and removing.</li> </ul>			
		7.2	Place concrete using tremie systems, to given working instructions, during one of the following piling operations: <ul style="list-style-type: none"> <li>– cast-in-situ piling</li> <li>– diaphragm walling.</li> </ul>			
		7.3	Safely use materials, hand tools, machinery and ancillary equipment.			
		7.4	Safely store the materials, tools and equipment used when carrying out tremie operations.			
		7.5	Describe how to apply safe work practices, follow procedures, report problems and establish the authority needed to rectify them, to: <ul style="list-style-type: none"> <li>– contribute to the construction of specialist works by placing concrete using tremie systems for cast-in-situ piling or diaphragm walling</li> <li>– handle displaced fluids</li> <li>– guide lifting appliances</li> <li>– use hand tools, power tools, machinery and ancillary equipment.</li> </ul>			

Learning Outcome		Assessment Criterion		Evidence type	Portfolio reference	Date
		7.6	Describe the needs of other occupations and how to effectively communicate within a team when carrying out tremie operations.			
		7.7	Describe how to maintain the tools, machinery and equipment used when carrying out tremie operations.			

Learner name: \_\_\_\_\_

Date: \_\_\_\_\_

Learner signature: \_\_\_\_\_

Date: \_\_\_\_\_

Assessor signature: \_\_\_\_\_

Date: \_\_\_\_\_

Internal verifier signature: \_\_\_\_\_

Date: \_\_\_\_\_

*(if sampled)*