

# Level 2 NVQ Diploma in Construction Diving Operations (Construction)

**Qualification Specification** 

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## Introduction

The aim of this qualification is to recognise the knowledge, skills and competence of individuals working in construction diving operations.

The awarding organisation for this qualification is ProQual Awarding Body and the regulatory body is the Office of Qualifications and Examinations Regulation (Ofqual).

This qualification has been accredited onto the Regulated Qualifications Framework (RQF).

## **Qualification Profile**

Qualification title ProQual Level 2 NVQ Diploma in Construction Diving

**Operations (Construction)** 

Ofqual qualification number 603/4162/2

Level 2

Total qualification time 440 hours

Guided learning hours 147

Pass or fail

Assessment Internally assessed and verified by centre staff

External quality assurance by ProQual verifiers

Qualification start date 21/2/2019

Qualification end date 31/7/2026

# **Entry Requirements**

There are no formal entry requirements for this qualification.

Centres should carry out an **initial assessment** of candidate skills and knowledge to identify any gaps and help plan the assessment.

# **Qualification Structure**

Candidates must complete all FOUR Mandatory units, plus TWO Optional Units. Unit Endorsements are indicated in the unit list below, full details of endorsements are also included after the learning outcomes/assessment criteria at the end of each relevant unit.

Mandatory U	nits – complete ALL units		
Unit Reference Number	Unit Title		CITB Ref. No.
M/508/6537	Conforming to general health, safety and welfare in the workplace	1	641
T/508/6538	Conforming to productive working practices in the workplace	2	642
Y/508/6533	Moving, handling and storing resources in the workplace	2	643
H/617/4740	Carrying out construction diving operations in the workplace	2	495
Optional Unit	s – complete TWO units		
Unit Reference Number	Unit Title	Unit Level	CITB Ref. No.
L/503/9919	Carrying out site measurements and evaluations in the workplace <u>Unit Endorsements:</u> The following endorsement required (i.e. own area of work): <b>Construction Diving Operations</b>	3	120v2
D/615/4986	Placing and compacting concrete in the workplace <u>Unit Endorsements:</u> The following endorsement required (i.e. own area of work): <b>Construction Diving Operations Plus three</b> of the following endorsements required:  Chute  Elephant's trunk  Skip  Pump  Mono-rail  Manual	2	225v2
A/508/6525	Slinging and hand signalling the movement of suspended loads in the workplace <u>Unit Endorsements:</u> The following endorsement required (I.e. own area of work): <b>Slinger signaller - construction diving operations</b>	2	402Av1

M/508/6585	Preparing and operating plant or machinery from a floating vessel in the workplace <u>Unit Endorsements:</u> Six of the following endorsements required:  Lift  Transfer  Extract  Excavate  Construct  Form  Receive  Access  Distribute  Demolish	2	403v2
	Process		
K/617/4741	Carrying out underwater lifting operations in the workplace	2	496
M/617/4742	Preparing and setting up underwater jetting equipment in the workplace	2	497
T/617/4743	Cutting and breaking materials by underwater water jetting in the workplace	2	498

## **Centre Requirements**

Centres must be approved to offer this qualification. If your centre is not approved please complete and submit form **ProQual Additional Qualification Approval Application**.

#### Staff

Staff delivering this qualification must be appropriately qualified and occupationally competent.

#### **Assessors/Internal Quality Assurance**

For each competence-based unit centres must be able to provide at least one assessor and one internal quality assurance verifier who are suitably qualified for the specific occupational area. Assessors and internal quality assurance verifiers for competence-based units or qualifications will normally need to hold appropriate assessor or verifier qualifications, such as:

- Award in Assessing Competence in the Work Environment
- Award in Assessing Vocationally Related Achievement
- Certificate in Assessing Vocational Achievement
- Award in the Internal Quality Assurance of Assessment Processes and Practices
- Certificate in Leading the Internal Quality Assurance of Assessment Processes and Practices

# **Support for Candidates**

Materials produced by centres to support candidates should:

- enable them to track their achievements as they progress through the learning outcomes and assessment criteria;
- provide information on where ProQual's policies and procedures can be viewed;
- provide a means of enabling Internal and External Quality Assurance staff to authenticate evidence

#### **Assessment**

Candidates must demonstrate the level of knowledge described in the unit. Assessment is the process of measuring a candidate's knowledge and understanding against the standards set in the qualification.

Each candidate is required to produce evidence which demonstrates their achievement of all of the learning outcomes and assessment criteria for each unit.

Evidence can include: -

- assignments/projects/reports
- worksheets
- portfolio of evidence
- record of oral and/or written questioning
- candidate test papers

**Learning outcomes** set out what a candidate is expected to know, understand or be able to do.

**Assessment criteria** specify the standard a candidate must meet to show the learning outcome has been achieved.

Learning outcomes and assessment criteria for this qualification can be found from page 9.

# **Internal Quality Assurance**

An internal quality assurance verifier confirms that assessment decisions made in centres are made by competent and qualified assessors, that they are the result of sound and fair assessment practice and that they are recorded accurately and appropriately.

# **Adjustments to Assessment**

Adjustments to standard assessment arrangements are made on the individual needs of candidates. ProQual's Reasonable Adjustments Policy and Special Consideration Policy sets out the steps to follow when implementing reasonable adjustments and special considerations and the service that ProQual provides for some of these arrangements.

Centres should contact ProQual for further information or queries about the contents of the policy.

## **Results Enquiries and Appeals**

All enquiries relating to assessment or other decisions should be dealt with by centres, with reference to ProQual's Enquiries and Appeals Procedures.

## Certification

Candidates who achieve the requirements for qualifications will be awarded:

- A certificate listing the unit achieved, and
- A certificate giving the full qualification title -

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#### **Claiming certificates**

Centres may claim certificates for candidates who have been registered with ProQual and who have successfully achieved the requirements for a qualification. All certificates will be issued to the centre for successful candidates.

#### **Replacement certificates**

If a replacement certificate is required a request must be made to ProQual in writing. Replacement certificates are labelled as such and are only provided when the claim has been authenticated. Refer to the Fee Schedule for details of charges for replacement certificates.

Title:	Conforming to general health, safety and welfare in the workplace.
Unit Number:	M/508/6538

Un	it Number:	M/508/6538		
	arning outcome			sment criteria arner can:
Comply with all workplace     health, safety and welfare     legislation requirements.		1.1	Comply with information from workplace inductions and any health, safety and welfare briefings attended relevant to the occupational area.	
			1.2	Use health and safety control equipment safely to carry out the activity in accordance with legislation and organisational requirements.
			1.3	Comply with statutory requirements, safety notices and warning notices displayed within the workplace and/or on equipment.
			1.4	State why and when health and safety control equipment, identified by the principles of protection, should be used relating to types, purpose and limitations of each type, the work situation, occupational use and the general work environment, in relation to:  - collective protective measures  - personal protective equipment (PPE)  - respiratory protective equipment (RPE)  - local exhaust ventilation (LEV).
			1.5	State how the health and safety control equipment relevant to the work should be used in accordance with the given instructions.
			1.6	State which types of health, safety and welfare legislation, notices and warning signs are relevant to the occupational area and associated equipment.
			1.7	State why health, safety and welfare legislation, notices and warning signs are relevant to the occupational area.
			1.8	State how to comply with control measures that have been identified by risk assessments and safe systems of work.
2	2 Recognise hazards associated with the workplace that have not been previously controlled and report them in accordance with organisational procedures.	h the t have not	2.1	Report any hazards created by changing circumstances within the workplace in accordance with organisational procedures.
		em in th	2.2	List typical hazards associated with the work environment and occupational area in relation to resources, substances, asbestos, equipment, obstructions, storage, services and work activities.
			2.3	List the current Health and Safety Executive top ten safety risks.

Title: Confo	Conforming to general health, safety and welfare in the workplace.	
Learning outcomes	Assessment criteria	
The learner will be able to:	The learner can:	
2 continued	2.4 List the current Health and Safety Executive top five health risks.	
	2.5 State how changing circumstances within the workplace could cause hazards.	
	2.6 State the methods used for reporting changed circumstances, hazards and incidents in the workplace.	
3 Comply with organisa policies and procedu	safe systems of work and quality working practices.	
contribute to health, and welfare.	3.2 Contribute to discussions by offering/providing feedback relating to health, safety and welfare.	
	3.3 Contribute to the maintenance of workplace welfare facilities in accordance with workplace welfare procedures.	
	3.4 Safely store health and safety control equipment in accordance with given instructions.	
	3.5 Dispose of waste and/or consumable items in accordance with legislation.	
	<ul> <li>3.6 State the organisational policies and procedures for health, safety and welfare, in relation to: <ul> <li>dealing with accidents and emergencies associated with the work and environment</li> <li>methods of receiving or sourcing information</li> <li>reporting</li> <li>stopping work</li> <li>evacuation</li> <li>fire risks and safe exit procedures</li> <li>consultation and feedback.</li> </ul> </li> </ul>	
	3.7 State the appropriate types of fire extinguishers relevant to the work.	
	3.8 State how and when the different types of fire extinguishers are used in accordance with legislation and official guidance.	

Tit	le:	Conforming to general health, safety and welfare in the workplace.		
	arning outcome			sment criteria arner can:
4 Work responsibly to contribute to workplace health, safety and welfare		4.1	Demonstrate behaviour which shows personal responsibility for general workplace health, safety and welfare.	
whilst carrying out work in the relevant occupational area.	4.2	State how personal behaviour demonstrates responsibility for general workplace health, safety and welfare, in relation to:  - recognising when to stop work in the face of serious and imminent danger to self and/or others  - contributing to discussions and providing feedback  - reporting changed circumstances and incidents in the workplace  - complying with the environmental requirements of the workplace.		
			4.3	Give examples of how the behaviour and actions of individuals could affect others within the workplace.
5	organisationa	and support all I security s and approved	5.1	Provide appropriate support for security arrangements in accordance with approved procedures:  - during the working day  - on completion of the day's work  - for unauthorised personnel (other operatives and the general public)  - for theft.
			5.2	State how security arrangements are implemented in relation to the workplace, the general public, site personnel and resources.

Title:	Conforming to general health, safety and welfare in the workplace.		
Additional inform	ation about this	unit	
Assessment Guida	ance	This unit must be assessed in a work environment, in accordance with 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.	
Sector Subject Are	ea	5.2 Building and Construction	
Availability for use	9	Shared unit	
Unit guided learni	ng hours	7	

Title:	Conforming to productive working practices in the workplace
Unit Number:	T/508/6538

Unit Number: 1/508/6538		
Learning outcomes The learner will be able to:	Assessment criteria The learner can:	
Communicate with others to establish productive work practices.	1.1 Communicate in an appropriate manner with line management, colleagues and/or customers to ensure that work is carried out productively.	
	1.2 Describe the different methods of communicating with line management, colleagues and customers.	
	1.3 Describe how to use different methods of communication to ensure that the work carried out is productive.	
2 Follow organisational procedures to plan the	2.1 Interpret relevant information from organisational procedures in order to plan the sequence of work.	
sequence of work.	2.2 Plan the sequence of work, using appropriate resources, in accordance with organisational procedures to ensure work is completed productively.	
	<ul> <li>Describe how organisational procedures are applied to ensure work is planned and carried out productively, in relation to: <ul> <li>using resources for own and other's work requirements</li> <li>allocating appropriate work to employees</li> <li>organising the work sequence</li> <li>reducing carbon emissions.</li> </ul> </li> </ul>	
	2.4 Describe how to contribute to zero/low carbon work outcomes within the built environment.	
3 Maintain relevant records in accordance with the	3.1 Complete relevant documentation according to the occupation as required by the organisation.	
organisational procedures.	3.2 Describe how to complete and maintain documentation in accordance with organisational procedures, in relation to:  – job cards  – worksheets  – material/resource lists  – time sheets.	
	3.3 Explain the reasons for ensuring documentation is completed clearly and within given timescales.	
4 Maintain good working relationships when conforming to productive working practices.	4.1 Carry out work productively, to the agreed specification, in conjunction with line management, colleagues, customers and/or other relevant people involved in the work to maintain good working relationships.	

Title:	Conforming to productive working practices in the workplace		
Learning outcome		Assessment criteria The learner can:	
		4.2 Apply the principles of equality and diversity and respet the needs of individuals when communicating and working with others.	ect
		<ul> <li>4.3 Describe how to maintain good working relationships, relation to: <ul> <li>individuals</li> <li>customer and operative</li> <li>operative and line management</li> <li>own and other occupations.</li> </ul> </li> </ul>	in
		4.4 Describe why it is important to work effectively with lin management, colleagues and customers.	ne
		4.5 Describe how working relationships could have an effe on productive working.	ct
		4.6 Describe how to apply principles of equality and divers when communicating and working with others.	ity

Title:	Conforming to Productive Working Practices in the Workplace		
Additional inform	nation about this	unit	
Assessment Guida	ance	This unit must be assessed in a work environment, in accordance with 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.	
Sector Subject Are	eas	05.2 Building and Construction	
Availability for use	9	Shared unit	
Unit guided learning hours		10	

Title:	Moving, handling and storing resources in the workplace
Unit Number:	Y/508/6533

<b>Unit Number:</b> Y/508/6533					
	arning outcome		Assessment criteria The learner can:		
1	Comply with given     information when moving,     handling and/or storing	1.1	Interpret the given information relating to moving, handling and/or storing resources, relevant to the given occupation.		
	resources.		1.2	Interpret the given information relating to the use and storage of lifting aids and equipment.	
			1.3	Describe the different types of technical, product and regulatory information, their source and how they are interpreted.	
			1.4	State the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented.	
			1.5	Describe how to obtain information relating to using and storing lifting aids and equipment.	
2	Know how to relevant legisl official guidan moving, hand storing resour	ation and ice when ling and/or	2.1	Describe their responsibilities under current legislation and official guidance whilst working:  — in the workplace, in confined spaces, below ground level, at height, with tools and equipment, with materials and substances, with movement/storage of materials and by manual handling and mechanical lifting.	
			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 the reports.	
			2.4	State the appropriate types of fire extinguishers relevant to the work.	
			2.5	Describe how and when the different types of fire extinguishers, relevant to the given occupation, are used in accordance with legislation and official guidance.	
3	Maintain safe practices whe handling and/resources.	n moving,	3.1	Use health and safety control equipment safely to carry out the activity in accordance with legislation and organisational requirements when moving, handling and/or storing resources.	
			3.2	Use lifting aids safely as appropriate to the work.	

Title:	Moving, handl	ing and	storing resources in the workplace	
Learning outcomes The learner will be able to:		Assessment criteria The learner can:		
3 continued		3.3	Protect the environment in accordance with safe working practices as appropriate to the work.	
		3.4	Explain why and when health and safety control equipment, identified by the principles of protection, should be used, relating to moving, handling and/or storing resources, and the types, purpose and limitations of each type, the work situation, occupational use and the general work environment, in relation to:  - collective protective measures  - personal protective equipment (PPE)  - respiratory protective equipment (RPE)  - local exhaust ventilation (LEV).	
			Describe how the health and safety control equipment relevant to the work should be used in accordance with the given instructions.	
		3.6	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.	
and quality o	4 Select the required quantity and quality of resources for	4.1	Select the relevant resources to be moved, handled and/or stored, associated with own work.	
the methods of work to move, handle and/or store occupational resources.	e and/or store	4.2	Describe the characteristics, quality, uses, sustainability, limitations and defects associated with the occupational resources in relation to:  - lifting and handling aids - container(s) - fixing, holding and securing systems.	
		4.3	Describe how the resources should be handled and how any 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 methods of work.	
to occupation and surround	ling	5.1	Protect occupational resources and their surrounding area from damage in accordance with safe working practices and organisational procedures.	
environment when moving handling and/or storing resources.	<u>-</u> -	5.2	Dispose of waste and packaging in accordance with legislation.	

Title:	Moving, handling and storing resources in the workplace				
Learning outcomes The learner will be able to:			Assessment criteria The learner can:		
5 continued	d	5.3	Maintain a clean work space when moving, handling or storing resources.		
		5.4	Describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions.		
		5.5	Explain why the disposal of waste should be carried safely in accordance with environmental responsibilities, organisational procedures, manufacturers' information, statutory regulations and official guidance.		
6 Complete the the allocated	time when	6.1	Demonstrate completion of the work within the allocated time.		
moving, hand storing resou	_	6.2	State the purpose of the work programme and explain why deadlines should be kept in relation to:  - progress charts, timetables and estimated times  - organisational procedures for reporting circumstances which will affect the work programme.		
7 Comply with occupational information thandle and/o	resource o move,	7.1	Demonstrate the following work skills when moving, handling and/or storing occupational resources:  — moving, positioning, storing, securing and/or using lifting aids and kinetic lifting techniques.		
resources to guidance.	the required	7.2	Move, handle and/or store occupational resources to meet product information and organisational requirements relating to three of the following:  - sheet material  - loose material  - bagged or wrapped material  - fragile material  - tools and equipment  - components  - liquids.		
		7.3	Describe how to apply safe work practices, follow procedures, report problems and establish the authority needed to rectify them when moving, handling and/or storing occupational resources.		
		7.4	Describe the needs of other occupations when moving, handling and/or storing resources.		

Title:	Moving, handling and storing resources in the workplace		
Additional inform	nation about this	unit	
Assessment Guidance  Sector Subject Areas  Availability for use  Unit guided learning hours		This unit must be assessed in a work environment, in accordance with 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.  05.2 Building and Construction	
		Shared unit	
		17	

Title:	Carrying out construction diving operations in the workplace
Unit Number:	H/617/4740

<b>Unit Number:</b> H/617/4740			
Learning outcomes  The learner will be able to:			esment criteria
Interpret the given     information relating to the     work and resources when		1.1	Interpret and extract information from method statements, diving project plans, manufacturers' information and oral and/or written instructions.
carrying out c diving operati		1.2	Comply with information and/or instructions derived from risk assessments and method statement.
		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:  - method statements, diving project plans, manufacturers' information, oral and/or written instructions and regulations governing diving.
2 Know how to relevant legisl official guidar carrying out c diving operati	lation and nce when onstruction	2.1	Describe their responsibilities under current legislation and official guidance whilst working:  - in the workplace, underwater, in confined spaces, with tools and equipment, with materials and substances, with movement/storage of materials and by manual handling and mechanical lifting.
		2.2	Describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative.
		2.3	State what the accident reporting procedures are and who is responsible for making reports.
3 Maintain safe practices whe construction operations.	n carrying out	3.1	Use personal protective equipment (PPE) and access/ egress systems safely to carry out the activity in accordance with legislation and organisational requirements when carrying out construction diving operations.
		3.2	Explain why and when personal protective equipment (PPE) should be used, relating to carrying out construction diving operations, and the types, purpose and limitations of each type.
		3.3	State how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries, accidents and other task-related hazards.

Title: Carrying out co		onstruction diving operations in the workplace		
Learning outcomes		Assessment criteria		
The	e learner will be a	ble to:	The le	arner can:
4 Select the required quantity and quality of resources for the methods of work to carry out construction diving operations.		4.1	Describe the characteristics, quality, uses, limitations and defects associated with the resources in relation to:  - specified diving equipment  - communications equipment  - ancillary equipment  - hand and/or powered tools.	
			4.2	Select resources associated with own work in relation to materials, components, fixings, tools and equipment.
			4.3	State how the resources should be used correctly, how problems associated with the resources are reported and how the organisational procedures are used.
			4.4	Outline potential hazards associated with the resources and method of work.
5	5 Minimise the risk of damage to the work and	5.1	Protect the work and its surrounding area from damage.	
	surrounding a	rea when	5.2	Minimise damage and maintain a clean work space.
	carrying out construction diving operations.	5.3	Describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions.	
			5.4	Dispose of waste in accordance with legislation.
			5.5	State why the disposal of waste should be carried out in relation to the work.
6	Complete the the allocated t	ime when	6.1	Demonstrate completion of the work within the allocated time.
	carrying out co		6.2	State the purpose of the work programme and explain why deadlines should be kept in relation to:  - types of progress charts, timetables and estimated times  - organisational procedures for reporting circumstances which will affect the work programme.

Title: Carrying out co		onstruction diving operations in the workplace		
Learning outcomes The learner will be able to:		Assessment criteria The learner can:		
7 Comply with t contract infor carry out cons diving operati required spec	mation to struction ons to the	<ul> <li>7.1 Demonstrate the following work skills when carrying out construction diving operations:         <ul> <li>calculating, communicating, measuring, selecting, checking, testing, reporting, fitting, positioning and securing.</li> </ul> </li> </ul>		
		<ul> <li>7.2 Prepare for and carry out construction diving operations to given working instructions relating to:         <ul> <li>preparing specific diving equipment for use</li> <li>carrying out pre-dive checks/activities</li> <li>umbilical management.</li> </ul> </li> </ul>		
		<ul> <li>7.3 Describe how to apply safe work practices, follow procedures, report problems and establish the authority needed to rectify them, to:         <ul> <li>contribute to pre-dive briefing</li> <li>support team members during the live operational dive</li> <li>support safe access and egress methods</li> <li>prepare, use, maintain and test specified diving equipment</li> <li>prepare resources for 'follow up' use</li> <li>identify and report defects and discrepancies with materials and equipment</li> <li>identify, select and check the correct equipment for the work</li> <li>secure and recharge specified diving equipment</li> <li>contribute to the post dive works brief</li> <li>carry out umbilical management</li> <li>use hand tools, power tools and specialist diving equipment</li> <li>use access and egress systems.</li> </ul> </li> </ul>		
		7.4 Safely use and store materials, hand tools, portable power tools, ancillary and specialist diving equipment.		
		7.5 State the needs of other occupations and how to communicate within a team when carrying out construction diving operations.		
		7.6 Describe how to maintain the tools and equipment used when carrying out construction diving operations.		

Title:	Carrying out construction diving operations in the workplace		
Additional information about this unit			
Assessment Guida	ance	This unit must be assessed in a work environment and in accordance with 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.	
Sector subject area Availability for use		5.2 Building and Construction	
		Shared unit	
Unit guided learni	ing hours	50	

Title:	Carrying out site measurements and evaluations in the workplace
Unit Number:	L/503/9919

Un	it Number:	er: L/503/9919		
	Learning outcomes The learner will be able to:		Assessment criteria The learner can:	
Interpret the given     information relating to the     work and resources when     carrying out site		1.1	Interpret and extract information from drawings, specifications, method statements, schedules, manufacturers' information and oral/written instructions.	
	measurements evaluations.	s and	1.2	Comply with information and/or instructions derived from risk assessments and/or method statements.
			1.3	Describe 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:  - drawings, specifications, schedules, method statements, manufacturers' information and regulations governing buildings.
2	Know how to or relevant legisla official guidant carrying out sime measurements evaluations.	ation and ce when te	2.1	Describe their responsibilities regarding potential accidents and health hazards, whilst working:  - 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.
			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 practi carrying out si measurements	ces when te	3.1	Use personal protective equipment (PPE) and access equipment safely to carry out the activity in accordance with current legislation and organisational requirements when carrying out site measurements and evaluations.
	evaluations.		3.2	Explain why and when personal protective equipment (PPE) should be used, relating to carrying out site measurements and evaluations, and the types, purpose and limitations of each type.
			3.3	Describe 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.

Title: Carrying ou		Carrying ou	ut site measurements and evaluations in the workplace			
	Learning outcomes  The learner will be able to:		Assessment criteria			
4 Select the required quantity and quality of		uired	<ul><li>4.1 Select resources associated with own work in relation to measuring and recording tools and equipment.</li></ul>			
	resources for the methods of work to carry out site measurements and evaluations.		<ul> <li>4.2 Describe the characteristics, quality, uses, sustainability, limitations and defects associated with the resources in relation to:         <ul> <li>measuring tapes, levels, documentation, materials and components</li> <li>measuring and recording tools and equipment.</li> </ul> </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 methods of work.			
			4.6 Describe how to calculate quantity, length, area and wastage associated with the method/procedure to carry out site measurements and evaluations.			
5	damage to the	urements and 5.2	5.1 Protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures.			
	carrying out sit measurements evaluations.		5.2 Minimise damage and maintain a clean work space.			
			5.3 Dispose of waste in accordance with current legislation.			
			5.4 Describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations 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 within the allo		6.1 Demonstrate completion of the work within the allocated time.			
	when carrying measurements evaluations.	out site	<ul> <li>Describe the purpose of the work programme and explain why deadlines should be kept in relation to:         <ul> <li>types of work schedules/diaries, progress charts, timetables and estimated times</li> <li>organisational procedures for reporting circumstances which will affect the work programme.</li> </ul> </li> </ul>			

Title: Carrying out s	ite measurements and evaluations in the workplace	
Learning outcomes The learner will be able to:	Assessment criteria The learner can:	
7 Comply with the given contract information to carry out site measurements and evaluations to the	<ul> <li>7.1 Demonstrate the following work skills when carrying out site measurements and evaluations:         <ul> <li>measuring, marking out, evaluating, reporting and communicating.</li> </ul> </li> </ul>	
required specification.	<ul> <li>7.2 Carry out site measurements and evaluations relating to construction and allied activities, for own work area, to given working instructions: <ul> <li>measure and check dimensions</li> <li>confirm structural backgrounds as complete and acceptable for work requirements</li> <li>report results of findings to manager, as appropriate.</li> </ul> </li> </ul>	
	7.3 Safely use materials, measuring tools and/or equipment.	
	7.4 Safely store the materials, tools and equipment used when carrying out site measurements and evaluations.	
	<ul> <li>7.5 Describe how to apply safe and healthy work practices, follow procedures, report problems and establish the authority needed to rectify them, to:         <ul> <li>measure and check dimensions</li> <li>confirm structural backgrounds as complete and acceptable to work requirements</li> <li>evaluate work requirements</li> <li>report to manager, as appropriate</li> <li>use access equipment</li> <li>work at height</li> <li>use measuring and recording tools and equipment.</li> </ul> </li> </ul>	
	7.6 Describe the needs of other occupations and how to effectively communicate within a team when carrying out site measurements and evaluations.	
	7.7 Describe how to maintain the measuring and recording tools and/or equipment used when carrying out site measurements and evaluations.	

	T			
Title:	Carrying out site measurements and evaluations in the workplace			
Additional inform	Additional information about this unit			
Assessment Guida	ance	This unit must be assessed in a work environment and in accordance with 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.  This unit must be assessed against the endorsements detailed within the relevant NVQ Structure.  ProQual Level 2 NVQ Diploma in Construction Diving Operations (Construction)  The following endorsement required (i.e. own area of work): Construction diving operations		
Sector subject are	ea	5.2 Building and Construction		
Availability for use	e	Shared unit		
Unit guided learning hours		63		

Title:	Placing and compacting concrete in the workplace
Unit Number:	D/615/4986

<b>Unit Number:</b> D/615/4986				
	Learning outcomes The learner will be able to:			arner can:
Interpret the given     information relating to the     work and resources when		1.1	Interpret and extract relevant information from drawings, specifications, schedules method statements, risk assessments and manufacturers' information.	
	placing and co concrete.	mpacting	1.2	Comply with information and/or instructions derived from risk assessments and method statements.
			1.3	Describe 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:  - drawings, specifications, schedules, method statements, risk assessments, manufacturers' information, oral and written instructions, current regulations governing buildings and official guidance associated with the placement and compaction of concrete
2	2 Know how to comply with relevant legislation and official guidance when placing and compacting concrete.		2.1	Describe their responsibilities regarding potential accidents, health hazards and the environment whilst working:  — in the workplace, below ground level, in confined spaces, at height, with tools and equipment, with materials and substances, with movement and storage of materials and by manual handling and mechanical lifting.
		2.2	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	3 Maintain safe and healthy working practices when placing and compacting concrete.		3.1	Use health and safety control equipment safely and comply with the methods of work to carry out the activity in accordance with current legislation and organisational requirements when placing and compacting concrete.
			3.2	Demonstrate compliance with given information and relevant legislation when placing and compacting concrete in relation to the following:  - safe use of access equipment  - safe use, storage and handling of materials, tools and equipment  - specific risks to health

Title: Placing a	nd compacting concrete in the workplace		
Learning outcomes The learner will be able to:	Assessment criteria The learner can:		
3 Continued	3.3 Explain why and when health and safety control equipment, identified by the principles of prevention, should be used, relating to placing and compacting concrete, and the types, purpose and limitations of each type, the work situation and general work environment, in relation to:  - collective protective measures  - personal protective equipment (PPE)  - respiratory protective equipment (RPE)  - local exhaust ventilation (LEV).		
	3.4 Describe how the relevant health and safety control equipment should be used in accordance with the given instructions.		
	3.5 Describe how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries and other task-related activities.		
4 Select the required quant and quality of resources			
the methods of work to place and compact concrete.	<ul> <li>4.2 Describe the characteristics, quality, uses, sustainability limitations and defects associated with the resources in relation to:         <ul> <li>aggregates, cements, concrete, reinforcement, membranes, release agents, anti-heave materials, moulds, additives and retardants</li> <li>hand tools portable power tools and equipment, slump test equipment, skips, compaction equipment, poker vibrator, tampers, floats and trowels.</li> </ul> </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 methods of work.		
	4.6 Describe the methods of calculating quantity, length, area and wastage associated with the method and procedure to place and compact concrete.		

Title: Placing and cor		mpactin	g concrete in the workplace	
Learning outcomes The learner will be able to:			ment criteria rner can:	
5 Minimise the risk of damage to the work and surrounding area when		e work and rea when	5.1	Protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures.
	placing and co concrete.	ompacting	5.2	Maintain a clean work space.
			5.3	Dispose of waste in accordance with current legislation.
			5.4	Describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations 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	the allocated	e the work within ated time when	6.1	Demonstrate completion of the work within the allocated time.
	placing and compacting concrete.		6.2	Describe the purpose of the work programme and explain why deadlines should be kept in relation to:  - types of progress charts, timetables and estimated times  - organisational procedures for reporting circumstances which will affect the work programme.
7	Comply with t contract infor place and com concrete to th specification.	mation to	7.1	Demonstrate the following work skills when placing and compacting concrete:  - measuring, marking out, inspecting, receiving, handling, transporting, placing, spreading, levelling, vibrating, compacting, testing and protecting.
			7.2	Use and maintain hand tools, portable power tools, plant or machinery and ancillary equipment.

Title:	Placing and compacting concrete in the workplace	
Learning outcomes  The learner will be able to:		Assessment criteria The learner can:
7 Continued		7.3  Place, lay and compact concrete to given working instructions using three of the following placement methods  - chute  - elephant's trunk  - skip  - pump  - mono-rail  - manually
		<ul> <li>7.4 Describe how to apply safe and healthy work practices, follow procedures, report problems and establish the authority needed to rectify them, to: <ul> <li>identify installation quality requirements</li> <li>conform to agreed specification</li> <li>confirm integrity of formwork and temporary supports</li> <li>handle and transport concrete</li> <li>place concrete using shuts, elephant's trunk, skip, pump, mono-rail and manually</li> <li>visually assess the quality of the concrete prior to and during pouring and placement</li> <li>extract samples for testing</li> <li>work with, around and in close proximity to plant and machinery</li> <li>direct and guide the operations and movement of plant and machinery</li> <li>compact and finish concrete</li> <li>protect concrete to assist the curing process</li> <li>apply curing accelerants and aids</li> <li>recognise requirements for working with concretes containing additives for waterproofing and retardants</li> <li>recognise and determine when additional specialist skills and knowledge are required and report accordingly</li> </ul> </li> </ul>

Title:	Placing and compacting concrete in the workplace		
Learning outcomes  The learner will be able to:		Assessm The learn	nent criteria ner can:
7 Continued		7.4 contd	<ul> <li>determine specific requirements for structures of special interest, traditional build (pre 1919) and historical significance</li> <li>use hand tools, portable power tools, plant, machinery and equipment</li> <li>work at height</li> <li>use access equipment</li> </ul>
		7.5	Describe the needs of other occupations and how to effectively communicate within a team when placing and compacting concrete.
		7.6	Describe how to maintain the tools and equipment used when placing and compacting concrete.

Title:	Placing and compacting concrete in the workplace		
Additional inform	dditional information about this unit		
Assessment Guidance		This unit must be assessed in a work environment, in accordance 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.	
		Evidence for assessment criteria 7.2 must be for at least three different structures/placements.	
		This unit must be assessed against the endorsements detailed within the relevant NVQ Structure.	
		ProQual Level 2 NVQ Diploma in Construction Diving Operations (Construction):	
		The following endorsement required (i.e. own area of work):	
		Construction diving operations	
		Plus <b>three</b> of the following endorsements required:	
		Chute	
		Elephants trunk	
		Skip	
		Pump	
		Mono-rail	
		Manual	
Soctor subject are		E 2 Building and Construction	
Sector subject are	d:	5.2 Building and Construction	

Shared unit

37

Availability for use

Unit guided learning hours

Title:	Slinging and hand signalling the movement of suspended loads in the workplace			
<b>Unit Number:</b> A/508/6525				
Learning outcomes  The learner will be able to	o:	Assessment criteria The learner can:		
Interpret the given     information relating to the     preparation for and the		1.1 Interpret and extract relevant information from drawings, specifications, schedules, risk assessments, method statements (lift plans) and manufacturers' information.		
slinging and signal		1.2 Comply with information and/or instructions derived from risk assessments and method statements.		
		1.3 Describe the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented.		
		<ul> <li>Describe different types of information, their source and how they are interpreted in relation to:         <ul> <li>drawings, specifications, schedules, method statements, risk assessments, lift plans, work instructions, manufacturers' information, approved procedures and Codes of Practice.</li> </ul> </li> </ul>		
2 Organise with other sequence and ope	ration in	2.1 Organise the work according to given information or instructions.		
which the slinging signalling of loads carried out.		Describe how to communicate ideas between team members.		
		Organise and communicate with team members and other associated occupations.		
		2.4 Describe how to organise resources prior to and when slinging and signalling of loads.		
3 Know how to comply with relevant legislation and official guidance to carry out slinging and signalling of loads.		<ul> <li>Describe their responsibilities regarding potential accidents, health hazards and the environment whilst working:         <ul> <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> </li> </ul>		
		3.2 Describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative.		
		3.3 Explain what the accident reporting procedures are and who is responsible for making reports.		

Title: Slinging and I		I hand signalling the movement of suspended loads in the workplace		
Learning outcomes The learner will be able to:		Assessment criteria The learner can:		
4 Maintain safe and healthy working practices when preparing for and slinging and signalling loads.		4.1 Use health and safety control equipment safely and comply with the methods of work to carry out the activity in accordance with legislation and organisational requirements when slinging and signalling loads.		
		<ul> <li>4.2 Demonstrate compliance with given information and relevant legislation when carrying out the slinging and signalling of loads in relation to at least three of the following: <ul> <li>safe use and storage of tools and equipment</li> <li>safe use, storage and handling of lifting accessories</li> <li>safe use of access equipment</li> <li>specific risks to health.</li> </ul> </li> </ul>		
		<ul> <li>4.3 Explain why and when health and safety control_equipment, identified by the principles of protection, should be used, relating to slinging and signalling of loads, and the types, purpose and limitations of each type, the work situation and general work environment, in relation to: <ul> <li>collective protective measures</li> <li>personal protective equipment (PPE)</li> <li>respiratory protective equipment (RPE)</li> <li>local exhaust ventilation (LEV).</li> </ul> </li> </ul>		
		4.4 Describe how the relevant health and safety control equipment should be used in accordance with the given working instructions.		
		4.5 Describe how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries and other task-related activities.		
5 Select the required and quality of rescond signalling loss	ources to hen slinging	5.1 Select resources associated with slinging/signalling in relation to lifting accessories/aids, hand tools and ancillary equipment.		
and signalling loads.	15.	5.2 Describe the characteristics, quality, uses, sustainability, limitations and defects associated with the resources, and how they should be used correctly, relating to:  - lifting accessories - signalling and communication equipment - hand tools and ancillary equipment.		
		5.3 Describe how the resources should be used correctly, and how problems associated with the resources are reported.		

Title: Slinging and hand signalling the movement of suspended loads in the workplant.				
Learning outcomes The learner will be able to:		Assessment criteria The learner can:		
5 Continued		5.4	Explain why the organisational procedures have been developed and how they are used for the selection of required resources.	
		5.5	Describe any potential hazards associated with the resources and methods of work.	
		5.6	Describe how to identify weight, quantity, length and area associated with the method/procedures to carry out slinging/signalling.	
6	6 Minimise the risk of damage to the work and surrounding area when preparing to and slinging and signalling loads.		6.1	Protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures.
			6.2	Prevent damage and maintain a clean work space.
			6.3	Dispose of waste in accordance with current legislation.
			6.4	Describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions.
		6.5	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.	
7	Complete the work within the allocated time when preparing to and slinging and signalling loads.		7.1	Demonstrate completion of the work within the allocated time.
			7.2	Describe the purpose of the work programme and describe why deadlines should be kept in relation to:  - types of progress charts, timetables and estimated times  - organisational procedures for reporting circumstances which will affect the work programme.

Title: Slinging and hand signalling the movement of suspended loads in the workpl				
Learning outcomes The learner will be able to:		Assessment criteria The learner can:		
8 Comply with the given contract information to prepare to and sling and signal suspended loads for movement to the required specification.		8.1 Demonstrate the following work skills when preparing to and slinging and signalling loads:  - measuring, gauging, estimating, calculating, fitting, fixing, testing, balancing, interpreting, inspecting, judging, explaining, preparing, indicating, informing, instructing, signing, positioning, adjusting, configuring, moving, securing, signalling and relaying.		
		8.2 Use and maintain lifting accessories, lifting aids and equipment.		
		8.3 Inspect and prepare lifting accessories prior to slinging.		
		8.4 Prepare to and attach suspended loads to lifting equipment, using appropriate lifting accessories and load securing methods, to given working instructions for three of the following:  - balanced - unbalanced - loose - bundled - container - drum - a load where the machine operator cannot observe its full movement path.		
		8.5 Guide, move and place suspended loads to specified destinations, using hand signals, to given working instructions for three of the following:  - balanced - unbalanced - loose - bundled - container - drum - a load where the machine operator cannot observe its full movement path.		
		<ul> <li>Describe how to apply safe and healthy work practices, follow procedures, report problems and establish authority needed to rectify, to:         <ul> <li>identify the differences between: slinging and signalling, directing and guiding movement of vehicles, plant and machinery, and directing and guiding operations of plant and machinery not being used for lifting operations</li> <li>confirm the authority, duties and responsibilities allocated</li> <li>identify characteristics of lifting equipment and lifting accessories</li> <li>identify and interpret valid certification for maintenance, inspection and thorough examination</li> </ul> </li> </ul>		

Title:	Slinging and hand si	gnalling the movement of suspended loads in the workplace		
Learning outcomes  The learner will be able to		Assessment criteria The learner can:		
8 Continued	8.7	<ul> <li>lift and transfer people</li> <li>sling balanced, unbalanced, loose, live, bundled, container drum loads and loads that are blind to the equipment operator</li> <li>communicate using hand signals, hand signalling equipment (lights, wands, fluorescent gloves, flags) and electronic communication equipment (loud hailers, radios)</li> <li>confirm methods of communication</li> <li>recognise blind-spots, potential crush zones and other limitations to driver visibility</li> <li>consider the load characteristics including centre of gravity and lifting points to determine the method of slinging</li> <li>determine and check the route of the load before and during the lift including distances, clearances and landing position</li> <li>select, handle, inspect and use (assemble, set up and adjust) lifting accessories and aids</li> <li>identify rejection criteria for removing lifting accessories from service</li> <li>recognise and determine when specific skills and knowledge are required and report accordingly</li> <li>attach lifting accessories and sling loads securely</li> <li>ensure balance and stability of loads</li> <li>attach and use load guidance equipment (tag lines)</li> <li>guide and place suspended loads by recognised methods of communication and agreed operational</li> </ul>		
		<ul> <li>procedures</li> <li>land and position loads safely and securely</li> <li>remove and store lifting accessories</li> <li>use hand tools and ancillary equipment.</li> </ul>		
	8.9	Describe the needs of other occupations and how to communicate within a team when preparing to and slinging and signalling loads.		
	8.10	Describe how to maintain the lifting accessories, lifting aids and signalling and communication equipment used to sling and signal loads.		

Title:	Slinging and hand signalling the movement of suspended loads in the workplace		
Additional inform	ation about this	unit	
Assessment Guidance		This unit must be assessed in a work environment and in accordance with 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.  This unit must be assessed against the endorsements detailed within the relevant NVQ Structure.  ProQual Level 2 NVQ Diploma in Construction Diving Operations (Construction)	
		The following endorsement required (i.e. own area of work):	
		Slinger signaller – construction diving operations only	
Sector subject are	as	5.2 Building and Construction	
Availability for use	9	Shared unit	
Unit guided learni	ng hours	33	

Title: Preparing ar workplace		ıd opera	ating plant or machinery from a floating vessel in the	
Unit Number:	M/508/6585			
Learning outcomes  The learner will be able	to:		sment criteria arner can:	
Interpret the given     information relating to     preparing and operating plant		1.1	Interpret and extract relevant information from drawings, specifications, schedules, method statements, lift plans, risk assessments and manufacturers' information.	
or machinery fror vessel.	n a floating	1.2	Comply with information and/or instructions derived from risk assessments and method statements.	
		1.3	Describe 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:  - drawings, specifications, schedules, method statements, lift plans, risk assessments, manufacturers' information and current regulations governing operations from, and with, a floating vessel.	
2 Organise with oth		2.1	Organise the work according to given information or instructions.	
sequence and ope	chinery	2.2	Describe how to communicate ideas between team members.	
operations from a floating vessel are to be carried out.		2.3	Organise and communicate with team members and other associated occupations.	
		2.4	Describe how to organise resources prior to and during floating vessel operations.	
3 Know how to comply with relevant legislation and official guidance when carrying out plant or machinery operations from a floating vessel.		3.1	Describe their responsibilities regarding potential accidents, health hazards and the environment whilst working:  — in the workplace, 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.	
		3.2	Describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative.	
		3.3	Explain what the accident reporting procedures are and who is responsible for making reports.	
		3.4	Describe the types of fire extinguishers available when carrying out plant or machinery operations from a floating vessel, and explain how and when they are used.	

Title: Preparing ar workplace		d operating plant or machinery from a floating vessel in the			
Learning outcomes  The learner will be able to:		Assessment criteria The learner can:			
4 Maintain safe and healthy working practices when preparing for and carrying out plant or machinery operations	4.1	Use health and safety control equipment safely and comply with the methods of work to carry out the activity in accordance with legislation and organisational requirements during floating vessel operations.			
	from a floating vessel.	4.2	Demonstrate compliance with given information and relevant legislation when carrying out plant or machinery operations from a floating vessel in relation to the following:  - safe use and storage of plant or machinery on floating vessels  - safe use and storage of tools and equipment  - specific risks to health.		
			4.3	Explain why and when health and safety control equipment, identified by the principles of protection, should be used, relating to floating vessel operations, and the types, purpose and limitations of each type, the work situation and general work environment, in relation to:  - collective protective measures  - personal protective equipment (PPE)  - respiratory protective equipment (RPE)  - local exhaust ventilation (LEV).	
		4.4	Describe how the relevant health and safety control equipment should be used in accordance with the given working instructions.		
		4.5	Describe how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries and other task-related activities.		
			4.6	Demonstrate the safe use of a fire extinguisher relevant to a typical fire associated with carrying out plant or machinery operations from a floating vessel as relevant to the operation.	
5	required quantity and quality of resources to prepare for	5.1	Request and select resources associated with the work in relation to consumables, materials, plant, machinery, attachments, tools and ancillary equipment.		
and carry out plant or machinery operations from a floating vessel.		5.2	Describe the characteristics, quality, uses, sustainability, limitations and defects associated with the resources, and how they should be used correctly, relating to:  - floating vessels - consumables, lubricants and fuels - attachments - hand tools, accessories and ancillary equipment.		

Tit	le:	Preparing an workplace	nd operating plant or machinery from a floating vessel in the	
Learning outcomes The learner will be able to:			earner can:	
5	5 Continued		5.3	Describe how the resources should be used correctly and how problems associated with the resources are reported.
			5.4	Explain why the organisational procedures have been developed and how they are used for the selection of required resources.
			5.4	Describe any potential hazards associated with the resources and methods of work.
			5.5	Describe how to identify weight, ballast, quantity, length and area associated with the method/procedure to carry out work from a floating vessel.
6	to the work and surrounding area when carrying out plant		6.1	Protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures.
	or machinery oper a floating vessel.	ations from	6.2	Prevent damage and maintain a clean work space.
			6.3	Dispose of waste in accordance with current legislation.
			6.4	Describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions.
			6.5	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.
7	allocated time when preparing	7.1	Demonstrate completion of the work within the allocated time.	
	to and carrying out work from a floating vessel.		7.2	Describe the purpose of the work programme and describe why deadlines should be kept in relation to:  - types of progress charts, timetables and estimated times  - organisational procedures for reporting circumstances which will affect the work programme.

	Preparing and operating plant or machinery from a floating vessel in the workplace	
Learning outcomes The learner will be able to:	Assessment criteria The learner can:	
8 Comply with the given contract information to calout plant or machinery operations from a floating	8.1 Demonstrate the following work skills when preparing for and operating plant or machinery from a floating vessel:  - checking, setting up, adjusting, communicating, operating, manoeuvring, controlling, positioning and sea fastening.	
vessel to the required specification.	8.2 Use and maintain hand tools, ancillary equipment, accessories and lifting accessories.	
	8.3 Prepare to and carry out plant or machinery operations from a floating vessel to given working instructions, protocols and Codes of Practice, relating to the movement and operation for six or more of the following activities:  - lift - transfer - extract - excavate - construct - form - receive - access - distribute - demolish - process.	
	8.4 Shut down and secure the plant or machinery attached to the floating vessel.	
	<ul> <li>8.5 Describe how to apply safe and healthy work practices, follow procedures, report problems and establish authority needed to rectify, to: <ul> <li>mobilise and demobilise plant for floating vessel operations</li> <li>identify the restrictions on plant and machinery when operating on a floating vessel</li> <li>counter the effects of floating vessel movement during plant and machinery operations</li> <li>carry out function checks for the control of plant and machinery on the floating vessel</li> <li>confirm the area of work for the operation</li> <li>recognise operational limitations and de-ratings</li> <li>confirm safety and security requirements</li> <li>recognise and determine when specific skills and knowledge are required and report accordingly</li> <li>synchronise movements with other plant and machinery on a floating vessel</li> </ul> </li> <li>prepare, manoeuvre, position, sea fasten and set up plant and machinery for operations</li> </ul>	
	machinery for operations  - carry out plant or machinery operations safely and securely  - stop, shut down operations and secure plant and machinery  - use hand tools and equipment.	

Title:	Preparing and operating plant or machinery from a floating vessel in the workplace			
Learning outcomes The learner will be able to:		Assessment criteria The learner can:		
8 Continued		8.7	Describe the needs of other occupations and how to effectively communicate within a team when preparing to and carrying out plant or machinery operations from a floating vessel	
		8.8	Describe how to maintain the hand tools plant, machinery and ancillary equipment used to carry out operations from a floating vessel.	

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Preparing and operating plant or machinery from a floating vessel in the workplace

## Additional information about this unit

## Assessment Guidance

This unit must be assessed in a work environment and in accordance with 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 except for assessment criteria 4.6.

This unit must be assessed against the endorsements detailed within the relevant NVQ Structure.

<u>ProQual Level 2 NVQ Diploma in Construction Diving</u> <u>Operations (Construction)</u>

Six of the following endorsements required:

Lift

Transfer

**Extract** 

Excavate

Construct

Form

Receive

Access

Distribute

Demolish

**Process** 

Sector subject area	5.2 Building and Construction
Availability for use	Shared unit
Unit guided learning hours	125

Title:	Carrying out underwater lifting operations in the workplace
Unit Number:	K/617/4741

<b>Unit Number:</b> K/617/4741				
Learning outcomes The learner will be able to:			Assessment criteria The learner can:	
1	Interpret the given     information relating to the     work and resources when		1.1	Interpret and extract information from drawings, specifications, schedules, diving/lifting project plans, method statements and manufacturers' information.
	carrying out u lifting operation		1.2	Comply with information and/or instructions derived from risk assessments and method statement.
			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:  - drawings, specifications, schedules, manufacturers' information, diving/lifting plans, method statements and regulations governing diving.
2	2 Know how to comply with relevant legislation and official guidance when carrying out underwater lifting operations.		2.1	Describe their responsibilities under current legislation and official guidance whilst working:  - in the workplace, underwater, 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.
			2.2	Describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative.
			2.3	State what the accident reporting procedures are and who is responsible for making reports.
3	Maintain safe practices whe underwater lif operations.	n carrying out	3.1	Use personal protective equipment (PPE) and lifting equipment safely to carry out the activity in accordance with legislation and organisational requirements when carrying out underwater lifting operations.
			3.2	Explain why and when personal protective equipment (PPE) should be used, relating to carrying out underwater lifting operations, and the types, purpose and limitations of each type.
			3.3	State how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries, accidents and other task-related hazards.

Titl	Carrying out t	ınderw	ater lifting operations in the workplace		
	Learning outcomes The learner will be able to:		Assessment criteria The learner can:		
4 Select the required quantity and quality of resources for the methods of work to carry out underwater lifting operations.		4.1	Describe the characteristics, quality, uses, limitations and defects associated with the resources in relation to:  - shackles, links, straps, strops, lifting lines, air lift bags  - hand tools and equipment.		
		4.2	Select resources associated with own work in relation to materials, components, fixings, tools and equipment.		
		4.3	State how the resources should be used correctly, how problems associated with the resources are reported and how the organisational procedures are used.		
		4.4	Outline potential hazards associated with the resources and method of work.		
			Describe how to calculate quantity, length, area and wastage associated with the method/procedure to carry out underwater lifting operations.		
5	Minimise the risk of damage to the work and surrounding area when carrying out underwater lifting operations.	5.1	Protect the work and its surrounding area from damage.		
		5.2	Minimise damage and maintain a clean work space.		
		5.3	Describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions.		
		5.4	Dispose of waste in accordance with legislation.		
		5.5	State why the disposal of waste should be carried out in relation to the work.		
6	Complete the work within the allocated time when	6.1	Demonstrate completion of the work within the allocated time.		
	carrying out underwater lifting operations.	6.2	State the purpose of the work programme and explain why deadlines should be kept in relation to:  - types of progress charts, timetables and estimated times  - organisational procedures for reporting circumstances which will affect the work programme.		

Title: Carrying out un		nderwater lifting operations in the workplace	
Learning outcomes The learner will be able to:		Assessment criteria The learner can:	
7 Comply with the given contract information to carry out underwater lifting operations to the required specification.		<ul> <li>7.1 Demonstrate the following work skills when carrying out underwater lifting operations:         <ul> <li>estimating, communicating, adjusting, measuring, selecting, checking, testing, reporting, fitting, positioning and securing.</li> </ul> </li> </ul>	
		7.2 Prepare for and carry out underwater lifting operations using the specified lifting equipment to the given working instructions.	
		<ul> <li>7.3 Describe how to apply safe work practices, follow procedures, report problems and establish the authority needed to rectify them, to: <ul> <li>identify, select and check/test the correct lifting equipment for the work</li> <li>carry out pre-lift preparation/checks as appropriate to the work</li> <li>comply with the requirements of the lifting plan</li> <li>ensure that the conditions are acceptable for the lift</li> <li>contribute to the pre-dive briefing plan</li> <li>support team members during the live operational dive</li> <li>support safe access and egress methods</li> <li>prepare resources for 'follow up' use</li> <li>carry out lifting estimations appropriate to the work</li> <li>carry out the underwater lifting operations</li> <li>identify and report defects and discrepancies with the materials and lifting equipment</li> <li>identify the control measures for the object being lifted</li> <li>contribute to the post-works dive brief</li> <li>use hand tools and lifting equipment</li> <li>work at height.</li> </ul> </li> </ul>	
		7.4 Safely use and store materials, hand tools, air lift bags, lifting and ancillary equipment.	
		7.5 State the needs of other occupations and how to communicate within a team when carrying out underwater lifting operations.	
		7.6 Describe how to maintain the tools and equipment used when carrying out underwater lifting operations.	

Title:	Carrying out underwater lifting operations in the workplace				
Additional inform	Additional information about this unit				
Assessment Guidance		This unit must be assessed in a work environment and in accordance with 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.			
Sector subject area  Availability for use  Unit guided learning hours		5.2 Building and Construction			
		Shared unit			
		70			

Title:	Preparing and setting up underwater water jetting equipment in the workplace
Unit Number:	M/617/4742

Un	<b>Unit Number:</b> M/617/4742					
	Learning outcomes  The learner will be able to:			Assessment criteria The learner can:		
Interpret the given     information relating to the     work and resources when		1.1	Interpret and extract information from risk assessments, method statements, legislation, Codes of Practice, operating instructions and manufacturers' information.			
	preparing and underwater wa equipment.		1.2	Comply with information and/or instructions derived from risk assessments and method statement.		
			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:  - risk assessments, method statements, legislation, Codes of Practice, manufacturers' information and operating instructions.		
2	2 Know how to comply with relevant legislation and official guidance when preparing and setting up underwater water jetting equipment.		2.1	Describe their responsibilities under current legislation and official guidance whilst working:  — in the workplace, underwater, 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.		
			2.2	Describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative.		
			2.3	State what the accident reporting procedures are and who is responsible for making reports.		
3	3 Maintain safe working practices when preparing and setting up underwater water jetting equipment.		3.1	Use personal protective equipment (PPE) safely to carry out the activity in accordance with legislation and organisational requirements when preparing and setting up underwater water jetting equipment.		
			3.2	Explain why and when personal protective equipment (PPE) should be used, relating to preparing and setting up underwater water jetting equipment, and the types, purpose and limitations of each type.		
			3.3	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.		

Title: Preparing and workplace		setting up underwater water jetting equipment in the		
Learning outcomes  The learner will be able to:			ssment criteria Parner can:	
4 Select the required quantity and quality of resources for the methods of work to prepare and set up underwater water jetting equipment.		4.1	Describe the characteristics, quality, uses, limitations and defects associated with the resources in relation to:  - water, abrasives, chemicals  - fuel, lubricants, coolants  - pump units, hoses, retro lances, guns, nozzles, control valves and ancillary items  - hand tools and equipment.	
			4.2	Select resources associated with own work in relation to materials, substances, tools, equipment and underwater jetting plant and associated equipment.
			4.3	State how the resources should be used correctly, how problems associated with the resources are reported and how the organisational procedures are used.
			4.4	Outline potential hazards associated with the resources and method of work.
			4.5	Describe how to calculate quantity associated with the method/procedure to prepare and set up underwater water jetting equipment.
5		risk of damage	5.1	
	to the work and surrounding area when preparing and setting up underwater water jetting equipment.	rea when	5.2	Minimise damage and maintain a clean work space.
			5.3	Describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions.
			5.4	Dispose of waste in accordance with legislation.
			5.5	State why the disposal of waste should be carried out in relation to the work.
6	Complete the	time when	6.1	Demonstrate completion of the work within the allocated time.
	preparing and setting up underwater water jetting equipment.		6.2	State the purpose of the work programme and explain why deadlines should be kept in relation to:  - types of progress charts, timetables and estimated times  - organisational procedures for reporting circumstances which will affect the work programme.

Title: Preparing and workplace		setting up underwater water jetting equipment in the	
Learning outcomes The learner will be ab		Assessment criteria The learner can:	
7 Comply with the given contract information to prepare and set up underwater water jetting		<ul> <li>7.1 Demonstrate the following work skills when preparing and setting up underwater water jetting equipment:</li> <li>fitting, attaching, adjusting, securing, checking and confirming.</li> </ul>	
equipment to t specification.	ne required	<ul> <li>7.2 Prepare and set up underwater water jetting equipment for operational performance to the given working instructions relating to: <ul> <li>functional checks</li> <li>operational performance.</li> </ul> </li> </ul>	
		<ul> <li>7.3 Describe how to apply safe work practices, follow procedures, report problems and establish the authority needed to rectify them, to: <ul> <li>set up, carry out pre use and functional checks, operate and shut down equipment</li> <li>monitor and assess underwater plant and jetting equipment for performance requirements</li> <li>dismantle equipment</li> <li>use hand tools, underwater pumps, retro lance and associated equipment</li> <li>work at height.</li> </ul> </li> </ul>	
		7.4 Safely use and store materials, hand tools, underwater jetting pumps, retro lance, ancillary equipment and/or accessories.	
		7.5 State the needs of other occupations and how to communicate within a team when preparing and setting up underwater water jetting equipment.	
	7	7.6 Describe how to maintain the tools and equipment used when preparing and setting up underwater water jetting equipment.	

Title:	Preparing and setting up underwater water jetting equipment in the workplace				
Additional inform	Additional information about this unit				
Assessment Guidance		This unit must be assessed in a work environment and in accordance with 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.			
Sector subject are	ea	5.2 Building and Construction			
Availability for use	е	Shared unit			
Unit guided learning hours		30			

Title:	Cutting and breaking materials by underwater water jetting in the workplace
Unit Number:	T/617/4743

<b>Unit Number:</b> T/617/4743					
	Learning outcomes The learner will be able to:			Assessment criteria The learner can:	
Interpret the given     information relating to the     work and resources when		1.1	Interpret and extract information from drawings, specifications, schedules and manufacturers' information.		
	cutting and br materials by u water jetting.	-	1.2	Comply with information and/or instructions derived from risk assessments and method statement.	
			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:  - drawings, specifications, schedules, manufacturers' information and regulations governing diving.	
2	Know how to crelevant legislate official guidan cutting and brunaterials by uwater jetting.	ation and ce when eaking	2.1	Describe their responsibilities under current legislation and official guidance whilst working:  — in the workplace, underwater, 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.	
			2.2	Describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative.	
			2.3	State what the accident reporting procedures are and who is responsible for making reports.	
3	Maintain safe practices whe breaking mate underwater w	n cutting and erials by	3.1	Use personal protective equipment (PPE) and access equipment safely to carry out the activity in accordance with legislation and organisational requirements when cutting and breaking materials by underwater water jetting.	
			3.2	Explain why and when personal protective equipment (PPE) should be used, relating to cutting and breaking materials by underwater water jetting, and the types, purpose and limitations of each type.	
			3.3	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.	

Titl	le:	Cutting and br	eaking	materials by underwater water jetting in the workplace	
	arning outcome			Assessment criteria The learner can:	
4	4 Select the required quantity and quality of resources for the methods of work to cut and break materials by underwater water jetting.		4.1	Describe the characteristics, quality, uses, limitations and defects associated with the resources in relation to:  - water, fuel and power supply, chemicals, abrasives, protective materials and equipment  - pump units, hose assemblies, guns, retro lances, control valves, nozzles  - hand tools and ancillary equipment.	
			4.2	Select resources associated with own work in relation to materials and substances, tools and equipment, underwater jetting plant and associated equipment.	
			4.3	State how the resources should be used correctly, how problems associated with the resources are reported and how the organisational procedures are used.	
			4.4	Outline potential hazards associated with the resources and method of work.	
			4.5	Describe how to calculate quantity and area associated with the method/procedure to cut and break materials by underwater water jetting.	
5	to the work ar		5.1	Protect the work, adjacent structures and its surrounding area from damage.	
	surrounding a cutting and br	eaking	5.2	Minimise damage and maintain a clean work space.	
	materials by underwater water jetting.	nderwater	5.3	Describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions.	
			5.4	Dispose of waste in accordance with legislation.	
			5.5	State why the disposal of waste should be carried out in relation to the work.	
6	Complete the the allocated to	time when	6.1	Demonstrate completion of the work within the allocated time.	
	cutting and br materials by u water jetting.	underwater	6.2	State the purpose of the work programme and explain why deadlines should be kept in relation to:  - types of progress charts, timetables and estimated times  - organisational procedures for reporting circumstances which will affect the work programme.	

Title: Cutting and bre		eaking	materials by underwater water jetting in the workplace		
_	Learning outcomes The learner will be able to:			Assessment criteria The learner can:	
7 Comply with the given contract information to cut and break materials by underwater water jetting to the required specification.		7.1	Demonstrate the following work skills when cutting and breaking materials by underwater water jetting:  handling, monitoring and evaluating.		
		7.2	Carry out pre use checks and operate underwater water jetting equipment to cut and break materials to given working instructions for:  - brick - block - concrete - steel - rock/stone - marine growth - seabed debris.		
			7.3	Describe how to apply safe work practices, follow procedures, report problems and establish the authority needed to rectify them, to:  - prepare, cut and break brick, block, concrete, steel, rock/stone, marine growth and other seabed debris  - understand environmental factors and own responsibilities whilst working underwater  - carry out pre use equipment checks  - monitor and evaluate changes in surfaces and structures  - secure temporary protection  - monitor underwater plant and water jetting equipment for performance requirements  - use hand tools, underwater jetting pumps and associated equipment  - work at height  - use access equipment.	
			7.4	Safely use and store, materials, hand tools, underwater jetting pumps, retro lance, ancillary equipment and/or accessories and diving support equipment.	
			7.5	State the needs of other occupations and how to communicate within a team when cutting and breaking materials by underwater water jetting.	
			7.6	Describe how to maintain the tools and equipment used when cutting and breaking materials by underwater water jetting.	

Title:	Cutting and bre	aking materials by underwater water jetting in the workplace
Additional information about this unit		
Assessment Guidance		This unit must be assessed in a work environment and in accordance with 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.
Sector subject are	ea	5.2 Building and Construction
Availability for use		Shared unit
Unit guided learning hours		63



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