

Specification

Edexcel NVQ/competence-
based qualifications

**Edexcel Level 2 NVQ Diploma in Directional Drilling
Operations (QCF)**

For first registration September 2011



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Contents

Qualification title covered by this specification	1
Key features of the Edexcel Level 2 NVQ Diploma in Directional Drilling Operations (QCF)	2
What is the purpose of this qualification?	2
Who is this qualification for?	2
What are the benefits of this qualification to the learner and employer?	2
What are the potential job roles for those working towards this qualification?	3
What progression opportunities are available to learners who achieve this qualification?	3
What is the qualification structure for the Edexcel Level 2 NVQ Diploma in Directional Drilling Operations (QCF)?	4
How is the qualification graded and assessed?	7
Assessment Strategy	7
Types of evidence (to be read in conjunction with the Assessment Strategy in Annexe D)	8
Centre recognition and approval	9
Centre recognition	9
Approvals agreement	9
Quality assurance	9
What resources are required?	9
Unit format	10
Units	11
Unit 1: Contributing to the Specified Drilling Programme in the Workplace	13
Unit 2: Conforming to General Health, Safety and Welfare in the Workplace	21
Unit 3: Conforming to Productive Working Practices in the Workplace	29
Unit 4: Drilling and Completing Holes to the Drilling Specification Programme in the Workplace	33
Unit 5: Carrying out Checks and/or Basic Maintenance on Plant or Machinery in the Workplace	43
Unit 6: Carrying Out Mud, Slurry or Fluid Plant Operations in the Workplace	51
Unit 7: Operating Drilling Rigs to Construct and Form in the Workplace	61
Unit 8: Erecting and Dismantling Plant (Cranes and Rigs) in the Workplace	71

Unit 9: Operating Guidance Systems to Form Bored, Driven or Drilled Holes in the Workplace	79
Unit 10: Preparing and Operating Overhead Cranes to Lift and Transfer Loads in the Workplace	89
Unit 11: Preparing and Operating Excavator Cranes to Lift and Transfer Loads in the Workplace	99
Unit 12: Preparing and Operating Rough Terrain Masted Forklifts to Lift and Transfer Loads in the Workplace	109
Unit 13: Preparing and Operating Sideloader Forklifts to Lift and Transfer Loads in the Workplace	119
Unit 14: Preparing and Operating Telescopic Handlers to Lift and Transfer Loads in the Workplace	129
Unit 15: Preparing and Operating Reach Trucks to Lift and Transfer Loads in the Workplace	139
Unit 16: Preparing and Operating Lorry Loaders or Knuckle Boom Cranes to Lift and Transfer Loads in the Workplace	147
Unit 17: Preparing and Operating 180 degree Excavators to Extract and Excavate Ground and Loose Materials in the Workplace	157
Unit 18: Preparing and Operating Skid Steer Loaders to Extract Loose Materials in the Workplace	167
Unit 19: Preparing and Operating 360 degree Excavators to Extract Ground, Face and/or Loose Materials in the Workplace	175
Unit 20: Preparing and Operating Crawler/Tractor Dozers to Excavate and/or Form Ground in the Workplace	185
Unit 21: Preparing and Operating 360 Degree Excavators to Excavate Ground in the Workplace	195
Unit 22: Preparing and Operating Forward Tipping Dumpsters to Receive, Transport and Discharge Materials in the Workplace	205
Unit 23: Preparing and Operating Agricultural-based Tractors for Non-agricultural Activities in the Workplace	215
Unit 24: Preparing and Operating Self-propelled Bowsers to Receive, Transport and Discharge Materials in the Workplace	227
Unit 25: Slinging and Signalling the Movement of Loads (Secondary Role) in the Workplace	237
Further information	245
Useful publications	245
How to obtain National Occupational Standards	245
Professional development and training	246

Annexe A: Progression pathways	247
The Edexcel qualification framework for the construction sector	247
Annexe B: Quality assurance	251
Key principles of quality assurance	251
Quality assurance processes	251
Annexe C: Centre certification and registration	253
What are the access arrangements and special considerations for the qualification in this specification?	253
Annexe D: Assessment Strategy	255
Annexe E: Additional requirement for qualifications that use the term ‘NVQ’ in a QCF qualification title	257

Qualification title covered by this specification

This specification gives you the information you need to offer the Edexcel Level 2 NVQ Diploma in Directional Drilling Operations (QCF):

Qualification title	Qualification Number (QN)	Accreditation start date
Edexcel Level 2 NVQ Diploma in Directional Drilling Operations (QCF)	600/2914/6	03/08/11

This qualification has been accredited within the Qualifications and Credit Framework (QCF) and are eligible for public funding as determined by the Department for Education (DfE) under Section 96.

The qualification titles listed above feature in the funding lists published annually by the DfE and the regularly updated website. They will also appear on Learning and Reference Application (LARA), where relevant.

You should use the QCF Qualification Number (QN), when you wish to seek public funding for your learners. Each unit within a qualification will also have a unique QCF reference number, which is listed in this specification.

The QCF qualification title and unit reference numbers will appear on the learners' final certification document. Learners need to be made aware of this when they are recruited by the centre and registered with Edexcel.

Key features of the Edexcel Level 2 NVQ Diploma in Directional Drilling Operations (QCF)

This qualification:

- is nationally recognised
- is based on the ConstructionSkills National Occupational Standards (NOS). The NOS, Assessment Strategy and qualification structures are owned by ConstructionSkills.

The Edexcel Level 2 Diploma in Directional Drilling Operations (QCF) has been approved as a component for the ConstructionSkills Apprenticeship.

What is the purpose of this qualification?

This qualification is appropriate for employees in the construction and the built environment sector working across a broad range of areas. It is designed to assess occupational competence in the workplace where learners are required to demonstrate skills and knowledge to a level required in the construction industry.

Who is this qualification for?

This qualification is for all learners aged 16 and above who are capable of reaching the required standards.

Edexcel's policy is that the qualification should:

- be free from any barriers that restrict access and progression
- ensure equality of opportunity for all wishing to access the qualification(s).

What are the benefits of this qualification to the learner and employer?

This qualification allow learners to demonstrate competence against National Occupational Standards which are based on the needs of the construction industry as defined by ConstructionSkills, the Sector Skills Council. As such they contribute to the development of skilled labour in the sector. The qualifications may contribute towards the competence element of an Apprenticeship.

What are the potential job roles for those working towards this qualification?

Successful achievers may be involved in occupations for drilling holes for the installation of pipes, conduits and cables where open cut techniques cannot be used.

What progression opportunities are available to learners who achieve this qualification?

This qualification allows learners to demonstrate competence in land drilling operations at a level required by the construction and the built environment industry. Learners can progress across the level and size of the construction and the built environment competence and knowledge qualifications and into other occupational areas such as team leading and management.

Further information is available in *Annexe A*.

What is the qualification structure for the Edexcel Level 2 NVQ Diploma in Directional Drilling Operations (QCF)?

Individual units can be found in the *Units* section.

This qualification has four pathways. The credit value for each pathway is given below.

	Credit
Pathway 1: Edexcel Level 2 NVQ Diploma in Directional Drilling Operations – Driller (QCF)	70
Pathway 2: Edexcel Level 2 NVQ Diploma in Directional Drilling Operations – Fluid Operative (QCF)	97
Pathway 3: Edexcel Level 2 NVQ Diploma in Directional Drilling Operations – Drilling Rig Erector (QCF)	101
Pathway 4: Edexcel Level 2 NVQ Diploma in Directional Drilling Operations – Guidance Operative (QCF)	141

Minimum credit to be achieved at, or above, the level of the qualification:
68

Unit	Title	Credit	Level
Mandatory units for all pathways (credit value: 19)			
1	Contributing to the Specified Drilling Programme in the Workplace	14	2
2	Conforming to General Health, Safety and Welfare in the Workplace	2	1
3	Conforming to Productive Working Practices in the Workplace	3	2
Mandatory units for pathway 1 (credit value: 51)			
4	Drilling and Completing Holes to the Drilling Specification Programme in the Workplace	43	2
5	Carrying out Checks and/or Basic Maintenance on Plant or Machinery in the Workplace	8	2

Unit	Title	Credit	Level
Mandatory units for pathway 2 (credit value: 78)			
6	Carrying Out Mud, Slurry or Fluid Plant Operations in the Workplace	26	2
7	Operating Drilling Rigs to Construct and Form in the Workplace	52	2
Mandatory units for pathway 3 (credit value: 82)			
7	Operating Drilling Rigs to Construct and Form in the Workplace	52	2
8	Erecting and Dismantling Plant (Cranes and Rigs) in the Workplace	30	2
Mandatory units for pathway 4 (credit value: 122)			
9	Operating Guidance Systems to Form Bored, Driven or Drilled Holes in the Workplace	70	2
7	Operating Drilling Rigs to Construct and Form in the Workplace	52	2
Additional units (not compulsory) (credits from this section do not contribute to the credit requirements of this qualification)			
10	Preparing and Operating Overhead Cranes to Lift and Transfer Loads in the Workplace	18	2
11	Preparing and Operating Excavator Cranes to Lift and Transfer Loads in the Workplace	30	2
12	Preparing and Operating Rough Terrain Masted Forklifts to Lift and Transfer Loads in the Workplace	18	2
13	Preparing and Operating Sideloader Forklifts to Lift and Transfer Loads in the Workplace	16	2
14	Preparing and Operating Telescopic Handlers to Lift and Transfer Loads in the Workplace	25	2
15	Preparing and Operating Reach Trucks to Lift and Transfer Loads in the Workplace	16	2
16	Preparing and Operating Lorry Loaders or Knuckle Boom Cranes to Lift and Transfer Loads in the Workplace	30	2
17	Preparing and Operating 180 degree Excavators to Extract and Excavate Ground and Loose Materials in the Workplace	80	2
18	Preparing and Operating Skid Steer Loaders to Extract Loose Materials in the Workplace	20	2

Additional units (not compulsory) (credits from this section do not contribute to the credit requirements of this qualification)			
19	Preparing and Operating 360 degree Excavators to Extract Ground, Face and/or Loose Materials in the Workplace	80	2
20	Preparing and Operating Crawler/Tractor Dozers to Excavate and/or Form Ground in the Workplace	85	2
21	Preparing and Operating 360 degree Excavators to Excavate Ground in the Workplace	80	2
22	Preparing and Operating Forward Tipping Dumpers to Receive, Transport and Discharge Materials in the Workplace	16	2
23	Preparing and Operating Agricultural-based Tractors for Non-agricultural Activities in the Workplace	20	2
24	Preparing and Operating Self-propelled Bowsers to Receive, Transport and Discharge Materials in the Workplace	12	2
25	Slinging and Signalling the Movement of Loads (Secondary Role) in the Workplace	8	2

How is the qualification graded and assessed?

The overall grade for the qualification is a 'pass'. The learner must achieve all the required units within the specified qualification structure.

To pass a unit the learner must:

- achieve **all** the specified learning outcomes
- satisfy **all** the assessment criteria by providing sufficient and valid evidence for each criterion
- show that the evidence is their own.

The qualifications are designed to be assessed:

- in the workplace or
- in conditions resembling the workplace, as specified in the Assessment Strategy for the sector, or
- as part of a training programme.

Assessment Strategy

The Assessment Strategy for this qualification has been included in *Annexe D*. It has been developed by ConstructionSkills in partnership with employers, training providers, awarding organisations and the regulatory authorities. The Assessment Strategy includes details on:

- criteria for defining realistic working environments
- roles and occupational competence of assessors, expert witnesses, internal verifiers and standards verifiers
- quality control of assessment
- evidence requirements.

Evidence of competence may come from:

- **current practice** where evidence is generated from a current job role
- a **programme of development** where evidence comes from assessment opportunities built into a learning/training programme whether at or away from the workplace
- the **Recognition of Prior Learning (RPL)** where a learner can demonstrate that they can meet the assessment criteria within a unit through knowledge, understanding or skills they already possess without undertaking a course of learning. They must submit sufficient, reliable and valid evidence for internal and standards verification purposes. RPL is acceptable for accrediting a unit, several units or a whole qualification
- a **combination** of these.

It is important that the evidence is:

Valid	relevant to the standards for which competence is claimed
Authentic	produced by the learner
Current	sufficiently recent to create confidence that the same skill, understanding or knowledge persist at the time of the claim
Reliable	indicates that the learner can consistently perform at this level
Sufficient	fully meets the requirements of the standards.

Types of evidence (to be read in conjunction with the Assessment Strategy in Annexe D)

To successfully achieve a unit the learner must gather evidence which shows that they have met the required standard in the assessment criteria. Evidence can take a variety of different forms including the examples below. Centres should refer to the Assessment Strategy for information about which of the following are permissible.

- direct observation of the learner's performance by their assessor (O)
- outcomes from oral or written questioning (Q&A)
- products of the learner's work (P)
- personal statements and/or reflective accounts (RA)
- outcomes from simulation, where permitted by the Assessment Strategy (S)
- professional discussion (PD)
- assignment, project/case studies (A)
- authentic statements/witness testimony (WT)
- expert witness testimony (EPW)
- evidence of Recognition of Prior Learning (RPL).

The abbreviations may be used for cross-referencing purposes.

Learners can use one piece of evidence to prove their knowledge, skills and understanding across different assessment criteria and/or across different units. It is, therefore, not necessary for learners to have each assessment criterion assessed separately. Learners should be encouraged to reference the assessment criteria to which the evidence relates.

Evidence must be made available to the assessor, internal verifier and Edexcel standards verifier. A range of recording documents is available on the Edexcel website www.edexcel.com. Alternatively, centres may develop their own.

Centre recognition and approval

Centre recognition

Centres that have not previously offered Edexcel qualifications need to apply for and be granted centre recognition as part of the process for approval to offer individual qualifications. New centres must complete both a centre recognition approval application and a qualification approval application.

Existing centres will be given 'automatic approval' for a new qualification if they are already approved for a qualification that is being replaced by the new qualification and the conditions for automatic approval are met. Centres already holding Edexcel approval are able to gain qualification approval for a different level or different sector via Edexcel online.

Approvals agreement

All centres are required to enter into an approvals agreement which is a formal commitment by the head or principal of a centre to meet all the requirements of the specification and any linked codes or regulations. Edexcel will act to protect the integrity of the awarding of qualifications, if centres do not comply with the agreement. This could result in the suspension of certification or withdrawal of approval.

Quality assurance

Detailed information on Edexcel's quality assurance processes is given in *Annexe B*.

What resources are required?

Each qualification is designed to support learners working in the Construction sector. Physical resources need to support the delivery of the qualifications and the assessment of the learning outcomes and must be of industry standard. Centres must meet any specific resource requirements outlined in *Annexe D: Assessment Strategy*. Staff assessing the learner must meet the requirements within the overarching Assessment Strategy for the sector.

Unit format

Each unit in this specification contains the following sections.

Unit title:					The unit title is accredited on the QCF and this form of words will appear on the learner's Notification of Performance (NOP).
Unit reference number:					This code is a unique reference number for the unit.
QCF level:					All units and qualifications within the QCF have a level assigned to them, which represents the level of achievement. There are nine levels of achievement, from Entry level to level 8. The level of the unit has been informed by the QCF level descriptors and, where appropriate, the NOS and/or other sector/professional.
Credit value:					All units have a credit value. The minimum credit value is one, and credits can only be awarded in whole numbers. Learners will be awarded credits when they achieve the unit.
Guided learning hours:					A notional measure of the substance of a qualification. It includes an estimate of the time that might be allocated to direct teaching or instruction, together with other structured learning time, such as directed assignments, assessments on the job or supported individual study and practice. It excludes learner-initiated private study.
Unit summary:					This provides a summary of the purpose of the unit.
Assessment requirements/evidence requirements:					The assessment/evidence requirements are determined by the SSC. Learners must provide evidence for each of the requirements stated in this section.
Assessment methodology:					This provides a summary of the assessment methodology to be used for the unit.
Learning outcomes:	Assessment criteria:	Evidence type:	Portfolio reference:	Date:	
			The learner should use this box to indicate where the evidence can be obtained eg portfolio page number.	The learner should give the date when the evidence has been provided.	
Learning outcomes state exactly what a learner should know, understand or be able to do as a result of completing a unit.		The assessment criteria of a unit specify the standard a learner is expected to meet to demonstrate that a learning outcome, or a set of learning outcomes, has been achieved.		Learners must reference the type of evidence they have and where it is available for quality assurance purposes. The learner can enter the relevant key and a reference. Alternatively, the learner and/or centre can devise their own referencing system.	

Units

Unit 1: Contributing to the Specified Drilling Programme in the Workplace

Unit reference number: J/601/7315

QCF level: 2

Credit value: 14

Guided learning hours: 47

Unit summary

The aim of this unit is to gain the skills, knowledge and understanding required for contributing to the specified drilling programme in the workplace within the relevant sector of industry.

Assessment evidence requirements

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

- the Additional Requirements for Qualifications using the title NVQ 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 occupational expertise and knowledge of contributing to the specified drilling programme, 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 one of the following endorsements:

- own area of work
- rotary
- rotary percussive
- cable percussive
- dynamic sampling.

Assessment methodology

This unit is assessed in the workplace. Learners can enter the types of evidence they are presenting for assessment and the submission date against each assessment criterion. Alternatively, centre documentation should be used to record this information.

Learning outcomes and assessment criteria

Learning Outcomes		Assessment Criteria	Evidence type	Portfolio reference	Date
1	Interpret the given information and the work programme when contributing to the specified drilling programme.	1.1	Interpret information and instructions accurately in relation to the work programme from drawings, instructions, method statements, specifications, schedules and manufacturer's information.		
		1.2	Refer to and agree any departures from information and instructions with the authorised person.		
		1.3	State the approved procedures and practices relevant to the operations, work activity and workplace environment, relating to: <ul style="list-style-type: none"> • organisational • regulatory • emergency • operational. 		
		1.4	Describe different types of information and instructions in relation to the specified work activity including drawings, instructions, specifications, method statements, schedules and manufacturer's information.		
		1.5	Assess and communicate the impact that the pending work activity will have on the personnel and property in accordance with organisational procedures.		

Learning Outcomes		Assessment Criteria		Evidence type	Portfolio reference	Date
2	Prepare for the work when contributing to the specified drilling programme.	2.1	Carry out preparation work using appropriate and agreed work methods, technical information and instructions when preparing for the specified drilling programme in accordance with approved procedures and practices.			
		2.2	Confirm resources appropriate to contributing to the specified drilling programme are available and ready for use in accordance with the work requirement and approved procedures and practices, in relation to: <ul style="list-style-type: none"> • materials, components and fixings • machinery, tools and equipment. 			
		2.3	Describe the different types of materials, components, tools and equipment relevant to the work activity, in relation to: <ul style="list-style-type: none"> • drilling rigs • hand and/or powered tools, machinery and ancillary equipment. 			

Learning Outcomes		Assessment Criteria		Evidence type	Portfolio reference	Date
3	Maintain safe working practices when contributing to the specified drilling programme.	3.1	Use personal protective equipment (PPE) safely to carry out the work in accordance with approved procedures and practices and in compliance with current statutory requirements when contributing to the specified drilling programme.			
		3.2	Describe their responsibilities under the current health and safety statutory regulations whilst working: <ul style="list-style-type: none"> in the workplace, 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. 			
		3.3	Demonstrate that safety is not compromised and further clarification is sought if any information is unclear.			
		3.4	Record and report any defects and deficiencies to the appropriate authorised person, in accordance with the organisational and operational procedures.			
		3.5	Identify potential hazards and/or adverse conditions that could affect the work and agree a suitable action with the appropriate person(s).			

Learning Outcomes		Assessment Criteria		Evidence type	Portfolio reference	Date
4	Minimise the risk of damage to the work, surrounding area and environment when contributing to the specified drilling programme.	3.6	Outline potential hazards and/or adverse conditions that could impact on the work activity.			
		3.7	Refer any problems and/or conditions outside their level of responsibility arising from information, resources and methods of work to the appropriate authorised person.			
		4.1	Protect the work and its surrounding area from damage.			
		4.2	Minimise damage and maintain a clean work space.			
		4.3	Describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions.			
		4.4	Dispose of waste in accordance with legislation.			
		4.5	State why the disposal of waste should be carried out safely in accordance with environmental responsibilities, organisational procedures, manufacturers' information, statutory regulations and official guidance.			

Learning Outcomes	Assessment Criteria		Evidence type	Portfolio reference	Date
<p>5 Implement and maintain the specified work activity to the given requirements when contributing to the specified drilling programme.</p>	5.1	<p>Prepare resources to the given requirements and work instructions, using appropriate communication methods and in accordance with the specified work programme, agreed standards and approved procedures and practices to form bored and/or driven holes, and/or specialist works.</p>			
	5.2	<p>Describe the standards, work methods and different communication methods relevant to preparing for and forming a hole in accordance with approved procedures and practices in relation to one or more of the following drilling methods:</p> <ul style="list-style-type: none"> • cable percussive • rotary • rotary percussive • dynamic sampling 			
	5.3	<p>Safely use and store hand tools, machinery and ancillary equipment relevant to the work activity and in accordance with approved procedures and practices.</p>			
	5.4	<p>Work effectively as an individual and/or as part of a team when contributing to the specified drilling programme.</p>			

Learning Outcomes		Assessment Criteria		Evidence type	Portfolio reference	Date
	5.5	State the needs of other occupations and how to communicate within a team when contributing to the specified drilling programme.				
	5.6	Describe how to care for the tools, machinery and equipment used when contributing to the specified drilling programme.				
	5.7	Maintain records in accordance with operational and organisational requirements when contributing to the specified drilling programme.				

Learner name: _____ Date: _____

Learner signature: _____ Date: _____

Assessor signature: _____ Date: _____

Internal verifier signature: _____ Date: _____
(if sampled)

Unit 2: Conforming to General Health, Safety and Welfare in the Workplace

Unit reference number: A/503/1170

QCF level: 1

Credit value: 2

Guided learning hours: 7

Unit summary

The aim of this unit is to develop the skills, knowledge and understanding required to confirm competence in conforming to general safety in the workplace within the relevant sector of industry.

Assessment evidence requirements

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

- the Additional Requirements for Qualifications using the title NVQ 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 methodology

This unit is assessed in the workplace. Learners can enter the types of evidence they are presenting for assessment and the submission date against each assessment criterion. Alternatively, centre documentation should be used to record this information.

Learning outcomes and assessment criteria

Learning Outcome		Assessment Criterion		Evidence type	Portfolio reference	Date
1	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: <ul style="list-style-type: none"> • collective protective measures • personal protective equipment (PPE) • respiratory protective equipment (RPE) • local exhaust ventilation (LEV). 			

Learning Outcome	Assessment Criterion			Evidence type	Portfolio reference	Date
	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.				

Learning Outcome	Assessment Criterion	Evidence type	Portfolio reference	Date
<p>2 Recognise hazards associated with the workplace that have not been previously controlled and report them in accordance with organisational procedures.</p>	2.1	Report any hazards created by changing circumstances within the workplace in accordance with organisational procedures.		
	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.		
	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.		

Learning Outcome		Assessment Criterion			Evidence type	Portfolio reference	Date
3	Comply with organisational policies and procedures to contribute to health, safety and welfare.	3.1	Interpret and comply with given instructions to maintain safe systems of work and quality working practices.				
		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.				

Learning Outcome	Assessment Criterion	Evidence type	Portfolio reference	Date
	3.6 State the organisational policies and procedures for health, safety and welfare, in relation to: <ul style="list-style-type: none"> • dealing with accidents and emergencies associated with the work and environment • methods of receiving or sourcing information • reporting • stopping work • evacuation • fire risks and safe exit procedures • consultation and feedback. 			
	3.7			
	3.8			

Learning Outcome	Assessment Criterion		Evidence type	Portfolio reference	Date
4 Work responsibly to contribute to workplace health, safety and welfare whilst carrying out work in the relevant occupational area.	4.1	Demonstrate behaviour which shows personal responsibility for general workplace health, safety and welfare.			
	4.2	State how personal behaviour demonstrates responsibility for general workplace health, safety and welfare, in relation to: <ul style="list-style-type: none"> • 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.			

Learning Outcome	Assessment Criterion		Evidence type	Portfolio reference	Date
5 Comply with and support all organisational security arrangements and approved procedures.	5.1	Provide appropriate support for security arrangements in accordance with approved procedures: <ul style="list-style-type: none"> • 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.			

Learner name: _____ Date: _____

Learner signature: _____ Date: _____

Assessor signature: _____ Date: _____

Internal verifier signature: _____ Date: _____
(if sampled)

Unit 3: Conforming to Productive Working Practices in the Workplace

Unit reference number: J/503/1169

QCF level: 2

Credit value: 3

Guided learning hours: 10

Unit summary

The aim of this unit is to enable learners to develop the skills, knowledge and understanding required to confirm competence in conforming to productive working practices in the workplace, within the relevant sector of industry.

Assessment evidence requirements

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

- the Additional Requirements for Qualifications using the title NVQ 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 methodology

This unit is assessed in the workplace. Learners can enter the types of evidence they are presenting for assessment and the submission date against each assessment criterion. Alternatively, centre documentation should be used to record this information.

Learning outcomes and assessment criteria

Learning Outcome		Assessment Criterion	Evidence type	Portfolio reference	Date
1	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 sequence of work.	2.1	Interpret relevant information from organisational procedures in order to plan the sequence of work.		
		2.2	Plan the sequence of work, using appropriate resources, in accordance with organisational procedures to ensure work is completed productively.		
		2.3	Describe how organisational procedures are applied to ensure work is planned and carried out productively, in relation to: <ul style="list-style-type: none"> • using resources for own and other's work requirements • allocating appropriate work to employees • organising the work sequence • reducing carbon emissions. 		
		2.4	Describe how to contribute to zero/low carbon work outcomes within the built environment.		

Learning Outcome		Assessment Criterion		Evidence type	Portfolio reference	Date
3	Maintain relevant records in accordance with the organisational procedures.	3.1	Complete relevant documentation according to the occupation as required by the organisation.			
		3.2	Describe how to complete and maintain documentation in accordance with organisational procedures, in relation to: <ul style="list-style-type: none"> • job cards • worksheets • material/resource lists • time sheets. 			
4	Maintain good working relationships when conforming to productive working practices.	3.3	Explain the reasons for ensuring documentation is completed clearly and within given timescales.			
		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.			
		4.2	Apply the principles of equality and diversity and respect the needs of individuals when communicating and working with others.			

Learning Outcome	Assessment Criterion		Evidence type	Portfolio reference	Date
	4.3	Describe how to maintain good working relationships, in relation to: <ul style="list-style-type: none"> • individuals • customer and operative • operative and line management • own and other occupations. 			
	4.4	Describe why it is important to work effectively with line management, colleagues and customers.			
	4.5	Describe how working relationships could have an effect on productive working.			
	4.6	Describe how to apply principles of equality and diversity when communicating and working with others.			

Learner name: _____ Date: _____

Learner signature: _____ Date: _____

Assessor signature: _____ Date: _____

Internal verifier signature: _____ Date: _____
(if sampled)

Unit 4: Drilling and Completing Holes to the Drilling Specification Programme in the Workplace

Unit reference number: Y/601/7318

QCF level: 2

Credit value: 43

Guided learning hours: 143

Unit summary

The aim of this unit is to gain the skills, knowledge and understanding required for drilling and completing holes to the drilling specification programme in the workplace within the relevant sector of industry.

Assessment evidence requirements

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

- the Additional Requirements for Qualifications using the title NVQ in QCF
- the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment – Craft, Supervisory, Technical, Managerial and Professional Units and Qualifications with NVQ in the Qualification and Credit Framework (QCF) title and SVQs.

Assessors for this unit must use a combination of the following assessment methods:

- observation of normal work activities within the workplace that clearly confirms the required skills
- questioning the learner on knowledge criteria that clearly confirms the required understanding
- review other forms of evidence that can clearly confirm industry required skills, knowledge and understanding.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of occupational expertise and knowledge of drilling and completing holes to the drilling specification programme to be effective and reliable when confirming a learner's competence.

Workplace evidence of skills cannot be simulated.

This unit must be assessed against one of the following endorsements:

- land driller - ground investigation cable percussion
- land driller - ground investigation rotary
- land driller - ground investigation dynamic sampling
- land driller - drilling for grouting

- land driller - drilling for anchoring
- land driller - marine cable percussion
- land driller - marine rotary
- land driller - water well cable percussion
- land driller - water well rotary
- land driller - landfill drilling cable percussion
- land driller - landfill drilling rotary
- land driller - geothermal drilling.
- directional driller - rotary
- directional driller - rotary percussive
- directional driller - HDD rig below 40 tonne
- directional driller - HDD rig above 40 tonne.

Assessment methodology

This unit is assessed in the workplace. Learners can enter the types of evidence they are presenting for assessment and the submission date against each assessment criterion. Alternatively, centre documentation should be used to record this information.

Learning outcomes and assessment criteria

Learning Outcomes		Assessment Criteria	Evidence type	Portfolio reference	Date
1	Interpret the given information relating to the work when drilling and completing holes to the drilling specification programme.	1.1	Interpret and extract information from the drilling specification, plans, drawings, sketches, symbols and manufacturers' information.		
		1.2	State the approved procedures and practices relevant to the operations, work activity and workplace environment, relating to: <ul style="list-style-type: none"> • organisational • regulatory • emergency • operational. 		
		1.3	Describe different types of information, their source and how they are interpreted in relation to plans, drawings, sketches, symbols, terminology and manufacturers' information.		
		1.4	Describe the content of the drilling specification for the work to be carried out.		
		1.5	State the manufacturer's recommendations in relation to: <ul style="list-style-type: none"> • positioning and stabilising the drilling equipment • drill rig operations. 		

Learning Outcomes		Assessment Criteria		Evidence type	Portfolio reference	Date
2	Determine the position of the hole(s) when drilling and completing holes to the drilling specification programme.	2.1	Determine the position of the hole(s) in compliance with the specification and in accordance with operational requirements.			
		2.2	Check that the drilling specification is accurate and appropriate to the designated area and drilling requirement.			
		2.3	Describe the correlation of plans with datum points.			
		2.4	Check site conditions thoroughly in accordance with approved procedures and practices and report any variations to the appropriate person.			
		2.5	Describe site conditions that could require a modification to the drilling specification.			
		2.6	Describe how to determine the position and inclination of the hole(s) when using methods to measure, mark out and set out holes.			
		2.7	Promptly clarify any ambiguities in the drilling specification with the appropriate person(s).			
		2.8	Describe the effects of any errors in the positioning of the hole(s) and the acceptable tolerance limits for setting out holes.			

Learning Outcomes		Assessment Criteria		Evidence type	Portfolio reference	Date
3	Maintain safe working practices when drilling and completing holes to the drilling specification programme.	3.1	Use personal protective equipment (PPE) to carry out work safely and efficiently in accordance with approved procedures and practices, and in compliance with current statutory requirements when drilling and completing holes to the drilling specification programme.			
		3.2	Comply with risk and/or COSHH assessments to avoid hazards when drilling and completing holes to the drilling specification programme.			
		3.3	Explain why and when personal protective equipment (PPE) should be used, relating to drilling and completing holes to the drilling specification programme, and the types, purpose and limitations of each type.			
		3.4	Describe their responsibilities under the current health and safety statutory requirements, whilst working: <ul style="list-style-type: none"> in the workplace, below ground level, at height, with tools and equipment, with materials and substances, with movement of materials and by manual handling and mechanical lifting. 			
		3.5	Safely use and store hand tools and/or portable power tools, machinery and ancillary equipment.			

Learning Outcomes	Assessment Criteria		Evidence type	Portfolio reference	Date
	3.6	Describe how to care for tools and equipment used when drilling and completing holes to the drilling specification programme.			
	3.7	Recognise adverse ground conditions and take appropriate action in accordance with operational requirements.			
	3.8	Describe the potential dangers and effects of adverse environmental, site and ground conditions when: <ul style="list-style-type: none"> • determining the position of the hole(s) • positioning and stabilising the drilling equipment • drilling the hole(s). 			
	3.9	Refer any problems and/or conditions outside their level of responsibility to the appropriate authorised person.			

Learning Outcomes		Assessment Criteria		Evidence type	Portfolio reference	Date
4	Position and orientate the drilling rig to drill and complete holes to the drilling specification programme.	4.1	Check that the ground location and conditions for the drilling work is suitable and stable for the positioning and orientation of the rig.			
		4.2	Accurately position and stabilise the drilling rig at the specified location of the hole in compliance with the specification, and in accordance with approved procedures and practices.			
		4.3	Describe how to check that the ground conditions for the drilling work is suitable and stable for the position and orientation of the drilling rig.			
		4.4	Set the drill accurately at the specified inclination and direction in compliance with the drilling specification.			
		4.5	Describe the types and uses of devices for measuring the angle and direction of drilling.			

Learning Outcomes	Assessment Criteria		Evidence type	Portfolio reference	Date
5 Drill holes to the drilling specification programme.	5.1	Drill holes in the ground to the required depths and angles as specified in the drilling specification using all or any of the following standard or specialist items: <ul style="list-style-type: none"> • tripod • cable percussion • rotary • dynamic sampling • rotary percussive • vibration. 			
	5.2	Describe the different types of drilling action and varying feed requirement.			
	5.3	Describe the different types of tools and equipment and the different types of techniques and procedures used when drilling holes to the drilling specification.			
	5.4	Check gauges, monitoring and warning devices, constantly and accurately, and take prompt appropriate action when required.			
	5.5	Describe the drilling equipment gauges, monitoring and warning devices used when drilling holes to the drilling specification and explain why they should be constantly checked for accuracy.			

Learning Outcomes		Assessment Criteria		Evidence type	Portfolio reference	Date
6	Minimise the risk of damage to the work, surrounding area, environment and equipment when drilling and completing holes to the drilling specification programme.	5.6	Identify, isolate and immobilise any faulty drilling equipment and components and report faults to the appropriate person.			
		5.7	Describe the wear, tolerance and clearance requirements in relation to all in-hole drilling equipment.			
		5.8	Identify and record in the driller's log any changes in the condition and strata of the hole.			
		6.1	Protect the work and its surrounding area from damage.			
		6.2	Minimise damage and maintain a clean work space.			
		6.3	Describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions.			
		6.4	Dispose of waste and carry out flushing activities in accordance with approved procedures and practices.			
		6.5	State why the disposal of waste should be carried out in relation to the work.			
		6.6	Describe the actions and equipment that are required to efficiently remove cuttings.			

Learning Outcomes		Assessment Criteria		Evidence type	Portfolio reference	Date
7	Complete the hole(s) to the drilling specification programme.	7.1	Demonstrate and confirm that the hole(s) is completed to the required specification, operation is concluded and plant/equipment is shut-down in accordance with instructions and operational requirements.			
		7.2	Describe the methods used to verify that a drilled hole meets the required specification.			
		7.3	Describe how to identify and deal with any faults and defects in plant and equipment.			
		7.4	Describe the documentation required and how it should be completed following completion			
		7.5	State the given instructions for completing and handing over the work site.			
		7.6	Maintain records of the work carried out in accordance with organisational procedures			

Learner name: _____ Date: _____

Learner signature: _____ Date: _____

Assessor signature: _____ Date: _____

Internal verifier signature: _____ Date: _____
(if sampled)

Unit 5: Carrying out Checks and/or Basic Maintenance on Plant or Machinery in the Workplace

Unit reference number: J/600/7111

QCF level: 2

Credit value: 8

Guided learning hours: 27

Unit summary

The aim of this unit is to gain the skills, knowledge and understanding required for carrying out checks and/or basic maintenance on plant or machinery in the workplace within the relevant sector of industry.

Assessment evidence requirements

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

- the Additional Requirements for Qualifications using the title NVQ in QCF
- the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment – Craft, Supervisory, Technical, Managerial and Professional Units and Qualifications with NVQ in the Qualification and Credit Framework (QCF) title and SVQs.

Assessors for this unit must use a combination of the following assessment methods:

- observation of normal work activities within the workplace that clearly confirms the required skills
- questioning the learner on knowledge criteria that clearly confirms the required understanding
- review other forms of evidence that can clearly confirm industry required skills, knowledge and understanding.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of occupational expertise and knowledge of carrying out checks and/or basic maintenance on plant or machinery to be effective and reliable when confirming a learner's competence.

Workplace evidence of skills cannot be simulated.

This unit must be assessed against the following endorsement:

- own occupational area of work.

Assessment methodology

This unit is assessed in the workplace. Learners can enter the types of evidence they are presenting for assessment and the submission date against each assessment criterion. Alternatively, centre documentation should be used to record this information.

Learning outcomes and assessment criteria

Learning Outcomes		Assessment Criteria		Evidence type	Portfolio reference	Date
1	Work safely at all times when carrying out checks and/or basic maintenance on plant or machinery.	1.1	Comply with current legislation, Approved Codes of Practice and organisational procedures.			
		1.2	Use personal protective equipment (PPE) safely to carry out the activity in accordance with legislation and organisational requirements when carrying out checks and/or basic maintenance on plant or machinery.			
		1.3	Explain why and when personal protective equipment (PPE) should be used, relating to the carrying out of checks and/or basic maintenance on plant or machinery, and the types, purpose and limitations of each type.			
		1.4	Safely use, store and secure hand tools and ancillary equipment.			

Learning Outcomes		Assessment Criteria		Evidence type	Portfolio reference	Date
2	Know how to comply with relevant health and safety legislation and official guidance when carrying out checks and/or basic maintenance on plant or machinery.	2.1	Describe their responsibilities under current legislation and official guidance whilst working: <ul style="list-style-type: none"> in the workplace, below ground level, at height, with tools, plant or machinery and equipment, with materials and substances, with movement/storage of materials and by manual handling and mechanical lifting. 			
		2.2	Describe the reasons for devising and complying with risk and COSHH assessments and how this can encourage safe working practices.			
		2.3	Describe the organisational security procedures for tools, equipment and personal belongings.			
		2.4	State what the accident reporting procedures are and who is responsible for making reports.			
		2.5	State how hazards and emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries and other task-related hazards.			

Learning Outcomes		Assessment Criteria		Evidence type	Portfolio reference	Date
3	Follow the relevant maintenance schedules for the required work when carrying out checks and/or basic maintenance on plant or machinery.	3.1	Interpret and extract information from specifications, schedules, organisational procedures and manufacturers' information relating to the work being carried out.			
		3.2	State the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented.			
		3.3	Describe different types of checks and maintenance information, their source and how they are interpreted in relation to: <ul style="list-style-type: none"> • specifications, schedules, manufacturers' information and organisational procedures. 			
		3.4	Describe the organisational procedures to solve problems with the information and why it is important they are followed.			
4	Carry out checks and/or basic maintenance activities within the limits of their personal authority in the specified sequence and agreed time scale.	4.1	Demonstrate the following work skills when carrying out checks and/or basic maintenance on plant or machinery: <ul style="list-style-type: none"> • replenishing, replacing, applying, lubricating, cleaning and securing. 			

Learning Outcomes	Assessment Criteria	Evidence type	Portfolio reference	Date
	<p>4.2 Carry out operator checks and/or basic maintenance tasks on standard or specialised plant or machinery to given working instructions as directed by the employer/supervisor or authorised person.</p>			
	<p>4.3 Describe how to follow maintenance authorisation, apply safe work practices, follow procedures, report problems and establish the authority and responsibility needed to:</p> <ul style="list-style-type: none"> • clean and prepare areas and components for maintenance • replenish fuels, lubricants, fluids and coolants • replace parts • recycle components • fit fastening systems, pins, bolts, nuts, washers and consumable items • complete functional checks in accordance with equipment operating and care and control procedures • complete reports and records • use hand tools and ancillary equipment. 			

Learning Outcomes		Assessment Criteria		Evidence type	Portfolio reference	Date
5	Report any instances where the maintenance activities cannot be fully met or where there are identified defects outside the planned schedule when carrying out checks and/or basic maintenance on plant or machinery.	4.4	Complete the checks and/or basic maintenance activities within the estimated allocated time and to the required standards and accuracy.			
		4.5	State the needs of other occupations and how to communicate within a team when carrying out checks and/or basic maintenance on plant or machinery.			
		4.6	Describe how maintain the tools and equipment used when carrying out checks and/or basic maintenance on plant or machinery.			
		5.1	Report problems and defects beyond their area of responsibility.			
		5.2	Describe the different ways that problems with maintenance procedures and problems associated with resources can be reported.			

Learning Outcomes		Assessment Criteria		Evidence type	Portfolio reference	Date
6	Complete relevant maintenance records accurately and pass them on to the appropriate person when carrying out checks and/or basic maintenance on plant or machinery.	6.1	Record and report maintenance tasks in accordance with organisational procedures and manufacturer's requirements.			
		6.2	State the procedure to complete checks and maintenance records and what the reporting lines and procedures are within the organisation.			
7	Dispose of waste materials in accordance with safe working practices and approved procedures when carrying out checks and/or basic maintenance on plant or machinery.	7.1	Protect the work and its surrounding area from damage.			
		7.2	Minimise damage and maintain a clean work space.			
		7.3	Dispose of waste in accordance with legislation.			
		7.4	Describe what the waste disposal procedures are, and how and why the disposal of waste should be carried out safely and how it is achieved.			

Learner name: _____ Date: _____

Learner signature: _____ Date: _____

Assessor signature: _____ Date: _____

Internal verifier signature: _____ Date: _____
(if sampled)

Unit 6: Carrying Out Mud, Slurry or Fluid Plant Operations in the Workplace

Unit reference number: L/600/7112

QCF level: 2

Credit value: 26

Guided learning hours: 87

Unit summary

The aim of this unit is to gain the skills, knowledge and understanding required for carrying out mud, slurry or fluid plant operations in the workplace within the relevant sector of industry.

Assessment evidence requirements

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

- the Additional Requirements for Qualifications using the title NVQ in QCF
- the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment – Craft, Supervisory, Technical, Managerial and Professional Units and Qualifications with NVQ in the Qualification and Credit Framework (QCF) title and SVQs.

Assessors for this unit must use a combination of the following assessment methods:

- observation of normal work activities within the workplace that clearly confirms the required skills
- questioning the learner on knowledge criteria that clearly confirms the required understanding
- review other forms of evidence that can clearly confirm industry required skills, knowledge and understanding.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of occupational expertise and knowledge of carrying out mud, slurry or fluid plant operations to be effective and reliable when confirming a learner's competence.

Workplace evidence of skills cannot be simulated.

This unit must be assessed against the following endorsement:

- own occupational area of work.

Assessment methodology

This unit is assessed in the workplace. Learners can enter the types of evidence they are presenting for assessment and the submission date against each assessment criterion. Alternatively, centre documentation should be used to record this information.

Learning outcomes and assessment criteria

Learning Outcomes		Assessment Criteria			Evidence type	Portfolio reference	Date
1	Interpret the given information relating to the work and resources when carrying out mud, slurry or fluid plant operations.	1.1	Interpret and extract information from drawings, instructions, method statements, specifications, schedules and manufacturers' information.				
		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: <ul style="list-style-type: none"> drawings, instructions, specifications, method statements, schedules and manufacturers' information. 				

Learning Outcomes		Assessment Criteria		Evidence type	Portfolio reference	Date
2	Know how to comply with relevant legislation and official guidance when carrying out mud, slurry or fluid plant operations.	2.1	Describe their responsibilities under current legislation and official guidance whilst working: <ul style="list-style-type: none"> in the workplace, below ground level, at height, 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.			

Learning Outcomes		Assessment Criteria		Evidence type	Portfolio reference	Date
3	Maintain safe working practices when carrying out mud, slurry or fluid plant operations.	3.1	Use personal protective equipment (PPE) safely to carry out the activity in accordance with legislation and organisational requirements when carrying out mud, slurry or fluid plant operations.			
		3.2	Explain why and when personal protective equipment (PPE) should be used, relating to carrying out mud, slurry or fluid plant 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 and other task-related hazards.			

Learning Outcomes		Assessment Criteria		Evidence type	Portfolio reference	Date
4	Select the required quantity and quality of resources for the methods of work to carrying out mud, slurry or fluid plant operations.	4.1	Describe the characteristics, quality, uses, limitations and defects associated with the resources in relation to: <ul style="list-style-type: none"> • mud, slurry or fluid plant • hand and/or powered tools and equipment. 			
		4.2	Select resources associated with own work in relation to materials, components, fixings, tools, plant and ancillary 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, length, area and wastage associated with the method/procedure to carry out mud, slurry or fluid plant operations.			

Learning Outcomes		Assessment Criteria		Evidence type	Portfolio reference	Date
5	Minimise the risk of damage to the work and surrounding area when carrying out mud, slurry or fluid plant 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, others involved with the work 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 carrying out mud, slurry or fluid plant 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"> types of progress charts, timetables and estimated times organisational procedures for reporting circumstances which will affect the work programme. 			

Learning Outcomes	Assessment Criteria		Evidence type	Portfolio reference	Date
7 Comply with the given contract information to carry out mud, slurry or fluid plant operations to the required specification.	7.1	Demonstrate the following work skills when carrying out mud, slurry or fluid plant operations: <ul style="list-style-type: none"> • preparing, setting up, connecting, checking, maintaining, mixing, monitoring, testing, pumping, cleaning, adjusting, and recording. 			
	7.2	Install, operate and maintain mud, slurry or fluid plant to given working instructions in one of the following operations: <ul style="list-style-type: none"> • piling • tunnelling • drilling. 			
	7.3	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"> • prepare the area allocated for the plant and ancillary equipment • set up, assemble and check the integrity of plant and ancillary equipment, including the connection of hoses, valves and items of plant for delivery, extraction, recycling and disposal of mud, slurry or fluids • mix mud, slurry or fluids in accordance with manufacturer's recommendations 			

Learning Outcomes	Assessment Criteria	Evidence type	Portfolio reference	Date
	<ul style="list-style-type: none"> • monitor the pumping process and make appropriate adjustments in order to maintain operational efficiency • test the viscosity and density of the mud, slurry or fluid • complete records of the process • use hand tools, power tools, plant and ancillary equipment. 			
7.4	Safely use and store hand tools, plant and ancillary equipment.			
7.5	State the needs of other occupations and how to communicate within a team when carrying out mud, slurry or fluid plant operations.			
7.6	Describe how to maintain the tools, plant and equipment used when carrying out mud, slurry or fluid plant operations.			

Learner name: _____ Date: _____

Learner signature: _____ Date: _____

Assessor signature: _____ Date: _____

Internal verifier signature: _____ Date: _____
(if sampled)

Unit 7: Operating Drilling Rigs to Construct and Form in the Workplace

Unit reference number: M/601/7325

QCF level: 2

Credit value: 52

Guided learning hours: 173

Unit summary

The aim of this unit is to gain the skills, knowledge and understanding required for operating drilling rigs to construct and form in the workplace within the relevant sector of industry.

Assessment evidence requirements

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

- the Additional Requirements for Qualifications using the title NVQ in QCF
- the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment – Craft, Supervisory, Technical, Managerial and Professional Units and Qualifications with NVQ in the Qualification and Credit Framework (QCF) title and SVQs.

Assessors for this unit must use a combination of the following assessment methods:

- observation of normal work activities within the workplace that clearly confirms the required skills
- questioning the learner on knowledge criteria that clearly confirms the required understanding
- review other forms of evidence that can clearly confirm industry required skills, knowledge and understanding.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of occupational expertise and knowledge of preparing and operating drilling rigs to construct and form to be effective and reliable when confirming a learner's competence.

Workplace evidence of skills cannot be simulated.

This unit must be assessed against one of the following endorsements:

- HDD rig below 40 tonne
- HDD rig above 40 tonne.

Assessment methodology

This unit is assessed in the workplace. Learners can enter the types of evidence they are presenting for assessment and the submission date against each assessment criterion. Alternatively, centre documentation should be used to record this information.

Learning outcomes and assessment criteria

Learning Outcomes		Assessment Criteria		Evidence type	Portfolio reference	Date
1	Interpret the given information relating to the use of drilling rigs during constructing and forming operations.	1.1	Interpret and extract information from drawings, specifications, schedules and manufacturers' information.			
		1.2	Comply with information and/or instructions derived from risk assessments and method statements.			
		1.3	State the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented.			
		1.4	Describe different types of information, their source and how they are interpreted in relation to: <ul style="list-style-type: none"> drawings, specifications, schedules, manufacturers' information, method statements, regulations and guidance. 			
2	Organise with others the sequence and operation in which constructing and forming operations using drilling rigs are to be carried out.	2.1	Organise the work according to given information or instructions.			
		2.2	Describe how to communicate ideas between team members.			
		2.3	Organise and communicate with team members and other associated occupations.			
		2.4	State how to organise resources prior to and during drilling operations.			

Learning Outcomes		Assessment Criteria		Evidence type	Portfolio reference	Date
3	Know how to comply with relevant legislation and official guidance to construct and form with drilling rigs.	3.1	Describe their responsibilities under current legislation and official guidance whilst working: <ul style="list-style-type: none"> in the workplace, below ground level, at height, in confined spaces, with tools and equipment, with materials and substances, with movement/storage of materials and by manual handling and mechanical lifting. 			
		3.2	Describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative.			
		3.3	State what the accident reporting procedures are and who is responsible for making reports.			

Learning Outcomes		Assessment Criteria		Evidence type	Portfolio reference	Date
4	Maintain safe working practices when carrying out constructing and forming operations with drilling rigs.	4.1	Use personal protective equipment (PPE) safely to carry out the activity in accordance with legislation and organisational requirements during drilling operations.			
		4.2	Explain why and when personal protective equipment (PPE) should be used, relating to drilling operations, and the types, purpose and limitations of each type.			
		4.3	State how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries and other task-related hazards.			

Learning Outcomes	Assessment Criteria		Evidence type	Portfolio reference	Date
5 Request and select the required quantity and quality of resources to carry out constructing and forming operations with drilling rigs.	5.1	Describe the characteristics, quality, uses, limitations and defects associated with the resources, and how they should be used correctly, relating to: <ul style="list-style-type: none"> • consumables, lubricants and fuels • attachments and aids for drilling • hand tools, ancillary equipment and/or accessories. 			
	5.2	Request and select resources associated with drilling operations in relation to consumables, materials, attachments, tools, accessories and/or ancillary equipment.			
	5.3	State how the resources should be used correctly, how problems associated with the resources are reported and how the organisational procedures are used.			
	5.4	Outline potential hazards associated with the resources and method of work.			
	5.5	Describe how to calculate quantity, weight, length and area associated with the method/procedures to carry out the drilling work.			

Learning Outcomes		Assessment Criteria			Evidence type	Portfolio reference	Date
6	Minimise the risk of damage to the work and surrounding area when constructing and forming with drilling rigs.	6.1	Protect the work and its surrounding area from damage.				
		6.2	Minimise damage and maintain a clean work space.				
		6.3	Describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions.				
		6.4	Dispose of waste in accordance with legislation.				
		6.5	State why the disposal of waste should be carried out safely in accordance with environmental responsibilities, organisational procedures, manufacturers' information, statutory regulations and official guidance.				

Learning Outcomes		Assessment Criteria		Evidence type	Portfolio reference	Date
7	Complete the work within the allocated time when carrying out constructing and forming operations with drilling rigs.	7.1	Demonstrate completion of the work within the allocated time.			
		7.2	Shut down and secure drilling rigs.			
		7.3	State the purpose of the work programme and describe why deadlines should be kept in relation to: <ul style="list-style-type: none"> types of progress charts, timetables and estimated times organisational procedures for reporting circumstances which will affect the lifting operation. 			
8	Comply with the given contract information to operate drilling rigs to construct and form to the required specification.	8.1	Demonstrate the following work skills when constructing and forming using drilling rigs: <ul style="list-style-type: none"> adjusting, checking, communicating, manoeuvring, positioning, constructing and forming. 			
		8.2	Operate drilling rigs to construct and form to given working instructions.			
		8.3	Describe how to apply safe work practices, follow procedures, report problems and establish authority needed to rectify, to: <ul style="list-style-type: none"> identify the characteristics of the drilling rig for the operation carry out performance checks 			

Learning Outcomes	Assessment Criteria	Evidence type	Portfolio reference	Date
	<ul style="list-style-type: none"> • carry out pre-operational checks for obstructions, stability, safety and security of the work and surrounding area • identify the area for the construction and formation work • check to avoid damage to structures and utilities service apparatus • carry out construction and formation operations • shut down and secure the drilling rig • use hand tools, ancillary equipment and accessories. 			
8.4	Safely use and store hand tools and ancillary equipment.			
8.5	State the needs of other occupations and how to communicate within a team during drilling operations.			
8.6	Describe how to maintain the drilling rig, tools and equipment used to carry out drilling operations.			

Learner name: _____
Learner signature: _____
Assessor signature: _____
Internal verifier signature: _____
(if sampled)

Date: _____
Date: _____
Date: _____
Date: _____

Unit 8: Erecting and Dismantling Plant (Cranes and Rigs) in the Workplace

Unit reference number: K/600/8106

QCF level: 2

Credit value: 30

Guided learning hours: 100

Unit summary

The aim of this unit is to gain the skills, knowledge and understanding required for erecting and dismantling plant (cranes and rigs) in the workplace within the relevant sector of industry.

Assessment evidence requirements

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

- the Additional Requirements for Qualifications using the title NVQ in QCF
- the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment – Craft, Supervisory, Technical, Managerial and Professional Units and Qualifications with NVQ in the Qualification and Credit Framework (QCF) title and SVQs.

Assessors for this unit must use a combination of the following assessment methods:

- observation of normal work activities within the workplace that clearly confirms the required skills
- questioning the learner on knowledge criteria that clearly confirms the required understanding
- review other forms of evidence that can clearly confirm industry required skills, knowledge and understanding.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of occupational expertise and knowledge of erecting and dismantling plant (cranes and rigs) to be effective and reliable when confirming a learner's competence.

Workplace evidence of skills cannot be simulated.

This unit must be assessed against one of the following endorsements:

- mobile crane
- crawler crane
- tower crane
- overhead crane
- piling rig
- demolition rig
- drilling rig.

Assessment methodology

This unit is assessed in the workplace. Learners can enter the types of evidence they are presenting for assessment and the submission date against each assessment criterion. Alternatively, centre documentation should be used to record this information.

Learning outcomes and assessment criteria

Learning Outcomes		Assessment Criteria		Evidence type	Portfolio reference	Date
1	Interpret the given information relating to erecting and dismantling plant.	1.1	Interpret and extract information from drawings, specifications, schedules, method statements and manufacturers' information.			
		1.2	Comply with information and/or instructions derived from risk assessments and method statements.			
		1.3	State the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented.			
		1.4	Describe different types of information, their source and how they are interpreted in relation to: <ul style="list-style-type: none"> drawings, specifications, schedules, method statements, manufacturers' information, regulations and guidance. 			
2	Organise with others the sequence and operation in which erecting and dismantling operations are to be carried out.	2.1	Organise the work according to given information or instructions.			
		2.2	Describe how to communicate ideas between team members.			
		2.3	Organise and communicate with team members and other associated occupations.			
		2.4	State how to organise resources prior to and during erecting and dismantling operations.			

Learning Outcomes		Assessment Criteria		Evidence type	Portfolio reference	Date
3	Know how to comply with relevant legislation and official guidance to carry out erecting and dismantling of plant.	3.1	Describe their responsibilities under current legislation and official guidance whilst working: <ul style="list-style-type: none"> in the workplace, below ground level, at height, with tools and equipment, with materials and substances, with movement/storage of materials and by manual handling and mechanical lifting. 			
		3.2	Describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative.			
		3.3	State what the accident reporting procedures are and who is responsible for making reports.			
4	Maintain safe working practices when carrying out erecting and dismantling of plant.	4.1	Use personal protective equipment (PPE) to safely carry out the activity in accordance with legislation and organisational requirements during erecting and dismantling operations.			
		4.2	Explain why and when personal protective equipment (PPE) should be used, relating to erecting and dismantling plant, and the types, purpose and limitations of each type.			

Learning Outcomes		Assessment Criteria		Evidence type	Portfolio reference	Date
		4.3	State how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries and other task-related hazards.			
5	Request and select the required quantity and quality of resources to carry out erecting and dismantling of plant.	5.1	Describe the characteristics, quality, uses, limitations and defects associated with the resources, and how they should be used correctly, relating to: <ul style="list-style-type: none"> • plant • hand and/or powered tools and equipment. 			
		5.2	Request and select resources associated with the work in relation to consumables, materials, tools, accessories and/or ancillary equipment.			
		5.3	State how the resources should be used correctly, how problems associated with the resources are reported and how the organisational procedures are used.			
		5.4	Outline potential hazards associated with the resources and method of work.			
		5.5	Describe how to calculate weight, bearing pressure, quantity, length and area associated with the method/procedures to carry out the work.			

Learning Outcomes		Assessment Criteria			Evidence type	Portfolio reference	Date
6	Minimise the risk of damage to the work and surrounding area when erecting and dismantling plant.	6.1	Protect the work and its surrounding area from damage.				
		6.2	Minimise damage and maintain a clean work space.				
		6.3	Describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions.				
		6.4	Dispose of waste in accordance with legislation.				
		6.5	State why the disposal of waste should be carried out safely in relation to the work.				
7	Complete the work within the allocated time when erecting and dismantling plant.	7.1	Demonstrate completion of the work within the allocated time.				
		7.2	State the purpose of the work programme and describe why deadlines should be kept in relation to: <ul style="list-style-type: none"> types of progress charts, timetables and estimated times organisational procedures for reporting circumstances which will affect the lifting operation. 				

Learning Outcomes	Assessment Criteria		Evidence type	Portfolio reference	Date
8	Comply with the given contract information to erect and dismantle plant to the required specification.	8.1 Demonstrate the following work skills when preparing for and erecting and dismantling plant: <ul style="list-style-type: none"> • unloading, loading, siting, measuring, marking out, lay out, aligning, fitting, positioning, connecting, configuring, dismantling, removing, adjusting, securing, checking and inspecting. 			
		8.2 Prepare, erect and dismantle plant to given working instructions on one or more of the following: <ul style="list-style-type: none"> • mobile crane • mobile (truck-mounted) tower crane • crawler crane • tower crane • overhead crane • drilling rig • piling rig • demolition rig. 			

Learning Outcomes	Assessment Criteria		Evidence type	Portfolio reference	Date
	8.3	Describe how to apply safe work practices, follow procedures, report problems and establish authority needed to rectify, to: <ul style="list-style-type: none"> • erect and dismantle one or more of the following: mobile crane, mobile (truck-mounted) tower crane, drilling rig, demolition rig and piling rig • use hand tools, power tools, plant and equipment. 			
	8.4	Safely use and store hand tools, portable power tools, ancillary equipment and machinery.			
	8.5	State the needs of other occupations and how to communicate within a team when preparing for and erecting and dismantling plant.			
	8.6	Describe how to maintain the plant, tools and equipment used to erect and dismantle plant.			

Learner name: _____ Date: _____
 Learner signature: _____ Date: _____
 Assessor signature: _____ Date: _____
 Internal verifier signature: _____ Date: _____
 (if sampled)

Unit 9: Operating Guidance Systems to Form Bored, Driven or Drilled Holes in the Workplace

Unit reference number: D/601/7322

QCF level: 2

Credit value: 70

Guided learning hours: 233

Unit summary

The aim of this unit is to gain the skills, knowledge and understanding required for operating guidance systems to form bored, driven or drilled holes in the workplace within the relevant sector of industry.

Assessment evidence requirements

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

- the Additional Requirements for Qualifications using the title NVQ in QCF
- the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment – Craft, Supervisory, Technical, Managerial and Professional Units and Qualifications with NVQ in the Qualification and Credit Framework (QCF) title and SVQs.

Assessors for this unit must use a combination of the following assessment methods:

- observation of normal work activities within the workplace that clearly confirms the required skills
- questioning the learner on knowledge criteria that clearly confirms the required understanding
- review other forms of evidence that can clearly confirm industry required skills, knowledge and understanding.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of occupational expertise and knowledge of operating guidance systems to form holes to be effective and reliable when confirming a learner's competence.

This unit must be assessed against one of the following endorsements:

- walk over
- wire lined
- magnetic guidance.

Assessment methodology

This unit is assessed in the workplace. Learners can enter the types of evidence they are presenting for assessment and the submission date against each assessment criterion. Alternatively, centre documentation should be used to record this information.

Learning outcomes and assessment criteria

Learning Outcomes		Assessment Criteria		Evidence type	Portfolio reference	Date
1	Interpret the given information relating to the work and resources when operating guidance systems to form holes.	1.1	Interpret and confirm information relating to the work and resources from drawings, instructions, specifications, schedules, method statements and manufacturers' information.			
		1.2	State the organisational procedures developed to report and rectify inappropriate information and unsuitable resources that will affect the work programme and how they are implemented.			
		1.3	Comply with information and/or instructions derived from risk assessments.			
		1.4	Describe different types of information, their source and how they are interpreted in relation to: <ul style="list-style-type: none"> drawings, instructions, specifications, schedules, risk assessments and manufacturers' information. 			

Learning Outcomes	Assessment Criteria		Evidence type	Portfolio reference	Date
2	Comply with relevant legislation and official guidance when operating guidance systems to form holes.	<p>2.1 Describe their responsibilities under current legislation and official guidance whilst working:</p> <ul style="list-style-type: none"> in the workplace, below ground level, at height, with tools and equipment, with materials and substances, with movement of materials and by manual handling and mechanical lifting. <p>2.2 Comply with the relevant current legislation and official guidance to carry out the work.</p> <p>2.3 Describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative.</p> <p>2.4 State what the accident reporting procedures are and who is responsible for making reports.</p>			

Learning Outcomes		Assessment Criteria		Evidence type	Portfolio reference	Date
3	Maintain safe working practices when operating guidance systems to form holes.	3.1	Use personal protective equipment (PPE) safely to carry out the activity in accordance with legislation and organisational requirements when operating guidance systems to form holes.			
		3.2	Explain why, when and how personal protective equipment (PPE) should be used, relating to operating guidance systems to form holes.			
		3.3	State how to identify and respond to emergencies in accordance with the methods of work, manufacturers' technical information, statutory regulations and official guidance when involved with fires, spillages, injuries and other task-related hazards.			

Learning Outcomes		Assessment Criteria		Evidence type	Portfolio reference	Date
4	Select the required quantity and quality of resources for the methods of work to operate guidance systems to form holes.	4.1	Describe the characteristics, quality, uses, limitations, defects and how defects should be rectified associated with the resources in relation to: <ul style="list-style-type: none"> • guidance systems • standard and/or specialist 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, why organisational procedures are developed and how they are used.			
		4.4	Outline potential hazards associated with the resources and methods of work and how they could be overcome.			
		4.5	Describe how to calculate quantity, length, area and wastage associated with the method/procedure to operate guidance systems to form holes.			

Learning Outcomes		Assessment Criteria		Evidence type	Portfolio reference	Date
5	Minimise the risk of damage to the work and surrounding area when operating guidance systems to form holes.	5.1	Protect the work and its surrounding area from damage.			
		5.2	Minimise damage to the work and surrounding area.			
		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 safely in accordance with environmental responsibilities, organisational procedures, manufacturers' information, statutory regulations and official guidance.			
6	Complete the work within the allocated time when operating guidance systems to form holes.	6.1	State the purpose of the work programme and explain why deadlines should be kept in relation to: <ul style="list-style-type: none"> • progress charts, timetables and estimated times • organisational procedures for reporting circumstances which will affect the work programme. 			

Learning Outcomes	Assessment Criteria	Evidence type	Portfolio reference	Date
7 Comply with the given contract information to operate guidance systems to form holes to the required specification.	<p>7.1 Demonstrate the following work skills when operating guidance systems to form holes:</p> <ul style="list-style-type: none"> • measuring, marking out, setting up, connecting, calibrating, locating, marking, recording and recovering. <p>7.2 Operate guidance systems to bore, drive or drill holes to given contractor's working instructions and in accordance with the contract specification and programme, relating to one or more of the following:</p> <ul style="list-style-type: none"> • walk over • wire lined • magnetic guidance system. <p>7.3 Describe how to apply safe work practices, follow procedures, report problems and establish authority needed to rectify, to:</p> <ul style="list-style-type: none"> • operate the following guidance systems: • walk over • wire lined • magnetic guidance systems • use hand tools and ancillary equipment. <p>7.4 Safely use and store hand tools and/or portable power tools and ancillary equipment associated with operating guidance systems to form holes.</p>			

Learning Outcomes		Assessment Criteria		Evidence type	Portfolio reference	Date
		7.5	State the needs of other occupations and how to communicate within a team when operating guidance systems to form holes.			
		7.6	Organise and carry out work to the sequence as agreed with the other occupations involved.			
		7.7	Describe how to maintain the hand tools and/or portable power tools, plant and ancillary equipment used when operating guidance systems to form holes.			

Learner name: _____ Date: _____

Learner signature: _____ Date: _____

Assessor signature: _____ Date: _____

Internal verifier signature: _____ Date: _____
(if sampled)

Unit 10: Preparing and Operating Overhead Cranes to Lift and Transfer Loads in the Workplace

Unit reference number: L/600/7868

QCF level: 2

Credit value: 18

Guided learning hours: 60

Unit summary

The aim of this unit is to gain the skills, knowledge and understanding required for preparing and operating overhead cranes to lift and transfer loads in the workplace within the relevant sector of industry.

Assessment evidence requirements

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

- the Additional Requirements for Qualifications using the title NVQ in QCF
- the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment – Craft, Supervisory, Technical, Managerial and Professional Units and Qualifications with NVQ in the Qualification and Credit Framework (QCF) title and SVQs.

Assessors for this unit must use a combination of the following assessment methods:

- observation of normal work activities within the workplace that clearly confirms the required skills
- questioning the learner on knowledge criteria that clearly confirms the required understanding
- review other forms of evidence that can clearly confirm industry required skills, knowledge and understanding.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of occupational expertise and knowledge of preparing and operating overhead cranes to lift and transfer loads to be effective and reliable when confirming a learner's competence.

Workplace evidence of skills cannot be simulated.

Assessment methodology

This unit is assessed in the workplace. Learners can enter the types of evidence they are presenting for assessment and the submission date against each assessment criterion. Alternatively, centre documentation should be used to record this information.

Learning outcomes and assessment criteria

Learning Outcomes		Assessment Criteria		Evidence type	Portfolio reference	Date
1	Interpret the given information relating to the use of overhead cranes to lift, transfer and place loads.	1.1	Interpret and extract information from drawings, specifications, schedules and manufacturers' information.			
		1.2	Comply with information and/or instructions derived from risk assessments and method statements.			
		1.3	State the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented.			
		1.4	Describe different types of information, their source and how they are interpreted in relation to: <ul style="list-style-type: none"> drawings, specifications, schedules, manufacturers' information, method statements and regulations and guidance applicable to overhead crane operations. 			
2	Organise with others the sequence and operation in which lifting operations using overhead cranes are to be carried out.	2.1	Organise the work according to given information or instructions.			
		2.2	Describe how to communicate ideas between team members.			
		2.3	Organise and communicate with team members and other associated occupations.			
		2.4	State how to organise resources prior to and during lifting operations with overhead cranes.			

Learning Outcomes		Assessment Criteria		Evidence type	Portfolio reference	Date
3	Know how to comply with relevant legislation and official guidance when carrying out lifting operations.	3.1	Describe their responsibilities under current legislation and official guidance whilst working: <ul style="list-style-type: none"> in the workplace, below ground level, at height, in confined spaces, with tools and equipment, with materials and substances, with movement/storage of materials and by manual handling and mechanical lifting. 			
		3.2	Describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative.			
		3.3	State what the accident reporting procedures are and who is responsible for making reports.			

Learning Outcomes		Assessment Criteria			Evidence type	Portfolio reference	Date
4	Maintain safe working practices when preparing for and carrying out lifting operations using overhead cranes.	4.1	Use personal protective equipment (PPE) to safely carry out the activity in accordance with legislation and organisational requirements during lifting operations.				
		4.2	Explain why and when personal protective equipment (PPE) should be used, relating to overhead crane use, and the types, purpose and limitations of each type.				
		4.3	State how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries and other task-related hazards.				

Learning Outcomes		Assessment Criteria		Evidence type	Portfolio reference	Date
5	Request and select the required quantity and quality of resources to prepare for and carry out lifting operations using overhead cranes.	5.1	Describe the characteristics, quality, uses, limitations and defects associated with the resources, and how they should be used correctly, relating to: <ul style="list-style-type: none"> • consumables, lubricants and fuels • attachments and lifting aids • hand tools, ancillary equipment and/or accessories. 			
		5.2	Request and select resources associated with overhead cranes in relation to consumables, materials, attachments, tools, accessories and/or ancillary equipment.			
		5.3	State how the resources should be used correctly, how problems associated with the resources are reported and how the organisational procedures are used.			
		5.4	Outline potential hazards associated with the resources and method of work.			
		5.5	Describe how to calculate weight, bearing pressure, length and area associated with the method/procedures to carry out lifting operations with overhead cranes.			

Learning Outcomes		Assessment Criteria			Evidence type	Portfolio reference	Date
6	Minimise the risk of damage to the work and surrounding area when lifting and transferring loads.	6.1	Protect the work and its surrounding area from damage.				
		6.2	Minimise damage and maintain a clean work space.				
		6.3	Describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions.				
		6.4	Dispose of waste in accordance with legislation.				
		6.5	State why the disposal of waste should be carried out safely in relation to the work.				

Learning Outcomes		Assessment Criteria			Evidence type	Portfolio reference	Date
7	Complete the work within the allocated time when preparing to and lifting and transferring loads.	7.1	Demonstrate completion of the work within the allocated time.				
		7.2	Shut down and secure overhead cranes.				
		7.3	State the purpose of the work programme and describe why deadlines should be kept in relation to: <ul style="list-style-type: none"> types of progress charts, timetables and estimated times organisational procedures for reporting circumstances which will affect the lifting operation. 				

Learning Outcomes	Assessment Criteria	Evidence type	Portfolio reference	Date
<p>8 Comply with the given contract information to lift, transfer and place loads using overhead cranes to the required specification.</p>	<p>8.1 Demonstrate the following work skills when preparing for, lifting, transferring and placing loads using overhead cranes:</p> <ul style="list-style-type: none"> • fitting, attaching, setting up, securing, adjusting, checking, removing, communicating, operating, manoeuvring, positioning, lifting, transferring and setting down. 			
	<p>8.2 Prepare, set up and operate overhead cranes to lift, transfer and place a variety of loads in the workplace, to given working instructions.</p>			
	<p>8.3 Describe how to apply safe work practices, follow procedures, report problems and establish authority needed to rectify, to:</p> <ul style="list-style-type: none"> • identify the characteristics of the crane for the lifting operation • carry out performance checks • prepare, set up and adjust for operational requirements • complete functional checks • carry out pre-operational checks for obstructions, stability, safety and security of the work and surrounding area • operate and move (where applicable) the crane 			

Learning Outcomes	Assessment Criteria	Evidence type	Portfolio reference	Date
	<ul style="list-style-type: none"> • identify characteristics, type, weight and positioning of loads for lifting and transferring • secure and balance loads for lifting • lift, remove and transfer loads • position, place and set down loads • confirm load stability and security • shut down the crane • use hand tools, ancillary equipment and accessories. 			
	8.4 Safely use and store hand tools and ancillary equipment.			
	8.5 State the needs of other occupations and how to communicate within a team when preparing for and lifting and transferring loads.			
	8.6 Describe how to maintain the plant, tools and equipment used to lift and transfer loads.			

Learner name: _____
Learner signature: _____
Assessor signature: _____
Internal verifier signature: _____
(if sampled)

Date: _____
Date: _____
Date: _____
Date: _____

Unit 11: Preparing and Operating Excavator Cranes to Lift and Transfer Loads in the Workplace

Unit reference number: D/600/7874

QCF level: 2

Credit value: 30

Guided learning hours: 100

Unit summary

The aim of this unit is to gain the skills, knowledge and understanding required for preparing and operating excavator cranes to lift and transfer loads in the workplace within the relevant sector of industry.

Assessment evidence requirements

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

- the Additional Requirements for Qualifications using the title NVQ in QCF
- the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment – Craft, Supervisory, Technical, Managerial and Professional Units and Qualifications with NVQ in the Qualification and Credit Framework (QCF) title and SVQs.

Assessors for this unit must use a combination of the following assessment methods:

- observation of normal work activities within the workplace that clearly confirms the required skills
- questioning the learner on knowledge criteria that clearly confirms the required understanding
- review other forms of evidence that can clearly confirm industry required skills, knowledge and understanding.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of occupational expertise and knowledge of preparing and operating excavator cranes to lift and transfer loads to be effective and reliable when confirming a learner's competence.

Workplace evidence of skills cannot be simulated.

Assessment methodology

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 Outcomes		Assessment Criteria		Evidence type	Portfolio reference	Date
1	Interpret the given information relating to the use of excavator cranes to lift, transfer and place loads.	1.1	Interpret and extract information from drawings, specifications, schedules and manufacturers' information.			
		1.2	Comply with information and/or instructions derived from risk assessments and method statements.			
		1.3	State the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented.			
		1.4	Describe different types of information, their source and how they are interpreted in relation to: <ul style="list-style-type: none"> drawings, specifications, schedules, manufacturers' information, method statements and regulations and guidance applicable to excavator crane operations. 			

Learning Outcomes		Assessment Criteria		Evidence type	Portfolio reference	Date
2	Organise with others the sequence and operation in which lifting operations using excavator cranes are to be carried out.	2.1	Organise the work according to given information or instructions.			
		2.2	Describe how to communicate ideas between team members.			
		2.3	Organise and communicate with team members and other associated occupations.			
		2.4	State how to organise resources prior to and during lifting operations with excavator cranes.			
3	Know how to comply with relevant legislation and official guidance when carrying out lifting operations.	3.1	Describe their responsibilities under current legislation and official guidance whilst working: <ul style="list-style-type: none"> in the workplace, below ground level, at height, in confined spaces, with tools and equipment, with materials and substances, with movement/storage of materials and by manual handling and mechanical lifting. 			
		3.2	Describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative.			
		3.3	State what the accident reporting procedures are and who is responsible for making reports.			

Learning Outcomes		Assessment Criteria		Evidence type	Portfolio reference	Date
4	Maintain safe working practices when preparing for and carrying out lifting operations using excavator cranes.	4.1	Use personal protective equipment (PPE) to safely carry out the activity in accordance with legislation and organisational requirements during lifting operations.			
		4.2	Explain why and when personal protective equipment (PPE) should be used, relating to excavator crane use, and the types, purpose and limitations of each type.			
		4.3	State how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries and other task-related hazards.			

Learning Outcomes	Assessment Criteria		Evidence type	Portfolio reference	Date
<p>5 Request and select the required quantity and quality of resources to prepare for and carry out lifting operations using excavator cranes.</p>	5.1	<p>Describe the characteristics, quality, uses, limitations and defects associated with the resources, and how they should be used correctly, relating to:</p> <ul style="list-style-type: none"> • consumables, lubricants and fuels • attachments and lifting aids • hand tools, ancillary equipment and/or accessories. 			
	5.2	<p>Request and select resources associated with excavator cranes in relation to consumables, materials, attachments, tools, accessories and/or ancillary equipment.</p>			
	5.3	<p>State how the resources should be used correctly, how problems associated with the resources are reported and how the organisational procedures are used.</p>			
	5.4	<p>Outline potential hazards associated with the resources and method of work.</p>			
	5.5	<p>Describe how to calculate weight, bearing pressure, length and area associated with the method/procedures to carry out lifting operations with excavator cranes.</p>			

Learning Outcomes		Assessment Criteria			Evidence type	Portfolio reference	Date
6	Minimise the risk of damage to the work and surrounding area when lifting and transferring loads.	6.1	Protect the work and its surrounding area from damage.				
		6.2	Minimise damage and maintain a clean work space.				
		6.3	Describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions.				
		6.4	Dispose of waste in accordance with legislation.				
		6.5	State why the disposal of waste should be carried out safely in relation to the work.				
7	Complete the work within the allocated time when preparing to and lifting and transferring loads.	7.1	Demonstrate completion of the work within the allocated time.				
		7.2	Shut down and secure excavator cranes.				
		7.3	State the purpose of the work programme and describe why deadlines should be kept in relation to: <ul style="list-style-type: none"> types of progress charts, timetables and estimated times organisational procedures for reporting circumstances which will affect the lifting operation. 				

Learning Outcomes	Assessment Criteria			Evidence type	Portfolio reference	Date
<p>8 Comply with the given contract information to lift, transfer and place loads using excavator cranes to the required specification.</p>	8.1	<p>Demonstrate the following work skills when preparing for, lifting, transferring and placing loads using excavator cranes:</p> <ul style="list-style-type: none"> • fitting, attaching, setting up, securing, adjusting, checking, removing, communicating, operating, manoeuvring, positioning, lifting, transferring and setting down. 				
	8.2	<p>Prepare, set up and operate excavator cranes to lift, transfer and place a variety of loads and/or materials in the workplace, to given working instructions.</p>				
	8.3	<p>Describe how to apply safe work practices, follow procedures, report problems and establish authority needed to rectify, to:</p> <ul style="list-style-type: none"> • identify the characteristics of the crane for the lifting operation • carry out performance checks • prepare, set up and adjust for operational requirements • complete functional checks • carry out pre-operational checks for obstructions, stability, safety and security of the work and surrounding area • operate and move (where applicable) the crane 				

Learning Outcomes	Assessment Criteria	Evidence type	Portfolio reference	Date
	<ul style="list-style-type: none"> • identify characteristics, type, weight and positioning of loads for lifting and transferring • secure and balance loads for lifting • lift, remove and transfer loads • position, place and set down loads • confirm load stability and security • shut down the crane • use hand tools, ancillary equipment and accessories. 			
8.4	Safely use and store hand tools and ancillary equipment.			
8.5	State the needs of other occupations and how to communicate within a team when preparing for and lifting and transferring loads.			
8.6	Describe how to maintain the plant, tools and equipment used to lift and transfer loads.			

Learner name: _____
Learner signature: _____
Assessor signature: _____
Internal verifier signature: _____
(if sampled)

Date: _____
Date: _____
Date: _____
Date: _____

Unit 12: Preparing and Operating Rough Terrain Masted Forklifts to Lift and Transfer Loads in the Workplace

Unit reference number: H/600/7889

QCF level: 2

Credit value: 18

Guided learning hours: 60

Unit summary

The aim of this unit is to gain the skills, knowledge and understanding required for preparing and operating rough terrain masted forklifts to lift and transfer loads in the workplace within the relevant sector of industry.

Assessment evidence requirements

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

- the Additional Requirements for Qualifications using the title NVQ in QCF
- the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment – Craft, Supervisory, Technical, Managerial and Professional Units and Qualifications with NVQ in the Qualification and Credit Framework (QCF) title and SVQs.

Assessors for this unit must use a combination of the following assessment methods:

- observation of normal work activities within the workplace that clearly confirms the required skills
- questioning the learner on knowledge criteria that clearly confirms the required understanding
- review other forms of evidence that can clearly confirm industry required skills, knowledge and understanding.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of occupational expertise and knowledge of preparing and operating rough terrain masted forklifts to lift and transfer loads to be effective and reliable when confirming a learner's competence.

Workplace evidence of skills cannot be simulated.

Assessment methodology

This unit is assessed in the workplace. Learners can enter the types of evidence they are presenting for assessment and the submission date against each assessment criterion. Alternatively, centre documentation should be used to record this information.

Learning outcomes and assessment criteria

Learning Outcomes		Assessment Criteria		Evidence type	Portfolio reference	Date
1	Interpret the given information relating to the use of rough terrain masted forklifts to lift, transfer and place loads.	1.1	Interpret and extract information from drawings, specifications, schedules and manufacturers' information.			
		1.2	Comply with information and/or instructions derived from risk assessments and method statements.			
		1.3	State the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented.			
		1.4	Describe different types of information, their source and how they are interpreted in relation to: <ul style="list-style-type: none"> drawings, specifications, schedules, manufacturers' information, method statements and regulations and guidance applicable to rough terrain masted forklift operations. 			
2	Organise with others the sequence and operation in which rough terrain masted forklift operations are to be carried out.	2.1	Organise the work according to given information or instructions.			
		2.2	Describe how to communicate ideas between team members.			
		2.3	Organise and communicate with team members and other associated occupations.			
		2.4	State how to organise resources prior to and during forklift operations.			

Learning Outcomes		Assessment Criteria		Evidence type	Portfolio reference	Date
3	Know how to comply with relevant legislation and official guidance when carrying out lifting and transferring loads with rough terrain masted forklifts.	3.1	Describe their responsibilities under current legislation and official guidance whilst working: <ul style="list-style-type: none"> in the workplace, below ground level, at height, in confined spaces, with tools and equipment, with materials and substances, with movement/storage of materials and by manual handling and mechanical lifting. 			
		3.2	Describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative.			
		3.3	State what the accident reporting procedures are and who is responsible for making reports.			

Learning Outcomes		Assessment Criteria		Evidence type	Portfolio reference	Date
4	Maintain safe working practices when preparing for and carrying out forklift operations with rough terrain masted types.	4.1	Use personal protective equipment (PPE) to safely carry out the activity in accordance with legislation and organisational requirements during rough terrain masted forklift operations.			
		4.2	Explain why and when personal protective equipment (PPE) should be used, relating to rough terrain masted forklift use, and the types, purpose and limitations of each type.			
		4.3	State how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries and other task-related hazards.			

Learning Outcomes	Assessment Criteria			Evidence type	Portfolio reference	Date
<p>5 Request and select the required quantity and quality of resources to prepare for and carry out forklift operations with rough terrain masted types.</p>	5.1	<p>Describe the characteristics, quality, uses, limitations and defects associated with the resources, and how they should be used correctly, relating to:</p> <ul style="list-style-type: none"> • consumables, lubricants and fuels • attachments and lifting aids • hand tools, ancillary equipment and/or accessories. 				
	5.2	<p>Request and select resources associated with rough terrain masted forklifts in relation to consumables, materials, attachments, tools, accessories and/or ancillary equipment.</p>				
	5.3	<p>State how the resources should be used correctly, how problems associated with the resources are reported and how the organisational procedures are used.</p>				
	5.4	<p>Outline potential hazards associated with the resources and method of work.</p>				
	5.5	<p>Describe how to calculate weight, bearing pressure, length and area associated with the method/procedures to lift and transfer loads using rough terrain masted forklifts.</p>				

Learning Outcomes		Assessment Criteria		Evidence type	Portfolio reference	Date
6	Minimise the risk of damage to the work and surrounding area when lifting and transferring loads.	6.1	Protect the work and its surrounding area from damage.			
		6.2	Minimise damage and maintain a clean work space.			
		6.3	Describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions.			
		6.4	Dispose of waste in accordance with legislation.			
		6.5	State why the disposal of waste should be carried out safely in relation to the work.			
7	Complete the work within the allocated time when preparing to and lifting and transferring loads.	7.1	Demonstrate completion of the work within the allocated time.			
		7.2	Shut down and secure rough terrain masted forklifts.			
		7.3	State the purpose of the work programme and describe why deadlines should be kept in relation to: <ul style="list-style-type: none"> types of progress charts, timetables and estimated times organisational procedures for reporting circumstances which will affect the lifting operation. 			

Learning Outcomes	Assessment Criteria		Evidence type	Portfolio reference	Date
<p>8</p> <p>Comply with the given contract information to lift, transfer and place loads using rough terrain masted forklifts to the required specification.</p>	8.1	<p>Demonstrate the following work skills when preparing for, lifting, transferring and placing loads using rough terrain masted forklifts:</p> <ul style="list-style-type: none"> • fitting, attaching, setting up, securing, adjusting, checking, removing, communicating, operating, manoeuvring, positioning, lifting, transferring and setting down. 			
	8.2	<p>Prepare and operate rough terrain masted forklift to lift, transfer and place a variety of loads in the workplace, to given working instructions.</p>			
	8.3	<p>Describe how to apply safe work practices, follow procedures, report problems and establish authority needed to rectify, to:</p> <ul style="list-style-type: none"> • identify the characteristics of the machine for the forklift operation • carry out performance checks • prepare, set up and adjust for operational requirements • complete functional checks • carry out pre-operational checks for obstructions, stability, safety and security of the work and surrounding area • operate and move the rough terrain masted forklift 			

Learning Outcomes	Assessment Criteria	Evidence type	Portfolio reference	Date
	<ul style="list-style-type: none"> • identify characteristics, type, weight and positioning of loads for lifting and transferring • secure and balance loads for lifting • lift, remove and transfer loads • position, place and set down loads • confirm load stability and security • shut down the rough terrain masted forklift • use hand tools, ancillary equipment and accessories. 			
8.4	Safely use and store hand tools and ancillary equipment.			
8.5	State the needs of other occupations and how to communicate within a team when preparing for and lifting and transferring loads.			
8.6	Describe how to maintain the plant, tools and equipment used to lift and transfer loads.			

Learner name: _____
Learner signature: _____
Assessor signature: _____
Internal verifier signature: _____
(if sampled)

Date: _____
Date: _____
Date: _____
Date: _____

Unit 13: Preparing and Operating Sideloader Forklifts to Lift and Transfer Loads in the Workplace

Unit reference number: L/600/7899

QCF level: 2

Credit value: 16

Guided learning hours: 53

Unit summary

The aim of this unit is to gain the skills, knowledge and understanding required for preparing and operating sideloader forklifts to lift and transfer loads in the workplace within the relevant sector of industry.

Assessment evidence requirements

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

- the Additional Requirements for Qualifications using the title NVQ in QCF
- the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment – Craft, Supervisory, Technical, Managerial and Professional Units and Qualifications with NVQ in the Qualification and Credit Framework (QCF) title and SVQs.

Assessors for this unit must use a combination of the following assessment methods:

- observation of normal work activities within the workplace that clearly confirms the required skills
- questioning the learner on knowledge criteria that clearly confirms the required understanding
- review other forms of evidence that can clearly confirm industry required skills, knowledge and understanding.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of occupational expertise and knowledge of preparing and operating sideloader forklifts to lift and transfer loads to be effective and reliable when confirming a learner's competence.

Workplace evidence of skills cannot be simulated.

Assessment methodology

This unit is assessed in the workplace. Learners can enter the types of evidence they are presenting for assessment and the submission date against each assessment criterion. Alternatively, centre documentation should be used to record this information.

Learning outcomes and assessment criteria

Learning Outcomes		Assessment Criteria		Evidence type	Portfolio reference	Date
1	Interpret the given information relating to the use of sideloaders to lift, transfer and place loads.	1.1	Interpret and extract information from drawings, specifications, schedules and manufacturers' information.			
		1.2	Comply with information and/or instructions derived from risk assessments and method statements.			
		1.3	State the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented.			
		1.4	Describe different types of information, their source and how they are interpreted in relation to: <ul style="list-style-type: none"> drawings, specifications, schedules, manufacturers' information, method statements and regulations and guidance applicable to sideloader operations. 			

Learning Outcomes		Assessment Criteria		Evidence type	Portfolio reference	Date	
2	Organise with others the sequence and operation in which sideloader operations are to be carried out.	2.1	Organise the work according to given information or instructions.				
		2.2	Describe how to communicate ideas between team members.				
3	Know how to comply with relevant legislation and official guidance when lifting and transferring loads with sideloaders.	2.3	Organise and communicate with team members and other associated occupations.				
		2.4	State how to organise resources prior to and during forklift operations.				
		3.1	Describe their responsibilities under current legislation and official guidance whilst working: <ul style="list-style-type: none"> in the workplace, below ground level, at height, in confined spaces, with tools and equipment, with materials and substances, with movement/storage of materials and by manual handling and mechanical lifting. 				
		3.2	Describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative.				
		3.3	State what the accident reporting procedures are and who is responsible for making reports.				

Learning Outcomes		Assessment Criteria		Evidence type	Portfolio reference	Date
4	Maintain safe working practices when preparing for and carrying out forklift operations with sideloader types.	4.1	Use personal protective equipment (PPE) to safely carry out the activity in accordance with legislation and organisational requirements during sideloader operations.			
		4.2	Explain why and when personal protective equipment (PPE) should be used, relating to rough terrain masted forklift use, and the types, purpose and limitations of each type.			
		4.3	State how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries and other task-related hazards.			

Learning Outcomes		Assessment Criteria		Evidence type	Portfolio reference	Date
5	Request and select the required quantity and quality of resources to prepare for and carry out forklift operations with sideloader types.	5.1	Describe the characteristics, quality, uses, limitations and defects associated with the resources, and how they should be used correctly, relating to: <ul style="list-style-type: none"> • consumables, lubricants and fuels • attachments and lifting aids • hand tools, ancillary equipment and/or accessories. 			
		5.2	Request and select resources associated with sideloader forklifts in relation to consumables, materials, attachments, tools, accessories and/or ancillary equipment.			
		5.3	State how the resources should be used correctly, how problems associated with the resources are reported and how the organisational procedures are used.			
		5.4	Outline potential hazards associated with the resources and method of work.			
		5.5	Describe how to calculate weight, length and area associated with the method/procedures to lift and transfer loads using sideloaders.			

Learning Outcomes		Assessment Criteria			Evidence type	Portfolio reference	Date
6	Minimise the risk of damage to the work and surrounding area when lifting and transferring loads.	6.1	Protect the work and its surrounding area from damage.				
		6.2	Minimise damage and maintain a clean work space.				
		6.3	Describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions.				
		6.4	Dispose of waste in accordance with legislation.				
		6.5	State why the disposal of waste should be carried out safely in relation to the work.				

Learning Outcomes		Assessment Criteria			Evidence type	Portfolio reference	Date
7	Complete the work within the allocated time when preparing to and lifting and transferring loads.	7.1	Demonstrate completion of the work within the allocated time.				
		7.2	Shut down and secure sideloaders.				
		7.3	State the purpose of the work programme and describe why deadlines should be kept in relation to: <ul style="list-style-type: none"> types of progress charts, timetables and estimated times organisational procedures for reporting circumstances which will affect the lifting operation. 				

Learning Outcomes	Assessment Criteria		Evidence type	Portfolio reference	Date
<p>8</p> <p>Comply with the given contract information to lift, transfer and place loads using sideloaders to the required specification.</p>	<p>8.1</p>	<p>Demonstrate the following work skills when preparing for, lifting, transferring and placing loads using sideloaders:</p> <ul style="list-style-type: none"> • fitting, attaching, setting up, securing, adjusting, checking, removing, communicating, operating, manoeuvring, positioning, lifting, transferring and setting down. 			
	<p>8.2</p>	<p>Prepare and operate sideloaders to lift, transfer and place a variety of loads in the workplace, to given working instructions.</p>			
	<p>8.3</p>	<p>Describe how to apply safe work practices, follow procedures, report problems and establish authority needed to rectify, to:</p> <ul style="list-style-type: none"> • identify the characteristics of the machine for the forklift operation • carry out performance checks • prepare, set up and adjust for operational requirements • complete functional checks • carry out pre-operational checks for obstructions, stability, safety and security of the work and surrounding area • operate and move the sideloader 			

Learning Outcomes	Assessment Criteria	Evidence type	Portfolio reference	Date
	<ul style="list-style-type: none"> • identify characteristics, type, weight and positioning of loads for lifting and transferring • secure and balance loads for lifting • lift, remove and transfer loads • position, place and set down loads • confirm load stability and security • shut down the sideloader • use hand tools, ancillary equipment and accessories. 			
8.4	Safely use and store hand tools and ancillary equipment.			
8.5	State the needs of other occupations and how to communicate within a team when preparing for and lifting and transferring loads.			
8.6	Describe how to maintain the plant, tools and equipment used to lift and transfer loads.			

Learner name: _____
Learner signature: _____
Assessor signature: _____
Internal verifier signature: _____
(if sampled)

Date: _____
Date: _____
Date: _____
Date: _____

Unit 14: Preparing and Operating Telescopic Handlers to Lift and Transfer Loads in the Workplace

Unit reference number: A/600/7915

QCF level: 2

Credit value: 25

Guided learning hours: 83

Unit summary

The aim of this unit is to gain the skills, knowledge and understanding required for preparing and operating telescopic handlers to lift and transfer loads in the workplace within the relevant sector of industry.

Assessment evidence requirements

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

- the Additional Requirements for Qualifications using the title NVQ in QCF
- the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment – Craft, Supervisory, Technical, Managerial and Professional Units and Qualifications with NVQ in the Qualification and Credit Framework (QCF) title and SVQs.

Assessors for this unit must use a combination of the following assessment methods:

- observation of normal work activities within the workplace that clearly confirms the required skills
- questioning the learner on knowledge criteria that clearly confirms the required understanding
- review other forms of evidence that can clearly confirm industry required skills, knowledge and understanding.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of occupational expertise and knowledge of preparing and operating telescopic handlers to lift and transfer loads to be effective and reliable when confirming a learner's competence.

Workplace evidence of skills cannot be simulated.

This unit must be assessed against one of the following endorsements:

- telescopic handlers – industrial telescopic
- telescopic handlers – up to 9 metres
- telescopic handlers – all sizes excluding 360 degree
- telescopic handlers – all sizes including 360 degree.

Assessment methodology

This unit is assessed in the workplace. Learners can enter the types of evidence they are presenting for assessment and the submission date against each assessment criterion. Alternatively, centre documentation should be used to record this information.

Learning outcomes and assessment criteria

Learning Outcomes		Assessment Criteria		Evidence type	Portfolio reference	Date
1	Interpret the given information relating to the use of telescopic handlers to lift, transfer and place loads.	1.1	Interpret and extract information from drawings, specifications, schedules and manufacturers' information.			
		1.2	Comply with information and/or instructions derived from risk assessments and method statements.			
		1.3	State the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented.			
		1.4	Describe different types of information, their source and how they are interpreted in relation to: <ul style="list-style-type: none"> drawings, specifications, schedules, manufacturers' information, method statements and regulations and guidance applicable to telescopic handler operations. 			
2	Organise with others the sequence and operation in which telescopic handlers operations are to be carried out.	2.1	Organise the work according to given information or instructions.			
		2.2	Describe how to communicate ideas between team members.			
		2.3	Organise and communicate with team members and other associated occupations.			
		2.4	State how to organise resources prior to and during telescopic handler operations.			

Learning Outcomes		Assessment Criteria			Evidence type	Portfolio reference	Date
3	Know how to comply with relevant legislation and official guidance when lifting and Transferring loads.	3.1	Describe their responsibilities under current legislation and official guidance whilst working: <ul style="list-style-type: none"> in the workplace, below ground level, at height, in confined spaces, with tools and equipment, with materials and substances, with movement/storage of materials and by manual handling and mechanical lifting. 				
		3.2	Describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative.				
		3.3	State what the accident reporting procedures are and who is responsible for making reports.				

Learning Outcomes		Assessment Criteria			Evidence type	Portfolio reference	Date
4	Maintain safe working practices when preparing for and carrying out telescopic handler operations.	4.1	Use personal protective equipment (PPE) to safely carry out the activity in accordance with legislation and organisational requirements during telescopic handler operations.				
		4.2	Explain why and when personal protective equipment (PPE) should be used, relating to telescopic handler use, and the types, purpose and limitations of each type.				
		4.3	State how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries and other task-related hazards.				

Learning Outcomes		Assessment Criteria		Evidence type	Portfolio reference	Date
5	Request and select the required quantity and quality of resources to prepare for and carry out telescopic handler operations.	5.1	Describe the characteristics, quality, uses, limitations and defects associated with the resources, and how they should be used correctly, relating to: <ul style="list-style-type: none"> • consumables, lubricants and fuels • attachments and lifting aids • hand tools, ancillary equipment and/or accessories. 			
		5.2	Request and select resources associated with telescopic handlers in relation to consumables, materials, attachments, tools, accessories and/or ancillary equipment.			
		5.3	State how the resources should be used correctly, how problems associated with the resources are reported and how the organisational procedures are used.			
		5.4	Outline potential hazards associated with the resources and method of work.			
		5.5	Describe how to calculate weight, length and area associated with the method/procedures to lift and transfer loads using telescopic handlers.			

Learning Outcomes		Assessment Criteria			Evidence type	Portfolio reference	Date
6	Minimise the risk of damage to the work and surrounding area when lifting and transferring loads.	6.1	Protect the work and its surrounding area from damage.				
		6.2	Minimise damage and maintain a clean work space.				
		6.3	Describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions.				
		6.4	Dispose of waste in accordance with legislation.				
		6.5	State why the disposal of waste should be carried out safely in relation to the work.				
7	Complete the work within the allocated time when preparing to and lifting and transferring loads.	7.1	Demonstrate completion of the work within the allocated time.				
		7.2	Shut down and secure telescopic handlers.				
		7.3	State the purpose of the work programme and describe why deadlines should be kept in relation to: <ul style="list-style-type: none"> types of progress charts, timetables and estimated times organisational procedures for reporting circumstances which will affect the lifting operation. 				

Learning Outcomes		Assessment Criteria		Evidence type	Portfolio reference	Date
8	Comply with the given contract information to lift, transfer and place loads using telescopic handlers to the required specification.	8.1	<p>Demonstrate the following work skills when preparing for, lifting, transferring and placing loads using telescopic handlers:</p> <ul style="list-style-type: none"> fitting, attaching, setting up, securing, adjusting, checking, removing, communicating, operating, manoeuvring, positioning, lifting, transferring and setting down. 			
		8.2	Prepare, set up and operate telescopic handlers to lift, transfer and place a variety of loads in the workplace, to given working instructions.			
		8.3	<p>Describe how to apply safe work practices, follow procedures, report problems and establish authority needed to rectify, to:</p> <ul style="list-style-type: none"> identify the characteristics of the telescopic handler for the lifting operation carry out performance checks prepare, set up and adjust for operational requirements complete functional checks 			

Learning Outcomes	Assessment Criteria	Evidence type	Portfolio reference	Date
	<ul style="list-style-type: none"> • carry out pre-operational checks for obstructions, stability, safety and security of the work and surrounding area • operate and move the tele-handler • identify characteristics, type, weight and positioning of loads for lifting and transferring • secure and balance loads for lifting • lift, remove and transfer loads • position, place and set down loads • confirm load stability and security • shut down the tele-handler • use hand tools, ancillary equipment and accessories. 			
8.4	Safely use and store hand tools and ancillary			
8.5	State the needs of other occupations and how to communicate within a team when preparing for and lifting and transferring loads.			
8.6	Describe how to maintain the plant, tools and equipment used to lift and transfer loads.			

Learner name: _____ Date: _____
Learner signature: _____ Date: _____
Assessor signature: _____ Date: _____
Internal verifier signature: _____ Date: _____
(if sampled)

Unit 15: Preparing and Operating Reach Trucks to Lift and Transfer Loads in the Workplace

Unit reference number: J/600/7917

QCF level: 2

Credit value: 16

Guided learning hours: 53

Unit summary

The aim of this unit is to gain the skills, knowledge and understanding required for preparing and operating reach trucks to lift and transfer loads in the workplace within the relevant sector of industry.

Assessment evidence requirements

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

- the Additional Requirements for Qualifications using the title NVQ in QCF
- the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment – Craft, Supervisory, Technical, Managerial and Professional Units and Qualifications with NVQ in the Qualification and Credit Framework (QCF) title and SVQs.

Assessors for this unit must use a combination of the following assessment methods:

- observation of normal work activities within the workplace that clearly confirms the required skills
- questioning the learner on knowledge criteria that clearly confirms the required understanding
- review other forms of evidence that can clearly confirm industry required skills, knowledge and understanding.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of occupational expertise and knowledge of preparing and operating reach trucks to lift and transfer loads to be effective and reliable when confirming a learner's competence.

Workplace evidence of skills cannot be simulated.

Assessment methodology

This unit is assessed in the workplace. Learners can enter the types of evidence they are presenting for assessment and the submission date against each assessment criterion. Alternatively, centre documentation should be used to record this information.

Learning outcomes and assessment criteria

Learning Outcomes		Assessment Criteria		Evidence type	Portfolio reference	Date
1	Interpret the given information relating to the use of reach trucks to lift, transfer and place loads.	1.1	Interpret and extract information from drawings, specifications, schedules and manufacturers' information.			
		1.2	Comply with information and/or instructions derived from risk assessments and method statements.			
		1.3	State the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented.			
		1.4	Describe different types of information, their source and how they are interpreted in relation to: drawings, specifications, schedules, manufacturers' information, method statements and regulations and guidance applicable to reach truck operations.			
2	Organise with others the sequence and operation in which reach truck operations are to be carried out.	2.1	Organise the work according to given information or instructions.			
		2.2	Describe how to communicate ideas between team members.			
		2.3	Organise and communicate with team members and other associated occupations.			
		2.4	State how to organise resources prior to and during forklift truck operations.			

Learning Outcomes		Assessment Criteria			Evidence type	Portfolio reference	Date
3	Know how to comply with relevant legislation and official guidance when lifting and transferring loads with reach trucks.	3.1	Describe their responsibilities under current legislation and official guidance whilst working in the workplace, below ground level, at height, in confined spaces, with tools and equipment, with materials and substances, with movement/storage of materials and by manual handling and mechanical lifting.				
		3.2	Describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative.				
		3.3	State what the accident reporting procedures are and who is responsible for making reports.				
4	Maintain safe working practices when preparing for and carrying out forklift operations with masted reach types.	4.1	Use personal protective equipment (PPE) to safely carry out the activity in accordance with legislation and organisational requirements during reach trucks operations.				
		4.2	Explain why and when personal protective equipment (PPE) should be used, relating to reach truck use, and the types, purpose and limitations of each type.				
		4.3	State how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries and other task-related hazards.				

Learning Outcomes		Assessment Criteria		Evidence type	Portfolio reference	Date
5	Request and select the required quantity and quality of resources to prepare for and carry out forklift operations with masted reach types.	5.1	Describe the characteristics, quality, uses, limitations and defects associated with the resources, and how they should be used correctly, relating to: <ul style="list-style-type: none"> • consumables, lubricants and fuels • attachments and lifting aids • hand tools, ancillary equipment and/or accessories. 			
		5.2	Request and select resources associated with reach trucks in relation to consumables, materials, attachments, tools, accessories and/or ancillary equipment.			
		5.3	State how the resources should be used correctly, how problems associated with the resources are reported and how the organisational procedures are used.			
		5.4	Outline potential hazards associated with the resources and method of work.			
		5.5	Describe how to calculate weight, length and area associated with the method/procedures to carry, lift and transfer loads using reach trucks.			

Learning Outcomes		Assessment Criteria			Evidence type	Portfolio reference	Date
6	Minimise the risk of damage to the work and surrounding area when lifting and transferring loads.	6.1	Protect the work and its surrounding area from damage.				
		6.2	Minimise damage and maintain a clean work space.				
		6.3	Describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions.				
		6.4	Dispose of waste in accordance with legislation.				
		6.5	State why the disposal of waste should be carried out safely in relation to the work.				
7	Complete the work within the allocated time when preparing to and lifting and transferring loads.	7.1	Demonstrate completion of the work within the allocated time.				
		7.2	Shut down and secure reach trucks.				
		7.3	State the purpose of the work programme and describe why deadlines should be kept in relation to: <ul style="list-style-type: none"> types of progress charts, timetables and estimated times organisational procedures for reporting circumstances which will affect the lifting operation. 				

Learning Outcomes		Assessment Criteria			Evidence type	Portfolio reference	Date
8	Comply with the given contract information to lift, transfer and place loads using reach trucks to the required specification.	8.1	<p>Demonstrate the following work skills when preparing for, lifting, transferring and placing loads using reach trucks:</p> <ul style="list-style-type: none"> fitting, attaching, setting up, securing, adjusting, checking, removing, communicating, operating, manoeuvring, positioning, lifting, transferring and setting down. 				
		8.2	<p>Prepare, set up and operate reach trucks to lift, transfer and place a variety of loads in the workplace, to given working instructions.</p>				
		8.3	<p>Describe how to apply safe work practices, follow procedures, report problems and establish authority needed to rectify, to:</p> <ul style="list-style-type: none"> identify the characteristics of the reach truck for the forklift operation carry out performance checks prepare, set up and adjust for operational requirements complete functional checks carry out pre-operational checks for obstructions, stability, safety and security of the work and surrounding area operate and move the reach truck 				

Learning Outcomes	Assessment Criteria	Evidence type	Portfolio reference	Date
	<ul style="list-style-type: none"> • identify characteristics, type, weight and positioning of loads for lifting and transferring • secure and balance loads for lifting and moving • lift, remove and transfer loads • position, place and set down loads • confirm load stability and security • shut down the reach truck • use hand tools, ancillary equipment and accessories. 			
8.4	Safely use and store hand tools and ancillary equipment.			
8.5	State the needs of other occupations and how to communicate within a team when preparing for and lifting and transferring loads.			
8.6	Describe how to maintain the plant, tools and equipment used to lift and transfer loads.			

Learner name: _____ Date: _____
Learner signature: _____ Date: _____
Assessor signature: _____ Date: _____
Internal verifier signature: _____ Date: _____
(if sampled)

Unit 16: Preparing and Operating Lorry Loaders or Knuckle Boom Cranes to Lift and Transfer Loads in the Workplace

Unit reference number: J/600/7920

QCF level: 2

Credit value: 30

Guided learning hours: 100

Unit summary

The aim of this unit is to gain the skills, knowledge and understanding required for preparing and operating lorry loaders or knuckle boom cranes to lift and transfer loads in the workplace within the relevant sector of industry.

Assessment evidence requirements

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

- the Additional Requirements for Qualifications using the title NVQ in QCF
- the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment – Craft, Supervisory, Technical, Managerial and Professional Units and Qualifications with NVQ in the Qualification and Credit Framework (QCF) title and SVQs.

Assessors for this unit must use a combination of the following assessment methods:

- observation of normal work activities within the workplace that clearly confirms the required skills
- questioning the learner on knowledge criteria that clearly confirms the required understanding
- review other forms of evidence that can clearly confirm industry required skills, knowledge and understanding.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of occupational expertise and knowledge of preparing and operating lorry loaders/knuckle boom cranes to lift and transfer loads to be effective and reliable when confirming a learner's competence.

Workplace evidence of skills cannot be simulated.

Assessment methodology

This unit is assessed in the workplace. Learners can enter the types of evidence they are presenting for assessment and the submission date against each assessment criterion. Alternatively, centre documentation should be used to record this information.

Learning outcomes and assessment criteria

Learning Outcomes		Assessment Criteria		Evidence type	Portfolio reference	Date
1	Interpret the given information relating to the use of lorry loaders/knuckle boom cranes to lift, transfer and place loads.	1.1	Interpret and extract information from drawings, specifications, schedules and manufacturers' information.			
		1.2	Comply with information and/or instructions derived from risk assessments and method statements.			
		1.3	State the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented.			
		1.4	Describe different types of information, their source and how they are interpreted in relation to: <ul style="list-style-type: none"> drawings, specifications, schedules, manufacturers' information, method statements and regulations and guidance applicable to lorry loader/knuckle boom crane operations. 			

Learning Outcomes		Assessment Criteria		Evidence type	Portfolio reference	Date
2	Organise with others the sequence and operation in which lifting operations using lorry loaders/knuckle boom cranes are to be carried out.	2.1	Organise the work according to given information or instructions.			
		2.2	Describe how to communicate ideas between team members.			
		2.3	Organise and communicate with team members and other associated occupations.			
		2.4	State how to organise resources prior to and during lifting operations with lorry loaders/knuckle boom cranes.			
3	Know how to comply with relevant legislation and official guidance when carrying out lifting operations.	3.1	Describe their responsibilities under current legislation and official guidance whilst working: <ul style="list-style-type: none"> in the workplace, below ground level, at height, in confined spaces, with tools and equipment, with materials and substances, with movement/storage of materials and by manual handling and mechanical lifting. 			
		3.2	Describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative.			
		3.3	State what the accident reporting procedures are and who is responsible for making reports.			

Learning Outcomes		Assessment Criteria		Evidence type	Portfolio reference	Date
4	Maintain safe working practices when preparing for and carrying out lifting operations using lorry loaders/knuckle boom cranes.	4.1	Use personal protective equipment (PPE) to safely carry out the activity in accordance with legislation and organisational requirements during lifting operations.			
		4.2	Explain why and when personal protective equipment (PPE) should be used, relating to lorry loader/knuckle boom crane use, and the types, purpose and limitations of each type.			
		4.3	State how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries and other task-related hazards.			

Learning Outcomes	Assessment Criteria		Evidence type	Portfolio reference	Date
<p>5 Request and select the required quantity and quality of resources to prepare for and carry out lifting operations using lorry loaders/knuckle boom cranes.</p>	5.1	<p>Describe the characteristics, quality, uses, limitations and defects associated with the resources, and how they should be used correctly, relating to:</p> <ul style="list-style-type: none"> • consumables, lubricants and fuels • attachments and lifting aids • hand tools, ancillary equipment and/or accessories. 			
	5.2	<p>Request and select resources associated with lorry loaders/knuckle boom cranes in relation to consumables, materials, attachments, tools, accessories and/or ancillary equipment.</p>			
	5.3	<p>State how the resources should be used correctly, how problems associated with the resources are reported and how the organisational procedures are used.</p>			
	5.4	<p>Outline potential hazards associated with the resources and method of work.</p>			
	5.5	<p>Describe how to calculate weight, bearing pressure, length and area associated with the method/procedures to carry out lifting operations with lorry loaders/knuckle boom cranes.</p>			

Learning Outcomes		Assessment Criteria			Evidence type	Portfolio reference	Date
6	Minimise the risk of damage to the work and surrounding area when lifting and transferring loads.	6.1	Protect the work and its surrounding area from damage.				
		6.2	Minimise damage and maintain a clean work space.				
		6.3	Describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions.				
		6.4	Dispose of waste in accordance with legislation.				
		6.5	State why the disposal of waste should be carried out safely in relation to the work.				
7	Complete the work within the allocated time when preparing to and lifting and transferring loads.	7.1	Demonstrate completion of the work within the allocated time.				
		7.2	Shut down and secure lorry loader/knuckle boom crane.				
		7.3	State the purpose of the work programme and describe why deadlines should be kept in relation to: <ul style="list-style-type: none"> types of progress charts, timetables and estimated times organisational procedures for reporting circumstances which will affect the lifting operation. 				

Learning Outcomes	Assessment Criteria		Evidence type	Portfolio reference	Date
<p>8</p> <p>Comply with the given contract information to lift, transfer and place loads using lorry loaders/knuckle boom cranes to the required specification.</p>	8.1	<p>Demonstrate the following work skills when preparing for, lifting, transferring and placing loads using lorry loaders/knuckle boom cranes:</p> <ul style="list-style-type: none"> • fitting, attaching, setting up, securing, adjusting, checking, removing, communicating, operating, manoeuvring, positioning, lifting, transferring and setting down. 			
	8.2	<p>Prepare, set up and operate lorry loaders/knuckle boom cranes to lift, transfer and place a variety of loads in the workplace, to given working instructions.</p>			
	8.3	<p>Describe how to apply safe work practices, follow procedures, report problems and establish authority needed to rectify, to:</p> <ul style="list-style-type: none"> • identify the characteristics of the crane for the lifting operation • carry out performance checks • prepare, set up and adjust for operational requirements • complete functional checks • carry out pre-operational checks for obstructions, stability, safety and security of the work and surrounding area 			

Learning Outcomes	Assessment Criteria	Evidence type	Portfolio reference	Date
	<ul style="list-style-type: none"> • operate and move (where applicable) the crane • identify characteristics, type, weight and positioning of loads for lifting and transferring • secure and balance loads for lifting • lift, remove and transfer loads • position, place and set down loads • confirm load stability and security • shut down the crane • use hand tools, ancillary equipment and accessories. 			
8.4	Safely use and store hand tools and ancillary equipment.			
8.5	State the needs of other occupations and how to communicate within a team when preparing for and lifting and transferring loads.			
8.6	Describe how to maintain the plant, tools and equipment used to lift and transfer loads.			

Learner name: _____ Date: _____
Learner signature: _____ Date: _____
Assessor signature: _____ Date: _____
Internal verifier signature: _____ Date: _____
(if sampled)

Assessment methodology

This unit is assessed in the workplace. Learners can enter the types of evidence they are presenting for assessment and the submission date against each assessment criterion. Alternatively, centre documentation should be used to record this information.

Learning outcomes and assessment criteria

Learning Outcomes		Assessment Criteria		Evidence type	Portfolio reference	Date
1	Interpret the given information relating to the use of 180 degree excavators to carry out extracting and excavating operations.	1.1	Interpret and extract information from drawings, specifications, schedules and manufacturers' information.			
		1.2	Comply with information and/or instructions derived from risk assessments and method statements.			
		1.3	State the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented.			
		1.4	Describe different types of information, their source and how they are interpreted in relation to: <ul style="list-style-type: none"> drawings, specifications, schedules, manufacturers' information, method statements and regulations and guidance applicable to extracting and excavating operations. 			

Learning Outcomes		Assessment Criteria		Evidence type	Portfolio reference	Date
2	Organise with others the sequence and operation in which extracting and excavating operations using 180 degree excavators are to be carried out.	2.1	Organise the work according to given information or instructions.			
		2.2	Describe how to communicate ideas between team members.			
		2.3	Organise and communicate with team members and other associated occupations.			
		2.4	State how to organise resources prior to and during extracting and excavating operations using 180 degree excavators.			
3	Know how to comply with relevant legislation and official guidance to carry out extracting and excavating operations with 180 degree excavators.	3.1	Describe their responsibilities under current legislation and official guidance whilst working: <ul style="list-style-type: none"> in the workplace, below ground level, at height, in confined spaces, with tools and equipment, with materials and substances, with movement/storage of materials and by manual handling and mechanical lifting. 			
		3.2	Describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative.			
		3.3	State what the accident reporting procedures are and who is responsible for making reports.			

Learning Outcomes		Assessment Criteria			Evidence type	Portfolio reference	Date
4	Maintain safe working practices when preparing for and carrying out extracting and excavating operations using 180 degree excavators.	4.1	Use personal protective equipment (PPE) to safely carry out the activity in accordance with legislation and organisational requirements during extracting and excavating operations.				
		4.2	Explain why and when personal protective equipment (PPE) should be used, relating to extracting and excavating operations, and the types, purpose and limitations of each type.				
		4.3	State how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries and other task-related hazards.				

Learning Outcomes	Assessment Criteria		Evidence type	Portfolio reference	Date
<p>5 Request and select the required quantity and quality of resources to prepare for and carry out extracting and excavating operations using 180 degree excavators.</p>	5.1	<p>Describe the characteristics, quality, uses, limitations and defects associated with the resources, and how they should be used correctly, relating to:</p> <ul style="list-style-type: none"> • consumables, lubricants and fuels • attachments and extraction/excavation aids • hand tools, ancillary equipment and/or accessories. 			
	5.2	<p>Request and select resources associated with 180 degree excavators in relation to consumables, materials, attachments, tools, accessories and/or ancillary equipment.</p>			
	5.3	<p>State how the resources should be used correctly, how problems associated with the resources are reported and how the organisational procedures are used.</p>			
	5.4	<p>Outline potential hazards associated with the resources and method of work.</p>			
	5.5	<p>Describe how to calculate quantity, weight, length and area associated with the method/procedures to carry out extracting and excavating operations using 180 degree excavators.</p>			

Learning Outcomes		Assessment Criteria			Evidence type	Portfolio reference	Date
6	Minimise the risk of damage to the work and surrounding area when extracting and excavating materials using 180 degree excavators.	6.1	Protect the work and its surrounding area from damage.				
		6.2	Minimise damage and maintain a clean work space.				
		6.3	Describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions.				
		6.4	Dispose of waste in accordance with legislation.				
		6.5	State why the disposal of waste should be carried out safely in relation to the work.				
7	Complete the work within the allocated time when preparing to and extracting and excavating materials using 180 degree excavators.	7.1	Demonstrate completion of the work within the allocated time.				
		7.2	Shut down and secure 180 degree excavators.				
		7.3	State the purpose of the work programme and describe why deadlines should be kept in relation to: <ul style="list-style-type: none"> types of progress charts, timetables and estimated times organisational procedures for reporting circumstances which will affect the work programme. 				

Learning Outcomes	Assessment Criteria		Evidence type	Portfolio reference	Date
<p>8 Comply with the given contract information to extract and excavate materials using 180 degree excavators to the required specification.</p>	8.1	<p>Demonstrate the following work skills when preparing for and extracting and excavating loose materials and ground using 180 degree excavators:</p> <ul style="list-style-type: none"> • fitting, attaching, setting up, securing, adjusting, checking, removing, communicating, operating, manoeuvring, positioning, extracting, excavating, forming, measuring, removing and loading. 			
	8.2	<p>Prepare, position, set up and operate 180 degree excavators to given working instructions.</p> <ul style="list-style-type: none"> • extract loose materials and/or different types of ground • load and/or stockpile loose materials and ground • excavate different types of ground. 			

Learning Outcomes	Assessment Criteria	Evidence type	Portfolio reference	Date
	<p>8.3</p> <p>Describe how to apply safe work practices, follow procedures, report problems and establish authority needed to rectify, to:</p> <ul style="list-style-type: none"> • identify the characteristics of the 180 degree excavator used for extraction and excavation work • carry out performance checks • prepare, set up and adjust for operational requirements • complete functional checks • carry out pre-operational checks for obstructions, stability, safety and security of the work and surrounding area • identify the area to be extracted and excavated • check to avoid damage to structures and utilities service apparatus • extract, excavate, remove and load materials safely and securely • form stockpiles • shut down and secure 180 degree excavators • use hand tools, ancillary equipment and accessories. 			

Learning Outcomes		Assessment Criteria		Evidence type	Portfolio reference	Date
	8.4	Safely use and store hand tools and ancillary equipment.				
	8.5	State the needs of other occupations and how to communicate within a team when preparing to and carrying out extracting and excavating operations.				
	8.6	Describe how to maintain the plant, tools and equipment used to extract and excavate materials.				

Learner name: _____ Date: _____

Learner signature: _____ Date: _____

Assessor signature: _____ Date: _____

Internal verifier signature: _____ Date: _____
(if sampled)

Learning outcomes and assessment criteria

Learning Outcomes		Assessment Criteria		Evidence type	Portfolio reference	Date
1	Interpret the given information relating to the use of skid steer loaders to carry out extracting operations.	1.1	Interpret and extract information from drawings, specifications, schedules and manufacturers' information.			
		1.2	Comply with information and/or instructions derived from risk assessments and method statements.			
		1.3	State the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented.			
		1.4	Describe different types of information, their source and how they are interpreted in relation to: <ul style="list-style-type: none"> drawings, specifications, schedules, manufacturers' information, method statements and regulations and guidance applicable to extracting operations. 			

Learning Outcomes		Assessment Criteria		Evidence type	Portfolio reference	Date
2	Organise with others the sequence and operation in which extracting operations using skid steer loaders are to be carried out.	2.1	Organise the work according to given information or instructions.			
		2.2	Describe how to communicate ideas between team members.			
		2.3	Organise and communicate with team members and other associated occupations.			
		2.4	State how to organise resources prior to and during extracting operations using skid steer loaders.			
3	Know how to comply with relevant legislation and official guidance to carry out extracting operations with skid steer loaders.	3.1	Describe their responsibilities under current legislation and official guidance whilst working: <ul style="list-style-type: none"> in the workplace, below ground level, at height, in confined spaces, with tools and equipment, with materials and substances, with movement/storage of materials and by manual handling and mechanical lifting. 			
		3.2	Describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative.			
		3.3	State what the accident reporting procedures are and who is responsible for making reports.			

Learning Outcomes		Assessment Criteria			Evidence type	Portfolio reference	Date
4	Maintain safe working practices when preparing for and carrying out extracting operations using skid steer loaders.	4.1	Use personal protective equipment (PPE) to safely carry out the activity in accordance with legislation and organisational requirements during extracting operations.				
		4.2	Explain why and when personal protective equipment (PPE) should be used, relating to extracting operations, and the types, purpose and limitations of each type.				
		4.3	State how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries and other task-related hazards.				

Learning Outcomes	Assessment Criteria			Evidence type	Portfolio reference	Date
<p>5 Request and select the required quantity and quality of resources to prepare for and carry out extracting operations using skid steer loaders.</p>	5.1	<p>Describe the characteristics, quality, uses, limitations and defects associated with the resources, and how they should be used correctly, relating to:</p> <ul style="list-style-type: none"> • consumables, lubricants and fuels • attachments and extraction aids • hand tools, ancillary equipment and/or accessories. 				
	5.2	<p>Request and select resources associated with skid steer loaders in relation to consumables, materials, attachments, tools, accessories and/or ancillary equipment.</p>				
	5.3	<p>State how the resources should be used correctly, how problems associated with the resources are reported and how the organisational procedures are used.</p>				
	5.4	<p>Outline potential hazards associated with the resources and method of work.</p>				
	5.5	<p>Describe how to calculate quantity, weight, length and area associated with the method/procedures to carry out extracting operations using skid steer loaders.</p>				

Learning Outcomes		Assessment Criteria			Evidence type	Portfolio reference	Date
6	Minimise the risk of damage to the work and surrounding area when extracting materials using skid steer loaders.	6.1	Protect the work and its surrounding area from damage.				
		6.2	Minimise damage and maintain a clean work space.				
		6.3	Describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions.				
		6.4	Dispose of waste in accordance with legislation.				
		6.5	State why the disposal of waste should be carried out safely in relation to the work.				
7	Complete the work within the allocated time when preparing to and extracting materials using skid steer loaders.	7.1	Demonstrate completion of the work within the allocated time.				
		7.2	Shut down and secure skid steer loaders.				
		7.3	State the purpose of the work programme and describe why deadlines should be kept in relation to: <ul style="list-style-type: none"> • types of progress charts, timetables and estimated times • organisational procedures for reporting circumstances which will affect the work programme. 				

Learning Outcomes	Assessment Criteria		Evidence type	Portfolio reference	Date
<p>8 Comply with the given contract information to extract materials using skid steer loaders to the required specification.</p>	8.1	<p>Demonstrate the following work skills when preparing for and extracting loose materials using skid steer loaders:</p> <ul style="list-style-type: none"> • fitting, attaching, setting up, securing, adjusting, checking, removing, communicating, operating, manoeuvring, positioning, extracting, forming, removing and loading. 			
	8.2	<p>Prepare, position, set up and operate skid steer loaders to given working instructions.</p> <ul style="list-style-type: none"> • extract loose materials • load and/or stockpile loose materials. 			
	8.3	<p>Describe how to apply safe work practices, follow procedures, report problems and establish authority needed to rectify, to:</p> <ul style="list-style-type: none"> • identify the characteristics of the skid steer loader used for the extraction work • carry out performance checks • prepare, set up and adjust for operational requirements • complete functional checks • carry out pre-operational checks for obstructions, stability, safety and security of the work and surrounding area • identify the area to be extracted 			

Learning Outcomes	Assessment Criteria	Evidence type	Portfolio reference	Date
	<ul style="list-style-type: none"> • check to avoid damage to structures and utilities service apparatus • extract, remove and load materials safely and securely • form stockpiles • shut down and secure skid steer loader • use hand tools, ancillary equipment and accessories. 			
	8.4 Safely use and store hand tools and ancillary equipment.			
	8.5 State the needs of other occupations and how to communicate within a team when preparing to and carrying out extracting operations.			
	8.6 Describe how to maintain the plant, tools and equipment used to extract materials.			

Learner name: _____ Date: _____

Learner signature: _____ Date: _____

Assessor signature: _____ Date: _____

Internal verifier signature: _____ Date: _____
(if sampled)

This unit must be assessed against one of the following endorsements:

- 360 degree excavator – below 10 tonne tracked
- 360 degree excavator – below 10 tonne wheeled
- 360 degree excavator – above 10 tonne tracked
- 360 degree excavator – above 10 tonne wheeled
- quarry operations - 360 degree excavator – up to 30 tonne – standard reach
- quarry operations - 360 degree excavator – up to 30 tonne – long reach (over 6.1m)
- quarry operations - 360 degree excavator – up to 30 tonne – face shovel
- quarry operations - 360 degree excavator – 31 to 60 tonne – standard reach
- quarry operations - 360 degree excavator – 31 to 60 tonne – long reach (over 6.1m)
- quarry operations - 360 degree excavator – 31 to 60 tonne – face shovel
- quarry operations - 360 degree excavator – 61 to 100 tonne – standard reach
- quarry operations - 360 degree excavator – 61 to 100 tonne – long reach (over 6.1m)
- quarry operations - 360 degree excavator – 61 to 100 tonne – face shovel
- quarry operations - 360 degree excavator – above 100 tonne – standard reach
- quarry operations - 360 degree excavator – above 100 tonne – long reach (over 6.1m)
- quarry operations - 360 degree excavator – above 100 tonne – face shovel.

Assessment methodology

This unit is assessed in the workplace. Learners can enter the types of evidence they are presenting for assessment and the submission date against each assessment criterion. Alternatively, centre documentation should be used to record this information.

Learning outcomes and assessment criteria

Learning Outcomes		Assessment Criteria		Evidence type	Portfolio reference	Date
1	Interpret the given information relating to the use of 360 degree excavators to carry out extracting operations.	1.1	Interpret and extract information from drawings, specifications, schedules and manufacturers' information.			
		1.2	Comply with information and/or instructions derived from risk assessments and method statements.			
		1.3	State the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented.			
		1.4	Describe different types of information, their source and how they are interpreted in relation to: <ul style="list-style-type: none"> drawings, specifications, schedules, manufacturers' information, method statements and regulations and guidance applicable to extracting operations. 			

Learning Outcomes		Assessment Criteria		Evidence type	Portfolio reference	Date
2	Organise with others the sequence and operations in which extracting operations using 360 degree excavators are to be carried out.	2.1	Organise the work according to given information or instructions.			
		2.2	Describe how to communicate ideas between team members.			
		2.3	Organise and communicate with team members and other associated occupations.			
		2.4	State how to organise resources prior to and during extracting operations using 360 degree excavators.			
		3.1	Describe their responsibilities under current legislation and official guidance whilst working: <ul style="list-style-type: none"> in the workplace, below ground level, at height, in confined spaces, with tools and equipment, with materials and substances, with movement/storage of materials and by manual handling and mechanical lifting. 			
3	Know how to comply with relevant legislation and official guidance to carry out extracting operations with 360 degree excavators.	3.2	Describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative.			
		3.3	State what the accident reporting procedures are and who is responsible for making reports.			

Learning Outcomes		Assessment Criteria			Evidence type	Portfolio reference	Date
4	Maintain safe working practices when preparing for and carrying out extracting operations using 360 degree excavators.	4.1	Use personal protective equipment (PPE) to safely carry out the activity in accordance with legislation and organisational requirements during extracting operations.				
		4.2	Explain why and when personal protective equipment (PPE) should be used, relating to extracting operations, and the types, purpose and limitations of each type.				
		4.3	State how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries and other task-related hazards.				

Learning Outcomes	Assessment Criteria		Evidence type	Portfolio reference	Date
5 Request and select the required quantity and quality of resources to prepare for and carry out extracting operations using 360 degree excavators.	5.1	Describe the characteristics, quality, uses, limitations and defects associated with the resources, and how they should be used correctly, relating to: <ul style="list-style-type: none"> • consumables, lubricants and fuels • attachments and extraction/excavation aids • hand tools, ancillary equipment and/or accessories. 			
	5.2	Request and select resources associated with 360 degree excavators in relation to consumables, materials, attachments, tools, accessories and/or ancillary equipment.			
	5.3	State how the resources should be used correctly, how problems associated with the resources are reported and how the organisational procedures are used.			
	5.4	Outline potential hazards associated with the resources and method of work.			
	5.5	Describe how to calculate quantity, weight, length and area associated with the method/procedures to carry out extracting operations using 360 degree excavators.			

Learning Outcomes		Assessment Criteria			Evidence type	Portfolio reference	Date
6	Minimise the risk of damage to the work and surrounding area when extracting materials using 360 degree excavators.	6.1	Protect the work and its surrounding area from damage.				
		6.2	Minimise damage and maintain a clean work space.				
		6.3	Describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions.				
		6.4	Dispose of waste in accordance with legislation.				
		6.5	State why the disposal of waste should be carried out safely in relation to the work.				
7	Complete the work within the allocated time when preparing to and extracting materials using 360 degree excavators.	7.1	Demonstrate completion of the work within the allocated time.				
		7.2	Shut down and secure 360 degree excavators.				
		7.3	State the purpose of the work programme and describe why deadlines should be kept in relation to: <ul style="list-style-type: none"> types of progress charts, timetables and estimated times organisational procedures for reporting circumstances which will affect the work programme. 				

Learning Outcomes	Assessment Criteria		Evidence type	Portfolio reference	Date
8 Comply with the given contract information to extract materials using 360 degree excavators to the required specification.	8.1	Demonstrate the following work skills when preparing for and extracting loose materials, face or ground using 360 degree excavators: <ul style="list-style-type: none"> • fitting, attaching, setting up, securing, adjusting, checking, removing, communicating, operating, manoeuvring, positioning, extracting, forming, removing and loading. 			
	8.2	Prepare, position, set up and operate 360 degree excavators to given working instructions. <ul style="list-style-type: none"> • extract from a face, loose materials and/or ground • load extracted loose materials and/or stockpile loose materials. 			
	8.3	Describe how to apply safe work practices, follow procedures, report problems and establish authority needed to rectify, to: <ul style="list-style-type: none"> • identify the characteristics of the 360 degree excavators used for the extraction work • carry out performance checks • prepare, set up and adjust for operational requirements • complete functional checks 			

Learning Outcomes	Assessment Criteria	Evidence type	Portfolio reference	Date
	<ul style="list-style-type: none"> • carry out pre-operational checks for obstructions, stability, safety and security of the work and surrounding area • identify the area to be extracted • check to avoid damage to structures and utilities service apparatus • extract, remove and load materials safely and securely • form stockpiles • shut down and secure 360 degree excavators • use hand tools, ancillary equipment and accessories. 			
8.4	Safely use and store hand tools and ancillary equipment.			
8.5	State the needs of other occupations and how to communicate within a team when preparing to and carrying out extracting operations.			
8.6	Describe how to maintain the plant, tools and equipment used to extract materials.			

Learner name: _____ Date: _____
Learner signature: _____ Date: _____
Assessor signature: _____ Date: _____
Internal verifier signature: _____ Date: _____
(if sampled)

Unit 20: Preparing and Operating Crawler/Tractor Dozers to Excavate and/or Form Ground in the Workplace

Unit reference number: Y/600/7968

QCF level: 2

Credit value: 85

Guided learning hours: 283

Unit summary

The aim of this unit is to gain the skills, knowledge and understanding required for preparing and operating crawler/tractor dozers to excavate and/or form ground in the workplace within the relevant sector of industry.

Assessment evidence requirements

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

- the Additional Requirements for Qualifications using the title NVQ in QCF
- the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment – Craft, Supervisory, Technical, Managerial and Professional Units and Qualifications with NVQ in the Qualification and Credit Framework (QCF) title and SVQs.

Assessors for this unit must use a combination of the following assessment methods:

- observation of normal work activities within the workplace that clearly confirms the required skills
- questioning the learner on knowledge criteria that clearly confirms the required understanding
- review other forms of evidence that can clearly confirm industry required skills, knowledge and understanding.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of occupational expertise and knowledge of preparing and operating crawler/tractor dozers for excavating/forming operations to be effective and reliable when confirming a learner's competence.

Workplace evidence of skills cannot be simulated.

Assessment methodology

This unit is assessed in the workplace. Learners can enter the types of evidence they are presenting for assessment and the submission date against each assessment criterion. Alternatively, centre documentation should be used to record this information.

Learning outcomes and assessment criteria

Learning Outcomes		Assessment Criteria		Evidence type	Portfolio reference	Date
1	Interpret the given information relating to the use of crawler dozers to carry out excavating and/or forming operations.	1.1	Interpret and extract information from drawings, specifications, schedules and manufacturers' information.			
		1.2	Comply with information and/or instructions derived from risk assessments and method statements.			
		1.3	State the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented.			
		1.4	Describe different types of information, their source and how they are interpreted in relation to: <ul style="list-style-type: none"> drawings, specifications, schedules, manufacturers' information, method statements and regulations and guidance applicable to crawler dozer excavating and/or forming operations. 			

Learning Outcomes		Assessment Criteria		Evidence type	Portfolio reference	Date
2	Organise with others the sequence and operation in which excavating and/or forming operations using crawler dozers are to be carried out.	2.1	Organise the work according to given information or instructions.			
		2.2	Describe how to communicate ideas between team members.			
		2.3	Organise and communicate with team members and other associated occupations.			
		2.4	State how to organise resources prior to and during excavating and/or forming operations using crawler dozers.			
		3.1	Describe their responsibilities under current legislation and official guidance whilst working: <ul style="list-style-type: none"> in the workplace, below ground level, at height, in confined spaces, with tools and equipment, with materials and substances, with movement/storage of materials and by manual handling and mechanical lifting. 			
3	Know how to comply with relevant legislation and official guidance to carry out excavating and/or forming operations with crawler dozers.	3.2	Describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative.			
		3.3	State what the accident reporting procedures are and who is responsible for making reports.			

Learning Outcomes		Assessment Criteria		Evidence type	Portfolio reference	Date
4	Maintain safe working practices when preparing for and carrying out excavating and/or forming operations using crawler dozers.	4.1	Use personal protective equipment (PPE) to safely carry out the activity in accordance with legislation and organisational requirements during excavating and/or forming operations.			
		4.2	Explain why and when personal protective equipment (PPE) should be used, relating to excavating and/or forming operations, and the types, purpose and limitations of each type.			
		4.3	State how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries and other task-related hazards.			

Learning Outcomes	Assessment Criteria		Evidence type	Portfolio reference	Date
<p>5 Request and select the required quantity and quality of resources to prepare for and carry out excavating and/or forming operations using crawler dozers.</p>	5.1	<p>Describe the characteristics, quality, uses, limitations and defects associated with the resources, and how they should be used correctly, relating to:</p> <ul style="list-style-type: none"> • consumables, lubricants and fuels • attachments and extraction/excavation aids • hand tools, ancillary equipment and/or accessories. 			
	5.2	<p>Request and select resources associated with crawler dozers in relation to consumables, materials, attachments, tools, accessories and/or ancillary equipment.</p>			
	5.3	<p>State how the resources should be used correctly, how problems associated with the resources are reported and how the organisational procedures are used.</p>			
	5.4	<p>Outline potential hazards associated with the resources and method of work.</p>			
	5.5	<p>Describe how to calculate quantity, weight, length and area associated with the method/procedures to carry out excavating and/or forming operations using crawler dozers.</p>			

Learning Outcomes		Assessment Criteria		Evidence type	Portfolio reference	Date
6	Minimise the risk of damage to the work and surrounding area when excavating and/or forming materials using crawler dozers.	6.1	Protect the work and its surrounding area from damage.			
		6.2	Minimise damage and maintain a clean work space.			
		6.3	Describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions.			
		6.4	Dispose of waste in accordance with legislation.			
		6.5	State why the disposal of waste should be carried out safely in relation to the work.			
7	Complete the work within the allocated time when preparing to and excavating and/or forming materials using crawler dozers.	7.1	Demonstrate completion of the work within the allocated time.			
		7.2	Shut down and secure crawler dozers.			
		7.3	State the purpose of the work programme and describe why deadlines should be kept in relation to: <ul style="list-style-type: none"> types of progress charts, timetables and estimated times organisational procedures for reporting circumstances which will affect the work programme. 			

Learning Outcomes	Assessment Criteria		Evidence type	Portfolio reference	Date
<p>8</p> <p>Comply with the given contract information to excavate and/or form ground using crawler dozers to the required specification.</p>	8.1	<p>Demonstrate the following work skills when preparing for and excavating and/or forming ground using crawler dozers:</p> <ul style="list-style-type: none"> • fitting, attaching, setting up, securing, adjusting, checking, removing, communicating, operating, manoeuvring, positioning, excavating and/or forming, measuring and removing. 			
	8.2	<p>Prepare, position, set up and operate crawler/tractor dozers to given working instructions.</p> <ul style="list-style-type: none"> • excavate to line and level and stockpile different types of ground and/or • spread, form and shape ground and/or loose materials. 			
	8.3	<p>Describe how to apply safe work practices, follow procedures, report problems and establish authority needed to rectify, to:</p> <ul style="list-style-type: none"> • identify the characteristics of the crawler dozers used for the excavation and/or forming work • carry out performance checks • prepare, set up and adjust for operational requirements 			

Learning Outcomes	Assessment Criteria	Evidence type	Portfolio reference	Date
	<ul style="list-style-type: none"> • complete functional checks • carry out pre-operational checks for obstructions, stability, safety and security of the work and surrounding area • identify the area to be excavated/formed • check to avoid damage to structures and utilities service apparatus • excavate or form materials safely and securely • form stockpiles • shut down and secure crawler dozer • use hand tools, ancillary equipment and accessories. 			
8.4	Safely use and store hand tools and ancillary equipment.			
8.5	State the needs of other occupations and how to communicate within a team when preparing to and carrying out excavating and/or forming operations.			
8.6	Describe how to maintain the plant, tools and equipment used to excavate or form ground.			

Learner name: _____ Date: _____
Learner signature: _____ Date: _____
Assessor signature: _____ Date: _____
Internal verifier signature: _____ Date: _____
(if sampled)

Assessment methodology

This unit is assessed in the workplace. Learners can enter the types of evidence they are presenting for assessment and the submission date against each assessment criterion. Alternatively, centre documentation should be used to record this information.

Learning outcomes and assessment criteria

Learning Outcomes		Assessment Criteria		Evidence type	Portfolio reference	Date
1	Interpret the given information relating to the use of 360 degree excavators to carry out excavating operations.	1.1	Interpret and extract information from drawings, specifications, schedules and manufacturers' information.			
		1.2	Comply with information and/or instructions derived from risk assessments and method statements.			
		1.3	State the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented.			
		1.4	Describe different types of information, their source and how they are interpreted in relation to: <ul style="list-style-type: none"> drawings, specifications, schedules, manufacturers' information, method statements and regulations and guidance applicable to excavating operations. 			

Learning Outcomes		Assessment Criteria		Evidence type	Portfolio reference	Date
2	Organise with others the sequence and operations in which excavating operations using 360 degree excavators are to be carried out.	2.1	Organise the work according to given information or instructions.			
		2.2	Describe how to communicate ideas between team members.			
		2.3	Organise and communicate with team members and other associated occupations.			
		2.4	State how to organise resources prior to and during excavating operations using 360 degree excavators.			
		3.1	Describe their responsibilities under current legislation and official guidance whilst working: <ul style="list-style-type: none"> in the workplace, below ground level, at height, in confined spaces, with tools and equipment, with materials and substances, with movement/storage of materials and by manual handling and mechanical lifting. 			
3	Know how to comply with relevant legislation and official guidance to carry out excavating operations with 360 degree excavators.	3.2	Describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative.			
		3.3	State what the accident reporting procedures are and who is responsible for making reports.			

Learning Outcomes		Assessment Criteria			Evidence type	Portfolio reference	Date
4	Maintain safe working practices when preparing for and carrying out excavating operations using 360 degree excavators.	4.1	Use personal protective equipment (PPE) to safely carry out the activity in accordance with legislation and organisational requirements during excavating operations.				
		4.2	Explain why and when personal protective equipment (PPE) should be used, relating to excavating operations, and the types, purpose and limitations of each type.				
		4.3	State how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries and other task-related hazards.				

Learning Outcomes	Assessment Criteria		Evidence type	Portfolio reference	Date
<p>5 Request and select the required quantity and quality of resources to prepare for and carry out excavating operations using 360 degree excavators.</p>	5.1	<p>Describe the characteristics, quality, uses, limitations and defects associated with the resources, and how they should be used correctly, relating to:</p> <ul style="list-style-type: none"> • consumables, lubricants and fuels • attachments and excavation aids • hand tools, ancillary equipment and/or accessories. 			
	5.2	<p>Request and select resources associated with 360 degree excavators in relation to consumables, materials, attachments, tools, accessories and/or ancillary equipment.</p>			
	5.3	<p>State how the resources should be used correctly, how problems associated with the resources are reported and how the organisational procedures are used.</p>			
	5.4	<p>Outline potential hazards associated with the resources and method of work.</p>			
	5.5	<p>Describe how to calculate quantity, weight, length and area associated with the method/procedures to carry out excavating operations using 360 degree excavators.</p>			

Learning Outcomes		Assessment Criteria			Evidence type	Portfolio reference	Date
6	Minimise the risk of damage to the work and surrounding area when excavating materials using 360 degree excavators.	6.1	Protect the work and its surrounding area from damage.				
		6.2	Minimise damage and maintain a clean work space.				
		6.3	Describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions.				
		6.4	Dispose of waste in accordance with legislation.				
		6.5	State why the disposal of waste should be carried out safely in relation to the work.				
7	Complete the work within the allocated time when preparing to and excavating materials using 360 degree excavators.	7.1	Demonstrate completion of the work within the allocated time.				
		7.2	Shut down and secure 360 degree excavators.				
		7.3	State the purpose of the work programme and describe why deadlines should be kept in relation to: <ul style="list-style-type: none"> • types of progress charts, timetables and estimated times • organisational procedures for reporting circumstances which will affect the work programme. 				

Learning Outcomes	Assessment Criteria		Evidence type	Portfolio reference	Date
<p>8 Comply with the given contract information to excavate materials using 360 degree excavators to the required specification.</p>	8.1	<p>Demonstrate the following work skills when preparing for and excavating ground using 360 degree excavators:</p> <ul style="list-style-type: none"> • fitting, attaching, setting up, securing, adjusting, checking, removing, communicating, operating, manoeuvring, positioning, excavating, forming, removing and loading. 			
	8.2	<p>Prepare, position, set up and operate 360 degree excavators to given working instructions.</p> <ul style="list-style-type: none"> • excavate a variety of ground • load and/or stockpile excavated loose materials. 			
	8.3	<p>Describe how to apply safe work practices, follow procedures, report problems and establish authority needed to rectify, to:</p> <ul style="list-style-type: none"> • identify the characteristics of the 360 degree excavators used for the excavation work • carry out performance checks • prepare, set up and adjust for operational requirements • complete functional checks 			

Learning Outcomes	Assessment Criteria	Evidence type	Portfolio reference	Date
	<ul style="list-style-type: none"> • carry out pre-operational checks for obstructions, stability, safety and security of the work and surrounding area • identify the area to be excavated • check to avoid damage to structures and utilities service apparatus • excavate, remove and load materials safely and securely • form stockpiles • shut down and secure 360 degree excavator • use hand tools, ancillary equipment and accessories. 			
	8.4			
	8.5			
	8.6			

Learner name: _____
Learner signature: _____
Assessor signature: _____
Internal verifier signature: _____
(if sampled)

Date: _____
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Date: _____

Assessment methodology

This unit is assessed in the workplace. Learners can enter the types of evidence they are presenting for assessment and the submission date against each assessment criterion. Alternatively, centre documentation should be used to record this information.

Learning outcomes and assessment criteria

Learning Outcomes		Assessment Criteria			Evidence type	Portfolio reference	Date
1	Interpret the given information relating to the use of forward tipping dumpers to carry out transporting and discharging operations.	1.1	Interpret and extract information from drawings, specifications, schedules and manufacturers' information.				
		1.2	Comply with information and/or instructions derived from risk assessments and method statements.				
		1.3	State the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented.				
		1.4	Describe different types of information, their source and how they are interpreted in relation to: <ul style="list-style-type: none"> drawings, specifications, schedules, manufacturers' information, method statements and regulations and guidance applicable to transporting and discharging operations. 				

Learning Outcomes		Assessment Criteria		Evidence type	Portfolio reference	Date
2	Organise with others the sequence and operation in which transporting and discharging operations using forward tipping dumpers are to be carried out.	2.1	Organise the work according to given information or instructions.			
		2.2	Describe how to communicate ideas between team members.			
		2.3	Organise and communicate with team members and other associated occupations.			
		2.4	State how to organise resources prior to and during transporting and discharging operations using forward tipping dumpers.			
		3.1	Describe their responsibilities under current legislation and official guidance whilst working: <ul style="list-style-type: none"> in the workplace, below ground level, at height, in confined spaces, with tools and equipment, with materials and substances, with movement/storage of materials and by manual handling and mechanical lifting. 			
3	Know how to comply with relevant legislation and official guidance to carry out transporting and discharging operations with forward tipping dumpers.	3.2	Describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative.			
		3.3	State what the accident reporting procedures are and who is responsible for making reports.			

Learning Outcomes		Assessment Criteria		Evidence type	Portfolio reference	Date
4	Maintain safe working practices when preparing for and carrying out transporting and discharging operations using forward tipping dumpers.	4.1	Use personal protective equipment (PPE) to safely carry out the activity in accordance with legislation and organisational requirements during transporting and discharging operations.			
		4.2	Explain why and when personal protective equipment (PPE) should be used, relating to transporting and discharging operations, and the types, purpose and limitations of each type.			
		4.3	State how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries and other task-related hazards.			

Learning Outcomes	Assessment Criteria	Evidence type	Portfolio reference	Date
<p>5 Request and select the required quantity and quality of resources to prepare for and carry out transporting and discharging operations using forward tipping dumpers.</p>	<p>5.1 Describe the characteristics, quality, uses, limitations and defects associated with the resources, and how they should be used correctly, relating to:</p> <ul style="list-style-type: none"> • consumables, lubricants and fuels • attachments, transporting and discharging aids • hand tools, ancillary equipment and/or accessories. <p>5.2 Request and select resources associated with forward tipping dumpers in relation to consumables, materials, attachments, tools, accessories and/or ancillary equipment.</p> <p>5.3 State how the resources should be used correctly, how problems associated with the resources are reported and how the organisational procedures are used.</p> <p>5.4 Outline potential hazards associated with the resources and method of work.</p> <p>5.5 Describe how to calculate quantity, weight, length and area associated with the method/procedures to carry out transporting and discharging operations using forward tipping dumpers.</p>			

Learning Outcomes		Assessment Criteria			Evidence type	Portfolio reference	Date
6	Minimise the risk of damage to the work and surrounding area when transporting and discharging materials using forward tipping dumpers.	6.1	Protect the work and its surrounding area from damage.				
		6.2	Minimise damage and maintain a clean work space.				
		6.3	Describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions.				
		6.4	Dispose of waste in accordance with legislation.				
		6.5	State why the disposal of waste should be carried out safely in relation to the work.				

Learning Outcomes		Assessment Criteria			Evidence type	Portfolio reference	Date
7	Complete the work within the allocated time when preparing to and transporting and discharging materials using forward tipping dumpers.	7.1	Demonstrate completion of the work within the allocated time.				
		7.2	Shut down and secure forward tipping dumpers.				
		7.3	State the purpose of the work programme and describe why deadlines should be kept in relation to: <ul style="list-style-type: none"> types of progress charts, timetables and estimated times organisational procedures for reporting circumstances which will affect the work programme. 				

Learning Outcomes	Assessment Criteria		Evidence type	Portfolio reference	Date
<p>8 Comply with the given contract information to receive, transport and discharge materials using forward tipping dumpers to the required specification.</p>	8.1	<p>Demonstrate the following work skills when preparing for and transporting and discharging loose materials using forward tipping dumpers:</p> <ul style="list-style-type: none"> • fitting, attaching, setting up, securing, adjusting, checking, removing, communicating, operating, manoeuvring, positioning, receiving, transporting and depositing. 			
	8.2	<p>Prepare, position, set up and operate forward tipping dumpers to receive, transport and discharge loads to given working instructions.</p>			
	8.3	<p>Describe how to apply safe work practices, follow procedures, report problems and establish authority needed to rectify, to:</p> <ul style="list-style-type: none"> • identify the characteristics of the forward tipping dumper used for transporting and discharging work • carry out performance checks • prepare, set up and adjust for operational requirements • complete functional checks • carry out pre-operational checks for obstructions, stability, safety and security of the work and surrounding area • identify the area for discharging 			

Learning Outcomes	Assessment Criteria	Evidence type	Portfolio reference	Date
	<ul style="list-style-type: none"> • check to avoid damage to structures and utilities service apparatus • receive, transport and discharge materials safely and securely • shut down and secure forward tipping dumper • use hand tools, ancillary equipment and accessories. 			
	8.4 Safely use and store hand tools and ancillary equipment.			
	8.5 State the needs of other occupations and how to communicate within a team when preparing to and carrying out transporting and discharging operations.			
	8.6 Describe how to maintain the plant, tools and equipment used to transport and discharge materials.			

Learner name: _____ Date: _____

Learner signature: _____ Date: _____

Assessor signature: _____ Date: _____

Internal verifier signature: _____ Date: _____
(if sampled)

Assessment methodology

This unit is assessed in the workplace. Learners can enter the types of evidence they are presenting for assessment and the submission date against each assessment criterion. Alternatively, centre documentation should be used to record this information.

Learning outcomes and assessment criteria

Learning Outcomes		Assessment Criteria		Evidence type	Portfolio reference	Date
1	Interpret the given information relating to the use of agricultural-based tractors to carry out non-agricultural activities.	1.1	Interpret and extract information from drawings, specifications, schedules and manufacturers' information.			
		1.2	Comply with information and/or instructions derived from risk assessments and method statements.			
		1.3	State the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented.			
		1.4	Describe different types of information, their source and how they are interpreted in relation to: <ul style="list-style-type: none"> drawings, specifications, schedules, manufacturers' information, method statements and regulations and guidance applicable to non-agricultural activities using agricultural-based tractors. 			

Learning Outcomes		Assessment Criteria		Evidence type	Portfolio reference	Date
2	Organise with others the sequence and operation in which non-agricultural activities using agricultural-based tractors are to be carried out.	2.1	Organise the work according to given information or instructions.			
		2.2	Describe how to communicate ideas between team members.			
		2.3	Organise and communicate with team members and other associated occupations.			
		2.4	State how to organise resources prior to and during non-agricultural activities using agricultural-based tractors			

Learning Outcomes		Assessment Criteria		Evidence type	Portfolio reference	Date
3	Know how to comply with relevant legislation and official guidance to carry out non-agricultural activities with agricultural-based tractors.	3.1	Describe their responsibilities under current legislation and official guidance whilst working: <ul style="list-style-type: none"> in the workplace, below ground level, at height, in confined spaces, with tools and equipment, with materials and substances, with movement/storage of materials and by manual handling and mechanical lifting. 			
		3.2	Describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative.			
		3.3	State what the accident reporting procedures are and who is responsible for making reports.			

Learning Outcomes		Assessment Criteria		Evidence type	Portfolio reference	Date
4	Maintain safe working practices when preparing for and carrying out non-agricultural activities using agricultural-based tractors.	4.1	Use personal protective equipment (PPE) to safely carry out the activity in accordance with legislation and organisational requirements during non-agricultural activities.			
		4.2	Explain why and when personal protective equipment (PPE) should be used, relating to non-agricultural activities, and the types, purpose and limitations of each type.			
		4.3	State how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries and other task-related hazards.			
5	Request and select the required quantity and quality of resources to prepare for and carry out non-agricultural activities using agricultural-based tractors.	5.1	Describe the characteristics, quality, uses, limitations and defects associated with the resources, and how they should be used correctly, relating to: <ul style="list-style-type: none"> • consumables, lubricants and fuels • attachments and non-agricultural activity aids • hand tools, ancillary equipment and/or accessories. 			

Learning Outcomes		Assessment Criteria		Evidence type	Portfolio reference	Date
	5.2	Request and select resources associated with agricultural-based tractors in relation to consumables, materials, attachments, tools, accessories and/or ancillary equipment.				
	5.3	State how the resources should be used correctly, how problems associated with the resources are reported and how the organisational procedures are used.				
	5.4	Outline potential hazards associated with the resources and method of work.				
	5.5	Describe how to calculate quantity, weight, length and area associated with the method/procedures to carry out non-agricultural activities using agricultural-based tractors.				

Learning Outcomes		Assessment Criteria			Evidence type	Portfolio reference	Date
6	Minimise the risk of damage to the work and surrounding area when undertaking non-agricultural activities using agricultural-based tractors.	6.1	Protect the work and its surrounding area from damage.				
		6.2	Minimise damage and maintain a clean work space.				
		6.3	Describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions.				
		6.4	Dispose of waste in accordance with legislation.				
		6.5	State why the disposal of waste should be carried out safely in relation to the work.				

Learning Outcomes		Assessment Criteria		Evidence type	Portfolio reference	Date
7	Complete the work within the allocated time when preparing to and undertaking non-agricultural activities using agricultural-based tractors.	7.1	Demonstrate completion of the work within the allocated time.			
		7.2	Shut down and secure agricultural-based tractors.			
		7.3	State the purpose of the work programme and describe why deadlines should be kept in relation to: <ul style="list-style-type: none"> types of progress charts, timetables and estimated times organisational procedures for reporting circumstances which will affect the work programme. 			

Learning Outcomes	Assessment Criteria		Evidence type	Portfolio reference	Date
8 Comply with the given contract information to carry out non-agricultural activities using agricultural-based tractors to the required specification.	8.1	Demonstrate the following work skills when preparing for and undertaking non-agricultural activities using agricultural-based tractors: <ul style="list-style-type: none"> • fitting, attaching, setting up, securing, adjusting, checking, removing, communicating, operating, manoeuvring and positioning. 			
	8.2	Prepare, position, set up and operate agricultural-based tractors to undertake non-agricultural activities to given working instructions.			
	8.3	Describe how to apply safe work practices, follow procedures, report problems and establish authority needed to rectify, to: <ul style="list-style-type: none"> • identify the characteristics of the agricultural-based tractors used for non-agricultural activities • carry out performance checks • prepare, set up and adjust for operational requirements • complete functional checks 			

Learning Outcomes	Assessment Criteria	Evidence type	Portfolio reference	Date
	<ul style="list-style-type: none"> • carry out pre-operational checks for obstructions, stability, safety and security of the work and surrounding area • identify the area of work • check to avoid damage to structures and utilities service apparatus • undertake non-agricultural activities safely and securely • shut down and secure agricultural-based tractors • use hand tools, ancillary equipment and accessories. 			
8.4	Safely use and store hand tools and ancillary equipment.			
8.5	State the needs of other occupations and how to communicate within a team when preparing to and carrying out non-agricultural activities			
8.6	Describe how to maintain the plant, tools and equipment used to undertake non-agricultural activities.			

Learner name: _____ Date: _____
Learner signature: _____ Date: _____
Assessor signature: _____ Date: _____
Internal verifier signature: _____ Date: _____
(if sampled)

This unit can be assessed against one of the following endorsements:

- water bowser
- fuel bowser
- slurry tanker.

Assessment methodology

This unit is assessed in the workplace. Learners can enter the types of evidence they are presenting for assessment and the submission date against each assessment criterion. Alternatively, centre documentation should be used to record this information.

Learning outcomes and assessment criteria

Learning Outcomes		Assessment Criteria		Evidence type	Portfolio reference	Date
1	Interpret the given information relating to the use of self-propelled bowzers to carry out transporting and discharging operations.	1.1	Interpret and extract information from drawings, specifications, schedules and manufacturers' information.			
		1.2	Comply with information and/or instructions derived from risk assessments and method statements.			
		1.3	State the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented.			
		1.4	Describe different types of information, their source and how they are interpreted in relation to: <ul style="list-style-type: none"> drawings, specifications, schedules, manufacturers' information, method statements and regulations and guidance applicable to transporting and discharging operations. 			

Learning Outcomes		Assessment Criteria		Evidence type	Portfolio reference	Date
2	Organise with others the sequence and operation in which transporting and discharging operations using self-propelled bowzers are to be carried out.	2.1	Organise the work according to given information or instructions.			
		2.2	Describe how to communicate ideas between team members.			
		2.3	Organise and communicate with team members and other associated occupations.			
		2.4	State how to organise resources prior to and during transporting and discharging operations using self-propelled bowzers.			
		3.1	Describe their responsibilities under current legislation and official guidance whilst working: <ul style="list-style-type: none"> in the workplace, below ground level, at height, in confined spaces, with tools and equipment, with materials and substances, with movement/storage of materials and by manual handling and mechanical lifting. 			
3	Know how to comply with relevant legislation and official guidance to carry out transporting and discharging operations with self-propelled bowzers.	3.2	Describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative.			
		3.3	State what the accident reporting procedures are and who is responsible for making reports.			

Learning Outcomes		Assessment Criteria		Evidence type	Portfolio reference	Date
4	Maintain safe working practices when preparing for and carrying out transporting and discharging operations using self-propelled bowsers.	4.1	Use personal protective equipment (PPE) to safely carry out the activity in accordance with legislation and organisational requirements during transporting and discharging operations.			
		4.2	Explain why and when personal protective equipment (PPE) should be used, relating to transporting and discharging operations, and the types, purpose and limitations of each type.			
		4.3	State how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries and other task-related hazards.			

Learning Outcomes	Assessment Criteria	Evidence type	Portfolio reference	Date
<p>5 Request and select the required quantity and quality of resources to prepare for and carry out transporting and discharging operations using self-propelled bowzers.</p>	<p>5.1 Describe the characteristics, quality, uses, limitations and defects associated with the resources, and how they should be used correctly, relating to:</p> <ul style="list-style-type: none"> • consumables, lubricants and fuels • attachments and transporting and discharging aids • hand tools, ancillary equipment and/or accessories. 			
	<p>5.2 Request and select resources associated with self-propelled bowzers in relation to consumables, materials, attachments, tools, accessories and/or ancillary equipment.</p>			
	<p>5.3 State how the resources should be used correctly, how problems associated with the resources are reported and how the organisational procedures are used.</p>			
	<p>5.4 Outline potential hazards associated with the resources and method of work.</p>			
	<p>5.5 Describe how to calculate quantity, weight, length and area associated with the method/procedures to carry out transporting and discharging operations using self-propelled bowzers.</p>			

Learning Outcomes		Assessment Criteria		Evidence type	Portfolio reference	Date
6	Minimise the risk of damage to the work and surrounding area when transporting and discharging materials using self-propelled bowsters.	6.1	Protect the work and its surrounding area from damage.			
		6.2	Minimise damage and maintain a clean work space.			
		6.3	Describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions.			
		6.4	Dispose of waste in accordance with legislation.			
		6.5	State why the disposal of waste should be carried out safely in relation to the work.			
7	Complete the work within the allocated time when preparing to and transporting and discharging materials using self-propelled bowsters.	7.1	Demonstrate completion of the work within the allocated time.			
		7.2	Shut down and secure self-propelled bowsters.			
		7.3	State the purpose of the work programme and describe why deadlines should be kept in relation to: <ul style="list-style-type: none"> • types of progress charts, timetables and estimated times • organisational procedures for reporting circumstances which will affect the work programme. 			

Learning Outcomes	Assessment Criteria		Evidence type	Portfolio reference	Date
8 Comply with the given contract information to receive, transport and discharge materials using self-propelled bowzers to the required specification.	8.1	<p>Demonstrate the following work skills when preparing for and transporting and discharging materials using self-propelled bowzers:</p> <ul style="list-style-type: none"> • fitting, attaching, setting up, securing, adjusting, checking, removing, communicating, operating, manoeuvring, positioning, receiving, transporting and discharging. 			
	8.2	<p>Prepare, set up, position and operate self-propelled bowzers to receive, transport and discharge fluid materials to given working instructions.</p>			
	8.3	<p>Describe how to apply safe work practices, follow procedures, report problems and establish authority needed to rectify, to:</p> <ul style="list-style-type: none"> • identify the characteristics of the self-propelled bowzers used for transporting and discharging work • carry out performance checks • prepare, set up and adjust for operational requirements • complete functional checks • carry out pre-operational checks for obstructions, stability, safety and security of the work and surrounding area 			

Learning Outcomes	Assessment Criteria	Evidence type	Portfolio reference	Date
	<ul style="list-style-type: none"> • identify the area for discharging • check to avoid damage to structures and utilities service apparatus • receive, transport and discharge materials safely and securely • shut down and secure self-propelled bowsers • use hand tools, ancillary equipment and accessories. 			
8.4	Safely use and store hand tools and ancillary equipment.			
8.5	State the needs of other occupations and how to communicate within a team when preparing to and carrying out transporting and discharging operations.			
8.6	Describe how to maintain the plant, tools and equipment used to transport and discharge fluid materials.			

Learner name: _____ Date: _____
Learner signature: _____ Date: _____
Assessor signature: _____ Date: _____
Internal verifier signature: _____ Date: _____
(if sampled)

Learning outcomes and assessment criteria

Learning Outcomes		Assessment Criteria		Evidence type	Portfolio reference	Date
1	Interpret the given information relating to the preparation for and the slinging and signalling of loads.	1.1	Interpret and extract information from drawings, specifications, schedules, method statements and manufacturers' information.			
		1.2	Comply with information and/or instructions derived from risk assessments and method statements.			
		1.3	State the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented.			
		1.4	Describe different types of information, their source and how they are interpreted in relation to: <ul style="list-style-type: none"> drawings, specifications, schedules, method statements, manufacturers' information, approved procedures and Codes of Practice. 			

Learning Outcomes		Assessment Criteria		Evidence type	Portfolio reference	Date
2	Organise with others the sequence and operation in which the slinging and signalling of loads is to be carried out.	2.1	Organise the work according to given information or instructions.			
		2.2	Describe how to communicate ideas between team members.			
		2.3	Organise and communicate with team members and other associated occupations.			
		2.4	State how to organise resources prior to and 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.	3.1	Describe their responsibilities under current legislation and official guidance whilst working: <ul style="list-style-type: none"> in the workplace, below ground level, at height, with tools and equipment, with materials and substances, with movement/storage of materials and by manual handling and mechanical lifting. 			
		3.2	Describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative.			
		3.3	State what the accident reporting procedures are and who is responsible for making reports.			

Learning Outcomes		Assessment Criteria		Evidence type	Portfolio reference	Date
4	Maintain safe working practices when preparing for and slinging and signalling loads.	4.1	Use personal protective equipment (PPE) to safely carry out the activity in accordance with legislation and organisational requirements when slinging and signalling of loads.			
		4.2	Explain why and when personal protective equipment (PPE) should be used, relating to slinging and signalling of loads, and the types, purpose and limitations of each type.			
		4.3	State how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries and other task-related hazards.			

Learning Outcomes		Assessment Criteria		Evidence type	Portfolio reference	Date
5	Select the required quantity and quality of resources to prepare for and when slinging and signalling loads.	5.1	Describe the characteristics, quality, uses, limitations and defects associated with the resources, and how they should be used correctly, relating to: <ul style="list-style-type: none"> • lifting accessories • signalling and communication equipment • hand tools and ancillary equipment. 			
		5.2	Select resources associated with slinging/signalling in relation to hand tools, attachments, slinging equipment, lifting aids/accessories, signalling and communication equipment.			
		5.3	State how the resources should be used correctly, how problems associated with the resources are reported and how the organisational procedures are used.			
		5.4	Outline potential hazards associated with the resources and method of work.			
		5.5	Describe how to calculate weight, bearing pressure, quantity, length and area associated with the method/procedures to carry out slinging/signalling.			

Learning Outcomes		Assessment Criteria			Evidence type	Portfolio reference	Date
6	Minimise the risk of damage to the work and surrounding area when slinging and signalling loads.	6.1	Protect the work and its surrounding area from damage.				
		6.2	Minimise damage and maintain a clean work space.				
		6.3	Describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions.				
		6.4	Dispose of waste in accordance with legislation.				
		6.5	State why the disposal of waste should be carried out safely in relation to the work.				
7	Complete the work within the allocated time when preparing to and slinging and signalling loads.	7.1	Demonstrate completion of the work within the allocated time.				
		7.2	State the purpose of the work programme and describe why deadlines should be kept in relation to: <ul style="list-style-type: none"> types of progress charts, timetables and estimated times organisational procedures for reporting circumstances which will affect the lifting operation. 				

Learning Outcomes	Assessment Criteria		Evidence type	Portfolio reference	Date
<p>8</p> <p>Comply with the given contract information to prepare to and sling and signal loads for movement to the required specification.</p>	8.1	<p>Demonstrate the following work skills when preparing to and slinging and signalling loads:</p> <ul style="list-style-type: none"> • measuring, gauging, estimating, fitting, fixing, testing, balancing, interpreting, judging, explaining, preparing, indicating, informing, instructing, signing, positioning, adjusting, configuring, moving, securing, signalling, relaying and removing. 			
	8.2	<p>Prepare to and attach loads to lifting equipment, and guide loads using signals to the required destination to given working instructions using appropriate load securing methods and lifting accessories.</p>			
	8.3	<p>Describe how to apply safe work practices, follow procedures, report problems and establish authority needed to rectify, to:</p> <ul style="list-style-type: none"> • confirm method of communication • determine the method of slinging • select and use suitable slinging equipment/lifting accessories • sling loads securely and balance within correct weight distribution following agreed/recognised operational procedures • position loads safely and securely 			

Learning Outcomes	Assessment Criteria		Evidence type	Portfolio reference	Date
		<ul style="list-style-type: none"> • remove and store lifting accessories • use hand tools, ancillary equipment and accessories. 			
8.4		Safely use and store hand tools and slinging, signalling, communication and ancillary equipment.			
8.5		State the needs of other occupations and how to communicate within a team when preparing to and slinging and signalling loads.			
8.6		Describe how to maintain the tools and equipment used to sling and signal loads.			

Learner name: _____ Date: _____

Learner signature: _____ Date: _____

Assessor signature: _____ Date: _____

Internal verifier signature: _____ Date: _____
(if sampled)

Further information

Our customer service numbers are:

BTEC and NVQ	0844 576 0026
GCSE	0844 576 0027
GCE	0844 576 0025
The Diploma	0844 576 0028
DiDA and other qualifications	0844 576 0031

Calls may be recorded for training purposes.

Useful publications

Related information and publications include:

- *Centre Handbook for Edexcel QCF NVQs and Competence-based Qualifications* published annually
- functional skills publications – specifications, tutor support materials and question papers
- *Regulatory Arrangements for the Qualification and Credit Framework* (published by Ofqual, August 2008)
- the current Edexcel publications catalogue and update catalogue.

Edexcel publications concerning the Quality Assurance System and the internal and standards verification of vocationally related programmes can be found on the Edexcel website.

NB: Some of our publications are priced. There is also a charge for postage and packing. Please check the cost when you order.

How to obtain National Occupational Standards

To obtain the National Occupational Standards go to www.ukstandards.org.uk.

Professional development and training

Edexcel supports UK and international customers with training related to NVQ and BTEC qualifications. This support is available through a choice of training options offered in our published training directory or through customised training at your centre.

The support we offer focuses on a range of issues including:

- planning for the delivery of a new programme
- planning for assessment and grading
- developing effective assignments
- building your team and teamwork skills
- developing student-centred learning and teaching approaches
- building functional skills into your programme
- building effective and efficient quality assurance systems.

The national programme of training we offer can be viewed on our website (www.edexcel.com/training). You can request customised training through the website or by contacting one of our advisers in the Training from Edexcel team via Customer Services to discuss your training needs.

The training we provide:

- is active
- is designed to be supportive and thought provoking
- builds on best practice
- may be suitable for those seeking evidence for their continuing professional development.

Annexe A: Progression pathways

The Edexcel qualification framework for the construction sector

Level	General qualifications	Diplomas	BTEC vocationally-related qualifications	BTEC specialist qualification/professional	NVQ/competence
8					
7					Edexcel Level 7 NVQ Diploma in Built Environment Design and Consultancy Practice. Edexcel Level 7 NVQ Diploma in Construction Senior Management (QCF).

Level	General qualifications	Diplomas	BTEC vocationally-related qualifications	BTEC specialist qualification/professional	NVQ/competence
6					<p>Edexcel Level 6 NVQ Diploma in Built Environment Design Management.</p> <p>Edexcel Level 6 NVQ Diploma in Construction Contracting Operations Management.</p> <p>Edexcel Level 6 NVQ Diploma in Construction Site Management.</p> <p>Edexcel Level 6 NVQ Diploma in Senior Site Inspection.</p>
5			Edexcel BTEC Level 5 HN Diploma in Construction		
4			Edexcel BTEC Level 4 HN Certificate in Construction		

Level	General qualifications	Diplomas	BTEC vocationally-related qualifications	BTEC specialist qualification/ professional	NVQ/ competence
3		Edexcel Level 3 Diploma in Construction and the Built Environment	Edexcel BTEC Level 3 Certificate, Subsidiary Diploma, Diploma in Construction and the Built Environment	Edexcel BTEC Level 3 Award, Extended Certificate and Diploma in Construction and the Built Environment	We have too many qualifications to list in this space. Please refer to www.edexcel.com for further information.
2		Edexcel Level 2 Diploma in Construction and the Built Environment	Edexcel BTEC Level 2 Certificate, Extended Certificate and Diploma in Construction	Edexcel BTEC Level 2 Award, Certificate and Extended Certificate in Construction and the Built Environment (Craft) and Construction and the Built Environment (Technician)	We have too many qualifications to list in this space. Please refer to www.edexcel.com for further information.
1		Edexcel Level 1 Diploma in Construction and the Built Environment	Edexcel BTEC Level 1 Award, Certificate, Diploma in Construction (QCF)	Edexcel BTEC Level 1 Award, Certificate, Extended Certificate in Construction and the Built Environment	We have too many qualifications to list in this space. Please refer to www.edexcel.com for further information.
Entry			Edexcel Entry Level BTEC Award in Construction (Entry 3) (QCF)		

Annexe B: Quality assurance

Key principles of quality assurance

- A centre delivering Edexcel qualifications must be an Edexcel recognised centre and must have approval for qualifications that it is offering.
- The centre agrees, as part of gaining recognition, to abide by specific terms and conditions relating to the effective delivery and quality assurance of assessment. The centre must abide by these conditions throughout the period of delivery.
- Edexcel makes available to approved centres a range of materials and opportunities to exemplify the processes required for effective assessment and provide examples of effective standards. Approved centres must use the guidance on assessment to ensure that staff who are delivering Edexcel qualifications are applying consistent standards.
- An approved centre must follow agreed protocols for: standardisation of assessors; planning, monitoring and recording of assessment processes; internal verification and recording of internal verification processes and dealing with special circumstances, appeals and malpractice.

Quality assurance processes

The approach to quality assured assessment is made through a partnership between a recognised centre and Edexcel. Edexcel is committed to ensuring that it follows best practice and employs appropriate technology to support quality assurance processes where practicable. The specific arrangements for working with centres will vary. Edexcel seeks to ensure that the quality-assurance processes it uses do not inflict undue bureaucratic processes on centres, and works to support them in providing robust quality-assurance processes.

The learning outcomes and assessment criteria in each unit within this specification set out the standard to be achieved by each learner in order to gain each qualification. Edexcel operates a quality-assurance process, designed to ensure that these standards are maintained by all assessors and verifiers.

For the purposes of quality assurance, all individual qualifications and units are considered as a whole. Centres offering these qualifications must be committed to ensuring the quality of the units and qualifications they offer, through effective standardisation of assessors and internal verification of assessor decisions. Centre quality assurance and assessment processes are monitored by Edexcel.

The Edexcel quality-assurance processes will involve:

- gaining centre recognition and qualification approval if a centre is not currently approved to offer Edexcel qualifications
- annual visits to centres by Edexcel for quality review and development of overarching processes and quality standards. Quality review and development visits will be conducted by an Edexcel quality development reviewer
- annual visits by occupationally competent and qualified Edexcel Standards Verifiers for sampling of internal verification and assessor decisions for the occupational sector
- the provision of support, advice and guidance towards the achievement of National Occupational Standards.

Centres are required to declare their commitment to ensuring quality and appropriate opportunities for learners that lead to valid and accurate assessment outcomes. In addition, centres will commit to undertaking defined training and online standardisation activities.

Annexe C: Centre certification and registration

Edexcel Standards Verifiers will provide support, advice and guidance to centres to achieve Direct Claims Status (DCS). Edexcel will maintain the integrity of Edexcel QCF NVQs through ensuring that the awarding of these qualifications is secure. Where there are quality issues identified in the delivery of programmes, Edexcel will exercise the right to:

- direct centres to take action
- limit or suspend certification
- suspend registration.

The approach of Edexcel in such circumstances is to work with the centre to overcome the problems identified. If additional training is required, Edexcel will aim to secure the appropriate expertise to provide this.

What are the access arrangements and special considerations for the qualification in this specification?

Centres are required to recruit learners to Edexcel qualifications with integrity.

Appropriate steps should be taken to assess each applicant's potential and a professional judgement should be made about their ability to successfully complete the programme of study and achieve the qualification. This assessment will need to take account of the support available to the learner within the centre during their programme of study and any specific support that might be necessary to allow the learner to access the assessment for the qualification. Centres should consult Edexcel's policy on learners with particular requirements.

Edexcel's policy on access arrangements and special considerations for Edexcel qualifications aims to enhance access to the qualifications for learners with disabilities and other difficulties (as defined by the 1995 Disability Discrimination Act and the amendments to the Act) without compromising the assessment of skills, knowledge, understanding or competence. Please refer to *Access Arrangements and Special Considerations for BTEC and Edexcel NVQ Qualifications* for further details. www.edexcel.com.

Annexe D: Assessment Strategy

The ConstructionSkills Assessment Strategy is available from ConstructionSkills at www.cskills.org.

Annexe E: Additional requirement for qualifications that use the term 'NVQ' in a QCF qualification title

Please go to www.ofqual.gov.uk to access the document '*Operating rules for using the term 'NVQ' in a QCF qualification title*'.

