



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

Unit title:	Setting up and using transportable cutting and shaping machines in the workplace
Unit reference number:	D/503/2408
QCF level:	2
Credit value:	24
Guided learning hours:	80
Start date:	January 2012

Unit summary

The aim of this unit is to develop the skills, knowledge and understanding required to confirm competence in setting up and using transportable cutting and shaping machines in the workplace, within the relevant sector of industry.

Assessment requirements/evidence requirements

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

- The Additional Requirements for Qualifications using the title NVQ in QCF
- The Construction Skills' Consolidated Assessment Strategy for Construction and the Built Environment.

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

Workplace evidence of skills cannot be simulated.

This unit must be assessed against three cutting machine endorsements:

Saw (three from: circular, chop, mitre, bench, jig, reciprocating, alligator or scroll) - Drill – morticer – tenoner - biscuit jointer - disc cutter

AND against two shaping machine endorsements:

- planer – sander – router - grinder.

Assessment recording

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

Learning outcomes and assessment criteria

Learning Outcome		Assessment Criterion		Evidence type	Portfolio reference	Date
1	Interpret the given information relating to the work and resources needed when setting up and using transportable cutting and shaping machines.	1.1	Interpret and extract relevant information from drawings, specifications, schedules, method statements, risk assessments and manufacturers' information.			
		1.2	Comply with information and/or instructions derived from risk assessments and method statements.			
		1.3	State the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented.			
		1.4	Describe different types of information, their source and how they are interpreted in relation to: <ul style="list-style-type: none"> – drawings, specifications, schedules, method statements, risk, assessments, manufacturers' information and regulations associated with operating machines. 			

Learning Outcome		Assessment Criterion		Evidence type	Portfolio reference	Date
2	Know how to comply with relevant legislation and official guidance when setting up and using transportable cutting and shaping machines.	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, in confined spaces, at height, with tools and equipment, with materials and substances, with movement/storage of materials and by manual handling and mechanical lifting. 			
		2.2	Describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative.			
		2.3	Explain what the accident reporting procedures are and who is responsible for making reports.			
		2.4	State the types of fire extinguishers available when setting up and using transportable cutting and shaping machines and describe how and when they are used.			

Learning Outcome		Assessment Criterion		Evidence type	Portfolio reference	Date
3	Maintain safe working practices when setting up and using transportable cutting and shaping machines.	3.1	Use health and safety control equipment and access equipment (if applicable) safely to carry out the activity in accordance with legislation and organisational requirements when setting up and using transportable cutting and shaping machines.			
		3.2	Explain why and when health and safety control equipment, identified by the principles of protection, should be used, relating to setting up and using transportable cutting and shaping machines, and the types, purpose and limitations of each type, the work situation and general work environment, in relation to: <ul style="list-style-type: none"> – collective protective measures – personal protective equipment (PPE) – respiratory protective equipment (RPE) – local exhaust ventilation (LEV). 			
		3.3	Describe how the relevant health and safety control equipment should be used in accordance with the given instructions.			
		3.4	State how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries and other task-related hazards.			

Learning Outcome		Assessment Criterion		Evidence type	Portfolio reference	Date
4	Select the required quantity and quality of resources for the methods of work to set up and use transportable cutting and shaping machines.	4.1	Select resources associated with own work in relation to materials, components and fixings, tools, equipment and accessories.			
		4.2	Describe the characteristics, quality, uses, sustainability, limitations and defects associated with the resources in relation to: <ul style="list-style-type: none"> – accessories – tools and equipment. 			
		4.3	Describe how the resources should be used correctly and how problems associated with the resources are reported.			
		4.4	Explain why the organisational procedures have been developed and how they are used for the selection of required resources.			
		4.5	Describe any potential hazards associated with the resources and method of work.			
		4.6	Describe how to calculate quantity, length, area and wastage associated with the method/procedure to set up and use transportable cutting and shaping machines.			

Learning Outcome		Assessment Criterion		Evidence type	Portfolio reference	Date
5	Minimise the risk of damage to the work and surrounding area when setting up and using transportable cutting and shaping machines.	5.1	Protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures.			
		5.2	Minimise damage and maintain a clean work space.			
		5.3	Dispose of waste in accordance with legislation.			
		5.4	Describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions.			
		5.5	Explain why the disposal of waste should be carried out safely in accordance with environmental responsibilities, organisational procedures, manufacturers' information, statutory regulations and official guidance.			

Learning Outcome		Assessment Criterion		Evidence type	Portfolio reference	Date
6	Complete the work within the allocated time when setting up and using transportable cutting and shaping machines.	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. 			
7	Comply with the given contract information to set up and use transportable cutting and shaping machines to the required specification.	7.1	Demonstrate the following work skills when setting up and using transportable cutting and shaping machines: measuring, marking out, fitting, fixing, positioning, securing and operating.			
		7.2	Set up and use three of the following cutting machines to given working instructions: saw (three from the following: circular, chop, mitre, bench, jig, reciprocating, alligator or scroll) <ul style="list-style-type: none"> – drill – morticer – tenoner – biscuit jointer – disc cutter. 			

Learning Outcome		Assessment Criterion	Evidence type	Portfolio reference	Date
		7.3 Set up and use two of the following shaping machines to given working instructions: <ul style="list-style-type: none"> – planer (thicknesser, surfacer) – sander (orbital, belt, disc) – router – grinder. 			
		7.4 Safely use and handle materials.			
		7.5 Safely use tools and accessories, equipment and ancillaries.			
		7.6 Safety store the materials, tools and equipment used when setting up and using transportable cutting and shaping machines.			

Learning Outcome	Assessment Criterion	Evidence type	Portfolio reference	Date	
	7.7	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"> – check transportable cutting and shaping machines (fuel and electric mains/battery) for serviceability check voltage requirements, safety cut offs and circuit breakers – set up machine in preparation for use – fix and secure work – select and ensure safety guards are in place in accordance with machine instructions – select accessories for the machine and the work – identify maintenance requirements for accessories 			

Learning Outcome	Assessment Criterion	Evidence type	Portfolio reference	Date
	<p>7.8 Describe how to apply safe work practices, follow procedures, report problems and establish the authority needed to rectify them, to:</p> <ul style="list-style-type: none"> – cut and shape materials to agreed tolerances – change saw blades: circular, chop, mitre, bench, jig, reciprocating, alligator and scroll – change accessories: drill bits, router bits, discs, planner blades, abrasives. – use templates, profiles and jigs – operate fixed machines – use tools, accessories and equipment – work at height – use access equipment. 			
	<p>7.9 Describe the needs of other occupations and how to effectively communicate within a team when setting up and using transportable cutting and shaping machines.</p>			
	<p>7.10 Describe how to maintain the tools, accessories and ancillary equipment used when setting up and using transportable cutting and shaping machines.</p>			

Learner name: _____

Date: _____

Learner signature: _____

Date: _____

Assessor signature: _____

Date: _____

Internal verifier signature: _____

Date: _____

(if sampled)