

Unit title:	Maintaining Machinery and Equipment in the Workplace
Unit reference number:	A/600/8594
QCF level:	2
Credit value:	16
Guided learning hours:	53

Unit summary

The aim of this unit is to illustrate the skills, knowledge and understanding required to confirm competence in maintaining machinery and equipment in the workplace within the relevant sector of industry.

Assessment requirements/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 maintaining machinery and equipment to be effective and reliable when confirming a learner's competence.

Note: Learning Outcome 7 – contract information can relate to drawings, specifications, schedules, cuttings lists, manufacturer's information and oral instruction.

Workplace evidence of skills cannot be simulated.

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

- Sawing machinery
- Planing machinery
- Profiling machinery
- Jointing machinery
- Sanding machinery
- Boring machinery
- CNC/NC machinery

Assessment recording

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
<p>1 Interpret the given information relating to the work and resources when maintaining machinery and equipment</p>	<p>1.1 Interpret and extract information from drawings, specifications, schedules, risk assessments and manufacturers' information</p> <p>1.2 Comply with information and/or instructions derived from risk assessments and method statement</p> <p>1.3 State the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented</p> <p>1.4 Describe different types of information, their source and how they are interpreted in relation to:</p> <ul style="list-style-type: none"> - drawings, specifications, schedules, risk assessments, manufacturers' information and legislation governing wood machining 			
<p>2 Know how to comply with relevant legislation and official guidance when maintaining machinery and equipment</p>	<p>2.1 Describe their responsibilities under current legislation and official guidance whilst working:</p> <ul style="list-style-type: none"> - in the workplace, with tools, tooling and equipment, with materials and substances, movement of materials and manual and mechanical lifting <p>2.2 Describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative</p> <p>2.3 State what the accident reporting procedures are and who is responsible for making reports</p>			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
<p>3 Maintain safe working practices when maintaining machinery and equipment</p>	<p>3.1 Use personal protective equipment (PPE) safely to carry out the activity in accordance with all current statutory legislation and approved Codes of Practice when maintaining machinery and equipment</p> <p>3.2 Explain why and when personal protective equipment (PPE) should be used, relating to maintaining machinery and equipment, and the types, purpose and limitations of each type</p> <p>3.3 State how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries, accidents and other task-related hazards</p>			
<p>4 Select the required quantity and quality of resources for the methods of work to maintain machinery and equipment</p>	<p>4.1 Describe the characteristics, quality, uses, limitations and defects associated with the resources in relation to:</p> <ul style="list-style-type: none"> - lubricants - hand and/or powered tools and equipment <p>4.2 Select resources associated with own work in relation to materials, components, tools, tooling and equipment and dimensional control aids as appropriate</p>			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
<p>5 Minimise the risk of damage to the work and surrounding area when maintaining machinery and equipment</p>	<p>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</p> <p>4.4 Outline potential hazards associated with the resources and method of work</p> <p>4.5 Describe how to calculate quantity associated with the method/procedure to maintain machinery and equipment</p>			
	<p>5.1 Protect the work, equipment and its surrounding area from damage in accordance with organisational procedures</p> <p>5.2 Minimise damage and maintain a clean work space</p> <p>5.3 Describe how to protect work and equipment from damage and the purpose of protection in relation to general workplace activities and other occupations</p> <p>5.4 Remove waste in accordance with legislation</p> <p>5.5 State why the removal of waste should be carried out in relation to the work</p>			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
<p>6 Complete the work within the allocated time when maintaining machinery and equipment</p>	<p>6.1 Demonstrate completion of the work within the allocated time</p> <p>6.2 State the purpose of the work programme and explain why deadlines should be kept in relation to:</p> <ul style="list-style-type: none"> - types of progress charts, estimated times and deadlines - organisational procedures for reporting circumstances which will affect the work programme 			
<p>7 Comply with the given contract information to maintain machinery and equipment to the required specification</p>	<p>7.1 Demonstrate the following work skills when maintaining machinery and equipment:</p> <ul style="list-style-type: none"> - checking, cleaning, adjusting, lubricating, recording, repairing, replacing and testing <p>7.2 Prepare and maintain wood machinery and equipment in accordance with organisational/manufacturers routine service requirements for at least three of the following:</p> <ul style="list-style-type: none"> - sawing machinery - planing machinery - profiling machinery - jointing machinery - sanding machinery - boring machinery - CNC/NC machinery 			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
	<p>7.3 Set up and change appropriate tooling to meet the requirements</p> <p>7.4 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"> – prepare and maintain wood machinery – identify documentation and processing requirements – use and maintain maintenance logs as appropriate – identify machine principal parts and their functions – identify safe working limits of machines – identify defects and discrepancies – identify requirements of maintenance programmes – use and maintain hydraulics and pneumatics correctly – identify influencing factors and their implications – identify correct lubricants to meet the maintenance requirements – identify the techniques of risk assessment – use hand tools, power tools and equipment <p>7.5 Safely use and store hand tools, portable power tools and ancillary equipment</p>			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
	7.6 State the needs of other occupations and how to communicate within a team when maintaining machinery and equipment			
	7.7 Describe how to maintain the tools and equipment used when maintaining machinery and equipment			

Learner name: _____ Date: _____

Learner signature: _____ Date: _____

Assessor signature: _____ Date: _____

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