



# **SVQ in Sawmilling at SCQF Level 5**

Qualification Number: GP26 45

## **Qualification Specification**

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## PURPOSE

The SVQ in Sawmilling at SCQF Level 5 is nationally recognised competence based qualification. The primary purpose of this qualification is to enable work-based learners to demonstrate specific competences and knowledge appropriate for the day to day activities in a sawmilling environment either converting logs into boards or secondary sawing and planing.

The qualification also requires knowledge of health and safety in a machine environment and a contribution to the efficient working practices. The qualification includes a choice of units from a list of other units to best suit their own job role including sawing, planing, moulding/profiling etc. Learners will be able to relate job knowledge to their practical competencies and apply competencies to their knowledge.

It is expected that the prospective learner will have had sufficient initial assessment by the centre to establish the likely success of the learner, together with the learner specific learning requirements to maximise success.

The aim of the qualification is to acknowledge an individuals achievement whilst promoting a wider understanding of health and safety, efficient working practices and the use of machines. Those achieving the SVQ in Sawmilling at SCQF Level 5 will be able to produce components and apply related knowledge in a commercial setting.

The qualification is intended for those who have access to a limited range of machines to carry out a limited range of operations.

The qualification is part of the Modern Apprenticeship for Wood and Timber Industries for learners employed in the wood and timber industry and work in Scotland.

## OUTCOMES

In setting out a clearly-defined level of achievement, this qualification will:

1. Enhance the knowledge and job satisfaction of learners - providing them with a means of progression to higher level job roles and qualifications.
2. Provide employers with an open and transparent basis for judging the suitability of learners for employment and promotion.
3. Facilitate job movement throughout the timber sector and other related areas of the timber industry.

Specific outcomes for the qualification are listed under the individual unit description.

## TARGET GROUP

This qualification is suitable for those working in a sawmilling role within the wood and timber industry who want to gain recognition for the competencies and understanding in the basic operation of wood working machines.

Learners are likely to be working as wood machinists.

Job role	Type of company
Moulder/planer/ saw operator or machinist	Timber yard Builders merchant Manufacturing Sawmill
Sawyer	Sawmill

## ENTRY REQUIREMENTS

There are no entry qualifications or age limits required for this qualification.

Assessment for this qualification is open to any learner who has the potential and opportunity to reach the standards laid down for this qualification. An initial assessment of past experience and current skills, knowledge and understanding should be carried out prior to commencement, to determine suitability for this qualification.

Aids or appliances, which are designed to alleviate disability, may be used during assessment, providing they do not compromise the standard required.

## PROGRESSION

Success in this qualification prepares learners for progression in the timber industry. Learners may have the opportunity to progress into supervisory and management roles taking suitable qualifications. Learners are encouraged to consider belonging to a professional institute or similar. Centres are encouraged to make learners aware of relevant associations and related professional bodies.

After completing this qualification, learners will be able to take on more specialist tasks in their area of expertise and/or move onto the Level 6/7 Modern Apprenticeship.

## PROGRAMME ORGANISATION

Programmes leading to the SVQ in Sawmilling at SCQF Level 5 can be organised and delivered by providers who have gained centre and qualification approval from PIABC. To achieve this they need to complete the PIABC centre and qualification approval procedures available from [www.piabc.org.uk](http://www.piabc.org.uk). In completing the documentation and the approval visit, centres need to demonstrate their ability to deliver high quality education leading to the qualification.

Centres are expected to employ robust quality assurance processes. PIABC will appoint its own moderators to ensure the effective operation of these processes and the maintenance of standards of quality.

The organisation of the qualification is at the discretion of the centre and will take into account the aims, aspirations and experience of the learners.

Centres are encouraged to choose the most suitable curriculum model for their learners. Whilst the sequential delivery of parts of the unit is a possibility and may provide the most straightforward way of determining completion, it may be that some degree of integration of elements will occur, or that other methods of delivery are more appropriate to meet the needs of learners. It should be noted however that the whole unit and all the criteria will be assessed.

Centres must ensure that adequate arrangements are in place for supporting learners. This could be either through separate tutorial sessions or through the use of time within structured study sessions. Centres using on-line or other forms of open learning must ensure that appropriate tutorial support is provided for learners.

The employer's engagement in learning and assessment opportunities will be paramount in securing timely achievement and a participative role should be encouraged.

In relevant circumstances, centres are recommended to provide career related information and guidance to their learners.

## **GUIDANCE ON LEARNING AND TEACHING**

Those learners employed in the timber and related industries, completing this SVQ without following a recognised training programme will come to the qualification with varying levels of existing knowledge and/or practical experience of some parts of the syllabus. Training needs should be identified and gaps in knowledge and competency should be filled with a planned delivery of an individual learning plan. This should be utilised in preparing for teaching and assessment. The sharing of knowledge which has the potential to lead to a high level of understanding should be encouraged by the use of staff with direct experience in the wood machining and related industries. This must, of course, be balanced against a sound understanding of the theoretical understanding.

The relationship between theory and practice is a theme that should be reflected in the assessments for the programme. Therefore in structured learning and individual work, learners should be aware of the requirement to develop a theoretical understanding to their practical work and a practical application to their theoretical understanding.

Those developing learning programmes should expect to achieve all the learning outcomes. It may be useful to have workbooks for use either at home or in the workplace.

Assessment guidance can be found in the PIABC Centre Handbook for Competence Based Qualifications which should be used alongside the National Skills Academy for Food and Drink's Assessment Strategy for the Wood Sector.

## **QUALIFICATION DESCRIPTION**

The SVQ in Sawmilling at SCQF Level 5 follows the quality criteria for NOS for designing units and qualifications and contains the features listed as follows:

- NOS reference number, title, credit value and level.
- Each unit consists of:
  - Performance criteria: This describes what a learner needs to be able to do as a result of the process of learning.
  - Knowledge and understanding: These are the things learners are expected to know and understand as a result of the process of learning.
  - Some units also indicate the intended scope of the performance criteria

## **QUALIFICATION LEVEL**

This Scottish Vocational Qualification has been credit rated against the Scottish Credit and Qualifications Framework (SCQF) as a Level 5 qualification.

Generally, learners will demonstrate basic knowledge and understanding of processes, materials and terminology relating ideas and knowledge to practical contexts in roles such as purchasing, sales and yard operative. Tasks may include selecting, adjusting and using appropriate tools and materials and/or advising customers using product knowledge.

Learners may be working alone or as part of a team and will show an awareness of the role of others associated with the job role.

## QUALIFICATION STRUCTURE

The SVQ in Sawmilling at SCQF Level 5 qualification is a nationally recognised qualification consisting of mandatory and optional units. The mandatory units cover those areas which have a common approach, such as health and safety, effectiveness, timber and timber panel knowledge and the principle learning outcomes for the job role. The optional units offer a choice that can be combined to meet the needs of an individual's specific job role together with the organisations and learners preferences. These job specific units confirm both skills, competences and the necessary related job knowledge e.g. saw round timber or sawing/planning. Additional units are chosen to further match the job role e.g. moving, preparing timber and maintaining machinery.

Credit values are determined by the total notional learning hours (teaching + demonstrations + practice + reflection + assessment - including developing competence in the work environment, etc.) divided by 10. For example 4 credits reflect a total learning time of 40 hours. Learning time is usually much greater than direct tutor contact. Credit values have been calculated unit by unit - in isolation of each other - such that the unit is a stand alone unit; therefore Centres may find that where learners are completing a number of units to achieve the complete qualification, actual learning time will reduce (i.e. the actual learning time for the entire qualification is unlikely to be a sum total of the credits of the individual units taken).

Learning time will clearly be reduced if learners hold credits from prior learning. Learners will be expected to carry out additional reading, practice and other work to complete each unit and prepare for assessment.

Structure information: Learners must take 6 units (2 mandatory, plus 1 unit from Group A or B and 3 units from Group C). Note: It is not permitted that a learner chooses the same units in Group C that they have already chosen in Groups A or B.

<b>Mandatory Units</b>			
<b>Unit No.</b>	<b>Title</b>	<b>Level</b>	<b>Credit</b>
PROHSS1	Make sure your own actions reduce risks to health & safety	5	8
PROSM001	Contribute to the effectiveness of work in a commercial setting	5	5
<b>Group A (Round Timber Conversion Pathway)</b>			
<b>Unit No.</b>	<b>Title</b>	<b>Level</b>	<b>Credit</b>
PROSM04	Prepare and convert round timber	5	6
<b>Group B (Secondary Conversion Pathway)</b>			
<b>Unit No.</b>	<b>Title</b>	<b>Level</b>	<b>Credit</b>
COSVR468	Produce sawn wood and wood-based products	5	20
COSVR469	Produce planed wood and wood-based products	5	15
COSVR470	Produce profiled wood and wood-based products	5	21

<b>Group C (Optional Units)</b>			
<b>Unit No.</b>	<b>Title</b>	<b>Level</b>	<b>Credit</b>
PROSM02	Identify, sort, stack and package timber based products	5	4
PROSM03	Process and sort by-products	5	6
PROSM04	Prepare and convert round timber	5	6
PROSM05	Move and handle round timber	5	5
PROSM06	Drying of timber	5	6
PROSM07	Sharpen and maintain tooling in the workplace	5	5
PROSM09	Abrasive wheel operations in the wood industry	5	7
COSVR468	Produce sawn wood and wood-based products	5	20
COSVR469	Produce planed wood and wood-based products	5	15
COSVR470	Produce profiled wood and wood-based products	5	21
COSVR477	Machinery and equipment maintenance	5	16

# UNIT CONTENT

## MAKE SURE YOUR OWN ACTIONS REDUCE RISKS TO HEALTH AND SAFETY

Unit No: PROHSS1

Unit Level: 5

Unit Credit: 8

### Overview

This Standard is for everyone at work (whether paid, unpaid, full or part-time). It is about having an appreciation of significant risks at work, knowing how to identify and deal with them.

This Standard is about the health and safety responsibilities for everyone at work. It describes the competences required to make sure that:

- 1 your own actions do not create any health and safety hazards
- 2 you do not ignore significant risks at work, and
- 3 you take sensible action to put things right, including: reporting situations which pose a danger to people at work and seeking advice

Fundamental to this unit is an understanding of the terms "hazard", "risk" and "control".

### Performance Criteria

#### Identify the hazards and evaluate the risks at work

You must be able to:

- P1. identify which workplace instructions are relevant to your job
- P2. identify those working practices in your job which may harm you or others
- P3. identify those aspects of your work which could harm you or others
- P4. check which of the potentially harmful working practices and aspects of your work present the highest risks to you or to others
- P5. deal with hazards in accordance with workplace instructions and legal requirements
- P6. correctly name and locate the people responsible for health and safety at work

#### Reduce the risks to health and safety at work

You must be able to:

- P7. control those health and safety risks within your capability and job responsibilities
- P8. carry out your work in accordance with your level of competence, workplace instructions, suppliers or manufacturers instructions and legal requirements
- P9. pass on suggestions for reducing risks to health and safety to the responsible people
- P10. make sure your behaviour does not endanger the health and safety of you or others at work
- P11. follow the workplace instructions and suppliers' or manufacturers' instructions for the safe use of equipment, materials and products
- P12. report any differences between workplace instructions and suppliers' or manufacturers' instructions
- P13. make sure that your personal presentation and behaviour at work:
  - P13.1 protects the health and safety of you and others,
  - P13.2 meets any legal responsibilities, and
  - P13.3 is in accordance with workplace instructions

## Knowledge and Understanding

You need to know and understand:

- K1. what “hazards” and “risks” are
- K2. your responsibilities and legal duties for health and safety in the workplace
- K3. your responsibilities for health and safety as required by the law covering your job role
- K4. the hazards which exist at work and the safe working practices which you must follow
- K5. the particular health and safety hazards which may be present in your own job and the precautions you must take
- K6. the importance of remaining alert to the presence of hazards in the whole workplace
- K7. the importance of dealing with, or promptly reporting, risks
- K8. the responsibilities for health and safety in your job description
- K9. the safe working practices for your own job
- K10. the responsible people you should report health and safety matters to
- K11. where and when to get additional health and safety assistance
- K12. your scope and responsibility for controlling risks
- K13. workplace instructions for managing risks which you are unable to deal with
- K14. suppliers’ and manufacturers’ instructions for the safe use of equipment, materials and products which you must follow
- K15. the importance of personal presentation in maintaining health and safety at work
- K16. the importance of personal behaviour in maintaining the health and safety of you and others

## Additional Information

### Glossary

**Control(s):** the means by which the risks identified are eliminated or reduced to acceptable levels.

**Hazard:** a hazard is something with the potential to cause harm (this can include articles, substances, plant or machines, methods of work, the working environment and other aspects of work management)

**Notice:** includes all types of enforceable statutory document which may be drafted and served on a duty holder, such as improvement, prohibition and deferred prohibition notices, notices of taking into possession or to leave undisturbed, notices under the Food and Environment Protection Act and the Control of Major Accident Hazards Regulations, as well as approvals and licences, and associated notices of withdrawal, amendment or extension

**Personal presentation:** this includes personal hygiene, use of personal protective equipment, clothing and accessories suitable to the particular workplace

**Procedures:** a series of steps, instructions and/or decisions, a task. This includes the documentation prepared by the employer about the procedures to be followed for health, safety and welfare matters. Instructions covering, for example:

1. the use of safe working methods and equipment
2. the safe use of hazardous substances
3. smoking, eating, drinking and drugs
4. what to do in the event of an emergency
5. personal presentation

**Risk:** a risk is the likelihood of potential harm from that hazard being realised. The extent of the risk depends on:

1. the likelihood of that harm occurring;
2. the potential severity of that harm, i.e. of any resultant injury or adverse health effect; and
3. the population which might be affected by the hazard, i.e. the number of people who might be exposed.

**Stakeholders:** is any person(s) or group with an interest in an organisation, which may include, employees (at any level), duty holders, employee representatives, contractors, customers, community

# CONTRIBUTE TO THE EFFECTIVENESS OF WORK IN A COMMERCIAL SETTING

Unit No: PROSM001

Unit Level: 5

Unit Credit: 5

## Overview

This standard covers the skills and knowledge required to contribute to the effectiveness of work in a commercial setting. In particular to plan and organise own work, work effectively with other team members and make a contribution to problem solving and suggesting improvements.

## Performance Criteria

### Plan and organise own work

You must be able to:

- P1 ensure that you have the required authority to complete the required activity
- P2 comply with current legislation, including working safely
- P3 check that you understand the particular work activity and your role within it
- P4 check that the work area is clean, tidy and free from hazards before starting work
- P5 check that the required resources and equipment are ready for use, before starting work
- P6 check the job documentation, prior to starting work
- P7 complete the activity as planned and without any undue delay
- P8 complete all the required documentation accurately and legibly and pass it on to the next stage

### Work effectively with other team members

You must be able to:

- P9 communicate with others, using the appropriate method/s
- P10 give constructive support and feedback to appropriate personnel
- P11 receive support and feedback from personnel
- P12 treat others with respect, at all times

### Contribute to problem solving and improvement

You must be able to:

- P13 respond to any problems that occur during a work activity
- P14 report any problems that occur and the actions taken
- P15 identify and share opportunities for improving workplace practices and procedures, using appropriate methods

## Knowledge and Understanding

### Plan and organise own work

You need to know and understand:

- K1 your job roles, responsibilities and levels of authority
- K2 the current, relevant legislation and how it applies to your job role
- K3 the work activity and your role within that activity
- K4 how to check the work area is clean, tidy and free from hazards, including a list of the hazards and possible consequences of each
- K5 the list of resources that are required for the activity
- K6 how to check that equipment is ready for use
- K7 the relevant documentation and how it should be used

- K8 the relevant workplace procedures for monitoring the progress of the activity and how to keep others informed
- K9 how to complete the relevant documentation and what the next stages are

### **Work effectively with other team members**

You need to know and understand:

- K10 the available methods of communication to use and when to use them
- K11 when assistance may be required and how this may be given
- K12 why it is important to give constructive feedback and support
- K13 how to give constructive feedback and support
- K14 why it is important to receive constructive feedback and support
- K15 why treating other people with respect contributes to workplace efficiency

### **Contribute to problem solving and improvement**

You need to know and understand:

- K16 the most common problems that may occur and how these are resolved
- K17 the reporting procedure for problems that arise
- K18 how to identify opportunities for improvements
- K19 how suggestions for improvements should be made and to whom
- K20 how identifying and making improvements can benefit both you and the organisation

## **IDENTIFY, SORT, STACK AND PACKAGE TIMBER BASED PRODUCTS**

Unit No: PROSM02

Unit Level: 5

Unit Credit: 7

### **Overview**

This standard covers the skills and knowledge required to carry out identification of timber products, sorting by quantity and quality and safe building of timber stacks, including marking and suitable packaging.

This standard is suitable for operators working in sawmilling.

### **Performance criteria**

You must be able to:

1. identify end use of timber based products following standard operating procedures
2. sort products by size and quality to meet specifications
3. move products to storage locations to specification following standard operating procedures
4. maintain workplaces in a clear and safe condition following standard operating procedures
5. use safety equipment to meet specifications
6. build packs of timber based products to meet specifications
7. mark packs of timber based products to meet specifications
8. complete records following standard operating procedures
9. use packaging materials following standard operating procedures
10. check packaging meet specifications
11. mark finished packs to meet specifications and customer requirements
12. confirm timber is legal and sustainable following standard operating procedures

### **Knowledge and understanding**

You need to know and understand:

1. different species of timber available and their uses
2. purpose of grading timber
3. timber quality, grade, length, width, thickness and customer requirements
4. types of safety equipment used
5. methods for safe handling of timber based products
6. reasons for safe building of packs of timber based products
7. how to build safe packs of timber based products
8. methods and reasons for marking of packs
9. how to complete documentation and how it is passed on to relevant people
10. how to package materials to allow for their safe movement, keep them together and to protect them
11. safe working practices and how to use appropriate safety equipment
12. pack labels required and why they are used
13. how the company ensures that purchased timber is legal and sustainable and why this is important

## **PROCESS AND SORT BY-PRODUCTS**

Unit No: PROSM03

Unit Level: 5

Unit Credit: 8

### **Overview**

This standard covers the skills and knowledge required to process and sort products in a sawmill setting both primary product and products produced as result of primary processing. It also covers ensuring products remain fit for purpose, by sorting and storing according to specification.

This standard is suitable for operators working in sawmilling.

### **Performance criteria**

You must be able to:

1. set-up equipment to meet legal, manufacturers and organisational requirements
2. monitor equipment following standard operating procedures
3. check by-products meet specifications
4. clear blockages following standard operating procedures
5. repair machine breakdowns or report following standard operating procedures
6. use safety equipment following standard operating procedures
7. confirm timber is legal and sustainable following standard operating procedures
8. sort and store by-products following standard operating procedures
9. store products to prevent contamination of other products following standard operating procedures
10. store products to prevent contamination of immediate and surrounding areas following standard operating procedures
11. confirm storage mediums are fit for purpose and safe following standard operating procedures
12. check work areas are maintained in clear and safe condition following standard operating procedures

### **Knowledge and understanding**

You need to know and understand:

1. how to process materials to add value
2. how to safely set up and use equipment
3. different types of by-products and how they can be used
4. processes for monitoring equipment and who is responsible for this
5. how to clear machine blockages
6. how to repair machinery and the limits of your responsibilities
7. how the company ensures that purchased timber is legal and sustainable and why this is important
8. methods of safe handling of products
9. reasons for the safe building of packs
10. methods and reasons for marking of by-products
11. why by-products have to be separated and contained correctly
12. safety equipment used and safety requirements when sorting and storing by-products
13. different types of possible contamination of by-products
14. how to avoid the contamination of by-products

## **PREPARE AND CONVERT ROUND TIMBER**

Unit No: PROSM04

Unit Level: 5

Unit Credit: 6

### **Overview**

This standard covers skills and knowledge required to carry out preparation and conversion of round timber using sawmilling machinery (such as band saws). It covers the conversion of logs to boards and other products to required stock sizes or customer specifications.

This standard is suitable for operators working in sawmilling.

### **Performance criteria**

You must be able to:

1. maintain work area that is free from hazards following standard operating procedures
2. check round timber is clear of surface matter and bark to meet specifications
3. assess round timber to determine suitability to meet specifications
4. assess round timber for alternative use or stock following standard operating procedures
5. record and report significant defects following standard operating procedures
6. move round timber for conversion following standard operating procedures
7. dispose of residual products from cleaning process following standard operating procedures
8. confirm timber is legal and sustainable following standard operating procedures
9. set up conversion equipment to meet specifications
10. check quality of round timber meets specifications
11. position round timber on conversion equipment following standard operating procedures
12. operate conversion equipment to cut round timber to meet legal requirements and specifications
13. produce products, to meet schedules, cutting lists and specifications
14. monitor equipment for optimal flow of work following standard operating procedures
15. stack processed materials following standard operating procedures
16. use personal protective equipment (PPE) and local exhaust ventilation (LEV) systems to meet legal requirements
17. complete records and documentation following standard operating procedures

### **Knowledge and understanding**

You need to know and understand:

1. basic properties of timber used within the wood industry
2. different species of round timber
3. reasons why round timber is cleaned before conversion
4. safety requirements that apply to preparation process
5. appropriate types of personal protective equipment (PPE) used
6. sources of information and guidance available
7. defects found in round timber
8. importance of disposing of residual products in a safe manner
9. methods for moving and handling round timber
10. potential hazards present in the work area
11. company reporting processes for defects and actions taken
12. how the company ensures purchased timber is legal and sustainable and why this is important
13. equipment used in conversion of round timber and how to operate

14. importance of measuring dimensions and tallying quantities
15. how quality can be affected by poor tooling
16. importance of maintaining health and safety in the work area and when using conversion equipment
17. safety equipment used, including personal protective equipment (PPE)
18. sources of relevant information
19. different cutting speeds for different timbers and different dimensions and conditions of round timber
20. importance of identifying defects in the conversion process
21. importance of stacking materials safely

## **MOVE AND HANDLE ROUND TIMBER**

Unit No: PROSM05

Unit Level: 5

Unit Credit: 5

### **Overview**

This standard covers the skills and knowledge required to safely move and handle timber in a sawmilling setting. It includes loading and unloading of timber logs, converted timber and treated timber.

This standard is suitable for operators working in sawmilling.

### **Performance criteria**

You must be able to:

1. confirm valid handling certificates are held following standard operating procedures
2. check work area is clear and free from hazards following standard operating procedures
3. use safety equipment following standard operating procedures
4. check stacked timber is stable, safe and ready for handling following standard operating procedures
5. position handling equipment to load timber following standard operating procedures
6. check surrounding properties and structures are prevented from damage following standard operating procedures
7. load timber to meet specifications
8. move timber to locations to meet specifications
9. maintain health and safety during the loading and moving process following standard operating procedures
10. complete documentation following standard operating procedures
11. confirm timber is legal and sustainable following standard operating procedures
12. check timber is stable and safe for unloading following standard operating procedures
13. position handling equipment to unload timber following standard operating procedures
14. unload timber to meet specifications

### **Knowledge and understanding**

You need to know and understand:

1. why valid operator certificates are required
2. procedures for loading and moving timber
3. factors that can effect load stability
4. limitations of equipment being used
5. how to protect surrounding areas from damage
6. types of safety equipment used for loading and moving operations
7. risks and hazards that exist when loading, moving and unloading round timber
8. procedures for unloading timber
9. types of safety equipment required for unloading operations
10. faults that can occur with handling equipment
11. the range of risks and hazards that exist when unloading timber
12. documentation completed, who is responsible for completing it and where it goes when completed
13. how the company ensures purchased timber is legal and sustainable and why this is important

## **DRYING OF TIMBER**

Unit No: PROSM06

Unit Level: 5

Unit Credit: 7

### **Overview**

This standard covers the skills and knowledge required for drying timber by kiln and by natural seasoning. It includes stacking timber, measuring moisture content and monitoring the timber throughout the entire drying process.

### **Performance criteria**

You must be able to:

1. refer to and follow information/specification for drying timber
2. use the appropriate safety equipment following standard operating procedures
3. stack and load timber ready for the drying process to specification following standard operating procedures
4. sample timber pack and measure moisture content, in accordance with British Standards guidance and company procedures
5. monitor moisture content throughout the drying process to specification following standard operating procedures
6. complete records to specification following standard operating procedures
7. carry out the drying process using the method appropriate for the timber species and specification following standard operating procedures
8. confirm timber is legal and sustainable following standard operating procedures

### **Knowledge and understanding**

You need to know and understand:

1. methods for stacking and loading timber ready for drying
2. how to monitor moisture content during timber drying process
3. methods of air drying
4. methods of kiln drying
5. impact on timber processing of having an incorrect moisture content
6. impact on timber species of having an incorrect moisture content
7. range of possible drying defects
8. causes of drying defects and what can be done to prevent them occurring
9. end uses of timber with appropriate moisture content
10. safe working practices when drying timber
11. how the company ensures purchased timber is legal and sustainable and why this is important

## **SHARPEN AND MAINTAIN TOOLING IN THE WORKPLACE**

Unit No: PROSM07

Unit Level: 5

Unit Credit: 7

### **Overview**

This standard covers the skills and knowledge required to sharpen and maintain tooling and equipment in the workplace, including removal, cleaning, sharpening, maintenance and refitting.

This standard is suitable for operators working in wood and timber industry.

### **Performance criteria**

You must be able to:

1. comply with health and safety requirements at all times
2. check work area is clear and free from hazards following standard operating procedures
3. use safety equipment following standard operating procedures
4. remove tooling from equipment to meet specifications
5. use safe manual handling techniques following standard operating procedures
6. clean tooling equipment following standard operating procedures
7. assess tools and identify any defects and damage following standard operating procedures
8. protect and transfer tooling from work areas to sharpening areas following standard operating procedures
9. complete records and documentation following standard operating procedures
10. sharpen and maintain tooling to meet specifications
11. identify when abrasive wheels need to be changed following standard operating procedures
12. dispose of waste from sharpening processes following standard operating procedures
13. recognise machine equipment faults and report these to appropriate person following standard operating procedures
14. refit tooling to equipment to meet specifications

### **Knowledge and understanding**

You need to know and understand:

1. health and safety requirements
2. procedures for removing tooling from equipment
3. types of defects and damage found in tooling
4. why it is important to clean tooling
5. safety equipment used when removing and cleaning tooling
6. safe manual handling techniques used when handling and sharpening tooling
7. why it is important to sharpen tooling
8. procedures for sharpening tooling
9. types of sharpening defects that can occur
10. why abrasive wheels need to be changed

# ABRASIVE WHEEL OPERATIONS IN THE WOOD INDUSTRY

Unit No: PROSM09

Unit Level: 5

Unit Credit: 7

## Overview

This standard covers the skills and knowledge required for working with abrasive wheels in the wood industry. It covers carrying out checks and adjustments, handling, storing and transporting abrasive wheels and includes dressing and mounting of abrasive wheels.

This standard is suitable for operators working in the wood and timber industry.

## Performance criteria

You must be able to:

1. carry out risk assessments to identify: significant hazards, those at risk, appropriate control measures and emergency procedures following standard operating procedures
2. identify health and safety features of equipment used following standard operating procedures
3. operate abrasive wheels following standard operating procedures
4. select personal protective equipment (PPE) for operating abrasive wheels following standard operating procedures
5. identify key components of abrasive wheels, individual functions and faults that can occur following standard operating procedures
6. handle, store and transport abrasive wheels following standard operating procedures
7. maintain abrasive wheels and make adjustments to meet specifications
8. use marking systems to meet specifications
9. identify wheel spin for best efficiency to meet specifications
10. mount abrasive wheels to meet specifications
11. adjust work rests following standard operating procedures
12. dress and true abrasive wheels to meet specifications
13. select machines and abrasive wheels to meet specifications

## Knowledge and understanding

You need to know and understand:

1. carry out risk assessments to identify: significant hazards, those at risk, appropriate control measures and emergency procedures following standard operating procedures
2. identify health and safety features of equipment used following standard operating procedures
3. operate abrasive wheels following standard operating procedures
4. select personal protective equipment (PPE) for operating abrasive wheels following standard operating procedures
5. identify key components of abrasive wheels, individual functions and faults that can occur following standard operating procedures
6. handle, store and transport abrasive wheels following standard operating procedures
7. maintain abrasive wheels and make adjustments to meet specifications
8. use marking systems to meet specifications
9. identify wheel spin for best efficiency to meet specifications
10. mount abrasive wheels to meet specifications
11. adjust work rests following standard operating procedures
12. dress and true abrasive wheels to meet specifications
13. select machines and abrasive wheels to meet specifications

# PRODUCE SAWN WOOD AND WOOD-BASED PRODUCTS

Unit No: COSVR468

Unit Level: 5

Unit Credit: 20

## Overview

This standard is about:

1. interpreting information
2. adopting safe and healthy working practices
3. selecting materials, components and equipment
4. preparing, setting up, operating and maintaining the machinery to produce sawn wood and wood-based products

## Performance Criteria

You must be able to:

- P1 interpret the given information relating to the work and resources to confirm its relevance
- P2 comply with the given, relevant legislation and official guidance to carry out your work and maintain safe work practices
- P3 select the required quantity and quality of resources for the methods of work
- P4 comply with organisational procedures to minimise the risk of damage to the work and surrounding area
- P5 comply with the given contract information to carry out the work efficiently to the required specification
- P6 complete the work within the allocated time, in accordance with the programme of work

Note: Contract information in performance criteria five can relate to drawings, specifications, schedules, cutting lists, manufacturer's information and oral instruction

## Knowledge and Understanding

### Performance Criteria 1

#### Interpretation of information

You need to know and understand:

- K1 the organisational procedures developed to report and rectify inappropriate information and unsuitable resources, and how they are implemented
- K2 the types of information, their source and how they are interpreted K3 the organisational procedures to solve problems with the information and why it is important they are followed
- K3 the organisational procedures to solve problems with the information and why it is important that they are followed

### Performance Criteria 2

#### Safe work practices

You need to know and understand:

- K4 the level of understanding operatives must have of information for relevant, current legislation and official guidance and how it is applied
- K5 how emergencies should be responded to and who should respond
- K6 the organisational security procedures for tools, equipment and personal belongings
- K7 what the accident reporting procedures are and who is responsible for making the report
- K8 why and when personal protective equipment (PPE) should be used

K9 the safe use and storage of tools and equipment

### **Performance Criteria 3**

#### **Selection of resources**

You need to know and understand:

- K10 the characteristics, quality, uses, limitations and defects associated with the resources and how defects should be rectified
- K11 how the resources should be used and how any problems
- K12 the organisational procedures to select resources, why they have been developed and how they are used
- K13 the hazards associated with the resources and methods of work and how they are overcome

### **Performance Criteria 4**

#### **Minimise the risk of damage**

You need to know and understand:

- K14 how to protect work and equipment from damage and the purpose of protection
- K15 why removal of waste should be carried out safely and how it is achieved

### **Performance Criteria 5**

#### **Meet the contract specification**

You need to know and understand:

- K16 how methods of work, to meet the specification, are carried out and problems reported
- K17 how maintenance of tools and equipment is carried out

### **Performance Criteria 6**

#### **Allocated time**

You need to know and understand:

- K18 what the programme is for the work to be carried out in the estimated, allocated time and why deadlines should be kept

### **Additional Information**

#### **Scope/range related to performance criteria**

#### **Performance Criteria 1**

1. interpretation of drawings, specifications, schedules, cutting lists, risk assessments and manufacturers' information related to the work to be carried out

#### **Performance Criteria 2**

2. comply with all current statutory legislation and approved Codes of Practice to carry out the activity safely
3. safe use of personal protective equipment (PPE) to carry out the activity
4. safe use and storage of tools and equipment

#### **Performance Criteria 3**

5. selection and handling of resources associated with own work
  - 5.1 materials and components
  - 5.2 tools, tooling and equipment
  - 5.3 dimensional control aids as appropriate

#### **Performance Criteria 4**

- 6 protection of the work, equipment and its surrounding area from damage
- 7 minimise damage and maintain a clean work space
- 8 removal of waste in accordance with legislation

## **Performance Criteria 5**

- 9 demonstration of work skills to measure, mark out, adjust, fit, finish, position and secure
- 10 use and maintain hand tools and ancillary equipment
- 11 prepare, set up, operate and maintain at least three of the following machines to produce sawn wood and wood-based products to given working instructions
  - 11.1 band resaw
  - 11.2 narrow band saw
  - 11.3 parallel band saw
  - 11.4 band mill
  - 11.5 twin line resaw
  - 11.6 hand fed circular rip saw
  - 11.7 dimension/tilting arbour circular saw
  - 11.8 sliding table panel saw
  - 11.9 vertical wall panel saw
  - 11.10 pullover cross cut saw
  - 11.11 radial arm cross cut saw
  - 11.12 straight line edger
  - 11.13 multi-rip saw
  - 11.14 beam saw
  - 11.15 snip saw
- 12 set up and change appropriate tooling to meet the requirements

## **Performance Criteria 6**

- 13 completion of own work within the estimated, allocated time to meet the needs of other occupations and/or client

## **Scope/range related to knowledge and understanding**

### **Emergencies**

- 1 operative's response to situations in accordance with organisational authorisation and personal skills when involved with
  - 1.1 fires, spillages, injuries, accidents

### **Equipment**

- 2 tools, machinery, safety aids, safety guards as appropriate, dimensional control aids and extraction devices

### **Hazards**

- 3 those identified by method of work, manufacturers' technical information, statutory regulations and official guidance

### **Information**

- 4 drawings, specifications, schedules, cutting lists, risk assessments, manufacturers' information and regulations governing wood machining

### **Legislation and official guidance**

- 5 this relates to the operative's responsibilities regarding potential accidents and health hazards whilst working in the workplace, with tools, tooling and equipment, with materials and substances, with movement of materials and by manual and mechanical lifting

### **Maintenance**

- 6 operative care of hand tools and ancillary equipment

## **Methods of work**

- 7 application of knowledge for safe work practices, procedures and skills, relating to the method/area of work and materials used, to
  - 7.1 prepare and set up the sawing machinery
  - 7.2 operate the sawing machinery
  - 7.3 maintain the sawing machinery
  - 7.4 identify the compatibility of materials with machines
  - 7.5 identify how damage to materials and machines can be avoided
  - 7.6 identify the correct use of lubricants
  - 7.7 identify the relevant dimensional control aids and their uses
  - 7.8 identify and report defects and discrepancies in materials and machines
  - 7.9 set up and change appropriate tooling
  - 7.10 identify the types and suitability of tooling
  - 7.11 identify the scope and limitations of the machine
  - 7.12 select the appropriate machine for the work to be carried out
  - 7.13 use hand tools and equipment
- 8 team work and communication
- 9 needs of other occupations associated with producing sawn wood and wood-based products

## **Personal protective equipment (PPE)**

- 10 occupational use, types, purpose of each type and work situations

## **Problems**

- 11 those arising from information, resources and methods of work
  - 11.1 own authority to rectify
  - 11.2 organisational reporting procedures

## **Programme**

- 12 types of progress charts, timetables and estimated times
- 13 organisational procedures for reporting circumstances which will affect the work programme

## **Protect work**

- 14 protect work against damage from general workplace activities and other occupations

## **Removal of waste**

- 15 environmental responsibilities, organisational procedures, manufacturers' information, statutory regulations and official guidance

## **Resources**

- 16 materials, components and equipment relating to types, quantity, quality and sizes of standard and/or specialist
  - 16.1 sawing machinery
  - 16.2 wood materials
  - 16.3 wood-based materials
  - 16.4 lubricants
  - 16.5 hand tools and ancillary equipment
- 17 methods of calculating quantity, length, area and wastage associated with the method/procedure to produce wood and wood-based products

## **Security procedures**

- 18 workplace, company and operative

# PRODUCE PLANED WOOD AND WOOD-BASED PRODUCTS

Unit No: COSVR469

Unit Level: 5

Unit Credit: 15

## Overview

This standard is about:

1. interpreting information
2. adopting safe and healthy working practices
3. selecting materials, components and equipment
4. preparing, setting up, operating and maintaining the machinery to produce planed wood and wood-based products

## Performance Criteria

You must be able to:

- P1 interpret the given information relating to the work and resources to confirm its relevance
- P2 comply with the given, relevant legislation and official guidance to carry out your work and maintain safe work practices
- P3 select the required quantity and quality of resources for the methods of work
- P4 comply with organisational procedures to minimise the risk of damage to the work and surrounding area
- P5 comply with the given contract information to carry out the work efficiently to the required specification
- P6 complete the work within the allocated time, in accordance with the programme of work

Note: Contract information in performance criteria five can relate to drawings, specifications, schedules, cutting lists, manufacturer's information and oral instruction

## Knowledge and Understanding

### Performance Criteria 1

#### Interpretation of information

You need to know and understand:

- K1 the organisational procedures developed to report and rectify inappropriate information and unsuitable resources, and how they are implemented
- K2 the types of information, their source and how they are interpreted
- K3 the organisational procedures to solve problems with the information and why it is important they are followed

### Performance Criteria 2

#### Safe work practices

You need to know and understand:

- K4 the level of understanding operatives must have of information for relevant, current legislation and official guidance and how it is applied
- K5 how emergencies should be responded to and who should respond
- K6 the organisational security procedures for tools, equipment and personal belongings
- K7 what the accident reporting procedures are and who is responsible for making the report
- K8 why and when personal protective equipment (PPE) should be used
- K9 the safe use and storage of tools and equipment

### **Performance Criteria 3**

#### **Selection of resources**

You need to know and understand:

- K10 the characteristics, quality, uses, limitations and defects associated with the resources and how defects should be rectified
- K11 how the resources should be used and how any problems associated with the resources are reported
- K12 the organisational procedures to select resources, why they have been developed and how they are used
- K13 the hazards associated with the resources and methods of work and how they are overcome

### **Performance Criteria 4**

#### **Minimise the risk of damage**

You need to know and understand:

- K14 how to protect work and equipment from damage and the purpose of protection
- K15 why removal of waste should be carried out safely and how it is achieved

### **Performance Criteria 5**

#### **Meet the contract specification**

You need to know and understand:

- K16 how methods of work, to meet the specification, are carried out and problems reported
- K17 how maintenance of tools and equipment is carried out

### **Performance Criteria 6**

#### **Allocated time**

You need to know and understand:

- K18 what the programme is for the work to be carried out in the estimated, allocated time and why deadlines should be kept

### **Additional Information**

#### **Scope/range related to performance criteria**

#### **Performance Criteria 1**

- 1 interpretation of drawings, specifications, schedules, cutting lists, risk assessments and manufacturers' information related to the work to be carried out

#### **Performance Criteria 2**

- 2 comply with all current statutory legislation and approved Codes of Practice to carry out the activity safely
- 3 safe use of personal protective equipment (PPE) to carry out the activity
- 4 safe use and storage of tools and equipment

#### **Performance Criteria 3**

- 5 selection and handling of resources associated with own work
  - 5.1 materials and components
  - 5.2 tools, tooling and equipment
  - 5.3 dimensional control aids as appropriate

#### **Performance Criteria 4**

- 6 protection of the work, equipment and its surrounding area from damage
- 7 minimise damage and maintain a clean work space
- 8 removal of waste in accordance with legislation

### **Performance Criteria 5**

- 9 demonstration of work skills to measure, mark out, adjust, fit, finish, position and secure
- 10 use and maintain hand tools and ancillary equipment
- 11 prepare, set up, operate and maintain at least one combination of the following machines to produce wood and wood-based products to given working instructions
  - 11.1 surface planer and thicknesser (can be a combined machine)
  - 11.2 four sided planer and moulder (for planed all round)
- 12 set up and change appropriate tooling to meet the requirements

### **Performance Criteria 6**

- 13 completion of own work within the estimated, allocated time to meet the needs of other occupations and/or client

### **Scope/range related to knowledge and understanding**

#### **Emergencies**

- 1 operative's response to situations in accordance with organisational authorisation and personal skills when involved with
  - 1.1 fires, spillages, injuries, accidents

#### **Equipment**

- 2 tools, machinery, safety aids, safety guards as appropriate, dimensional control aids and extraction devices

#### **Hazards**

- 3 those identified by method of work, manufacturers' technical information, statutory regulations and official guidance

#### **Information**

- 4 drawings, specifications, schedules, cutting lists, risk assessments, manufacturers' information and regulations governing wood machining

#### **Legislation and official guidance**

- 5 this relates to the operative's responsibilities regarding potential accidents and health hazards whilst working in the workplace, with tools, tooling and equipment, with materials and substances, with movement of materials and by manual and mechanical lifting

#### **Maintenance**

- 6 operative care of hand tools and ancillary equipment

#### **Methods of work**

- 7 application of knowledge for safe work practices, procedures and skills, relating to the method/area of work and materials used, to
  - 7.1 prepare and set up the planing machinery
  - 7.2 operate the planing machinery
  - 7.3 maintain the planing machinery
  - 7.4 identify how damage to materials and machines can be avoided
  - 7.5 identify the correct use of lubricants
  - 7.6 identify the compatibility of materials with machines
  - 7.7 identify the relevant dimensional control aids and their uses
  - 7.8 identify and report defects and discrepancies in materials and machines
  - 7.9 set up and change appropriate tooling
  - 7.10 identify the types and suitability of tooling

- 7.11 identify the scope and limitations of the machine
- 7.12 select the appropriate machine for the work to be carried out
- 7.13 use hand tools and equipment
- 8 team work and communication
- 9 needs of other occupations associated with producing planed wood and wood-based products

### **Personal protective equipment (PPE)**

- 10 occupational use, types, purpose of each type and work situations

### **Problems**

- 11 those arising from information, resources and methods of work
  - 11.1 own authority to rectify
  - 11.2 organisational reporting procedures

### **Programme**

- 12 types of progress charts, timetables and estimated times
- 13 organisational procedures for reporting circumstances which will affect the work programme

### **Protect work**

- 14 protect work against damage from general workplace activities and other occupations

### **Removal of waste**

- 15 environmental responsibilities, organisational procedures, manufacturers' information, statutory regulations and official guidance

### **Resources**

- 16 materials, components and equipment relating to types, quantity, quality and sizes of standard and/or specialist
  - 16.1 planing machinery
  - 16.2 wood materials
  - 16.3 wood based materials
  - 16.4 lubricants
  - 16.5 hand tools and ancillary equipment
- 17 methods of calculating quantity, length, area and wastage associated with the method/procedure to produce planed wood and wood-based products

### **Security procedures**

- 18 workplace, company and operative

# PRODUCE PROFILED WOOD AND WOOD-BASED PRODUCTS

Unit No: COSVR470

Unit Level: 5

Unit Credit: 21

## Overview

This standard is about:

1. interpreting information
2. adopting safe and healthy working practices
3. selecting materials, components and equipment
4. preparing, setting up, operating and maintaining the machinery to produce profiled wood and wood-based products

## Performance Criteria

You must be able to:

- P1 interpret the given information relating to the work and resources to confirm its relevance
- P2 comply with the given, relevant legislation and official guidance to carry out your work and maintain safe work practices
- P3 select the required quantity and quality of resources for the methods of work
- P4 comply with organisational procedures to minimise the risk of damage to the work and surrounding area
- P5 comply with the given contract information to carry out the work efficiently to the required specification
- P6 complete the work within the allocated time, in accordance with the programme of work

Note: Contract information in performance criteria five can relate to drawings, specifications, schedules, cutting lists, manufacturer's information and oral instruction

## Knowledge and Understanding

### Performance Criteria 1

#### Interpretation of information

You need to know and understand:

- K1 the organisational procedures developed to report and rectify inappropriate information and unsuitable resources, and how they are implemented
- K2 the types of information, their source and how they are interpreted
- K3 the organisational procedures to solve problems with the information and why it is important they are followed

### Performance Criteria 2

#### Safe work practices

You need to know and understand:

- K4 the level of understanding operatives must have of information for relevant, current legislation and official guidance and how it is applied
- K5 how emergencies should be responded to and who should respond
- K6 the organisational security procedures for tools, equipment and personal belongings
- K7 what the accident reporting procedures are and who is responsible for making the report
- K8 why and when personal protective equipment (PPE) should be used
- K9 the safe use and storage of tools and equipment

### **Performance Criteria 3**

#### **Selection of resources**

You need to know and understand:

- K10 the characteristics, quality, uses, limitations and defects associated with the resources and how defects should be rectified
- K11 how the resources should be used and how any problems associated with the resources are reported
- K12 the organisational procedures to select resources, why they have been developed and how they are used
- K13 the hazards associated with the resources and methods of work and how they are overcome

### **Performance Criteria 4**

#### **Minimise the risk of damage**

You need to know and understand:

- K14 how to protect work and equipment from damage and the purpose of protection
- K15 why removal of waste should be carried out safely and how it is achieved

### **Performance Criteria 5**

#### **Meet the contract specification**

You need to know and understand:

- K16 how methods of work, to meet the specification, are carried out and problems reported
- K17 how maintenance of tools and equipment is carried out

### **Performance Criteria 6**

#### **Allocated time**

You need to know and understand:

- K18 what the programme is for the work to be carried out in the estimated, allocated time and why deadlines should be kept

### **Additional Information**

#### **Scope/range related to performance criteria**

#### **Performance Criteria 1**

- 1 interpretation of drawings, specifications, schedules, cutting lists, risk assessments and manufacturers' information related to the work to be carried out

#### **Performance Criteria 2**

- 2 comply with all current statutory legislation and approved Codes of Practice to carry out the activity safely
- 3 safe use of personal protective equipment (PPE) to carry out the activity
- 4 safe use and storage of tools and equipment

#### **Performance Criteria 3**

- 5 selection and handling of resources associated with own work
  - 5.1 materials and components
  - 5.2 tools, tooling and equipment
  - 5.3 dimensional control aids as appropriate

#### **Performance Criteria 4**

- 6 protection of the work, equipment and its surrounding area from damage
- 7 minimise damage and maintain a clean work space
- 8 removal of waste in accordance with legislation

### **Performance Criteria 5**

- 9 demonstration of work skills to measure, mark out, adjust, fit, finish, position and secure
- 10 use and maintain hand tools and ancillary equipment
- 11 prepare, set up, operate and maintain at least two of the following machines to produce profiled wood and wood-based products to given working instructions
  - 11.1 vertical spindle moulder (straight work)
  - 11.2 four sided planer and moulder
  - 11.3 high-speed router
  - 11.4 double-end tenoner
  - 11.5 wood turning lathe
  - 11.6 copying lathe
  - 11.7 linear shaper
  - 11.8 rotary shaper
  - 11.9 CNC/NC machines
- 12 set up and change appropriate tooling to meet the requirements

### **Performance Criteria 6**

- 13 completion of own work within the estimated, allocated time to meet the needs of other occupations and/or client

### **Scope/range related to knowledge and understanding**

#### **Emergencies**

- 1 operative's response to situations in accordance with organisational authorisation and personal skills when involved with
  - 1.1 fires, spillages, injuries, accidents

#### **Equipment**

- 2 tools, machinery, safety aids, safety guards as appropriate, dimensional control aids and extraction devices

#### **Hazards**

- 3 those identified by method of work, manufacturers' technical information, statutory regulations and official guidance

#### **Information**

- 4 drawings, specifications, schedules, cutting lists, risk assessments, manufacturers' information and regulations governing wood machining

#### **Legislation and official guidance**

- 5 this relates to the operative's responsibilities regarding potential accidents and health hazards whilst working in the workplace, with tools, tooling and equipment, with materials and substances, with movement of materials and by manual and mechanical lifting

#### **Maintenance**

- 6 operative care of hand tools and ancillary equipment

#### **Methods of work**

- 7 application of knowledge for safe work practices, procedures and skills, relating to the method/area of work and materials used, to
  - 7.1 prepare and set up the profiling machinery
  - 7.2 operate the profiling machinery
  - 7.3 maintain the profiling machinery

- 7.4 identify how damage to materials and machines can be avoided
- 7.5 identify the correct use of lubricants
- 7.6 identify the compatibility of materials with machines
- 7.7 identify the relevant dimensional control aids and their uses
- 7.8 identify and report defects and discrepancies in materials and machines
- 7.9 set up and change appropriate tooling
- 7.10 identify the types and suitability of tooling
- 7.11 identify the scope and limitations of the machine
- 7.12 select the appropriate machine for the
- 7.13 work to be carried out
- 7.14 use hand tools and equipment
- 8 team work and communication
- 9 needs of other occupations associated with producing profiled wood and wood-based products

### **Personal protective equipment (PPE)**

- 10 occupational use, types, purpose of each type and work situations

### **Problems**

- 11 those arising from information, resources and methods of work
  - 11.1 own authority to rectify
  - 11.2 organisational reporting procedures

### **Programme**

- 12 types of progress charts, timetables and estimated times
- 13 organisational procedures for reporting circumstances which will affect the work programme

### **Protect work**

- 14 protect work against damage from general workplace activities and other occupations

### **Removal of waste**

- 15 environmental responsibilities, organisational procedures, manufacturers' information, statutory regulations and official guidance

### **Resources**

- 16 materials, components and equipment relating to types, quantity, quality and sizes of standard and/or specialist
  - 16.1 profiling machinery
  - 16.2 wood materials
  - 16.3 wood-based materials
  - 16.4 lubricants
  - 16.5 hand tools and ancillary equipment
- 17 methods of calculating quantity, length, area and wastage associated with the method/procedure to produce profiled wood and wood-based products

### **Security procedures**

- 18 workplace, company and operative

# MACHINERY AND EQUIPMENT MAINTENANCE

Unit No: COSVR477

Unit Level: 5

Unit Credit: 16

## Overview

This standard is about:

1. interpreting information
2. adopting safe and healthy working practices
3. selecting materials, components and equipment
4. preparing and maintaining machinery and equipment

## Performance Criteria

You must be able to:

- P1 interpret the given information relating to the work and resources to confirm its relevance
- P2 comply with the given, relevant legislation and official guidance to carry out your work and maintain safe work practices
- P3 select the required quantity and quality of resources for the methods of work
- P4 comply with organisational procedures to minimise the risk of damage to the work and surrounding area
- P5 comply with the given contract information to carry out the work efficiently to the required specification
- P6 complete the work within the allocated time, in accordance with the programme of work

Note: Contract information in performance criteria five can relate to drawings, specifications, schedules, cutting lists, manufacturer's information and oral instruction.

## Knowledge and Understanding

### Performance Criteria 1

#### Interpretation of information

You need to know and understand:

- K1 the organisational procedures developed to report and rectify inappropriate information and unsuitable resources, and how they are implemented
- K2 the types of information, their source and how they are interpreted
- K3 the organisational procedures to solve problems with the information and why it is important they are followed

### Performance Criteria 2

#### Safe work practices

You need to know and understand:

- K4 the level of understanding operatives must have of information for relevant, current legislation and official guidance and how it is applied
- K5 how emergencies should be responded to and who should respond
- K6 the organisational security procedures for tools, equipment and personal belongings
- K7 what the accident reporting procedures are and who is responsible for making the report
- K8 why and when personal protective equipment (PPE) should be used
- K9 the safe use and storage of tools and equipment

### **Performance Criteria 3**

#### **Selection of resources**

You need to know and understand:

- K10 the characteristics, quality, uses, limitations and defects associated with the resources and how defects should be rectified
- K11 how the resources should be used and how any problems associated with the resources are reported
- K12 the organisational procedures to select resources, why they have been developed and how they are used
- K13 the hazards associated with the resources and methods of work and how they are overcome

### **Performance Criteria 4**

#### **Minimise the risk of damage**

You need to know and understand:

- K14 how to protect work and equipment from damage and the purpose of protection
- K15 why removal of waste should be carried out safely and how it is achieved

### **Performance Criteria 5**

#### **Meet the contract specification**

You need to know and understand:

- K16 how methods of work, to meet the specification, are carried out and problems reported
- K17 how maintenance of tools and equipment is carried out

### **Performance Criteria 6**

#### **Allocated time**

You need to know and understand:

- K18 what the programme is for the work to be carried out in the estimated, allocated time and why deadlines should be kept

### **Additional Information**

#### **Scope/range related to performance criteria**

##### **Performance Criteria 1**

- 1 interpretation of drawings, specifications, schedules, risk assessments and manufacturers' information related to the work to be carried out

##### **Performance Criteria 2**

- 2 comply with all current statutory legislation and approved Codes of Practice to carry out the activity safely
- 3 safe use of personal protective equipment (PPE) to carry out the activity
- 4 safe use and storage of tools and equipment

##### **Performance Criteria 3**

- 5 selection and handling of resources associated with own work
  - 5.1 materials and components
  - 5.2 tools, tooling and equipment
  - 5.3 dimensional control aids as appropriate

##### **Performance Criteria 4**

- 6 protection of the work, equipment and its surrounding area from damage
- 7 minimise damage and maintain a clean work space
- 8 removal of waste in accordance with legislation

### **Performance Criteria 5**

- 9 demonstration of work skills to check, clean, adjust, lubricate, record, repair, replace and test
- 10 use and maintain hand tools, portable power tools and ancillary equipment
- 11 prepare and maintain wood machinery and equipment in accordance with organisational/manufacturers routine service requirements for at least three of the following
  - 11.1 sawing machinery
  - 11.2 planing machinery
  - 11.3 profiling machinery
  - 11.4 jointing machinery
  - 11.5 sanding machinery
  - 11.6 boring machinery
  - 11.7 CNC/NC machinery
- 12 set up and change appropriate tooling to meet the requirements

### **Performance Criteria 6**

- 13 completion of own work within the estimated, allocated time to meet the needs of other occupations and/or client

### **Scope/range related to knowledge and understanding**

#### **Emergencies**

- 1 operative's response to situations in accordance with organisational authorisation and personal skills when involved with
  - 1.1 fires, spillages, injuries, accidents

#### **Equipment**

- 2 tools, machinery, safety aids, safety guards as appropriate, dimensional control aids and extraction devices

#### **Hazards**

- 3 those identified by method of work, manufacturers' technical information, statutory regulations and official guidance

#### **Information**

- 4 drawings, specifications, schedules, risk assessments, manufacturers' information and regulations governing wood machining

#### **Legislation and official guidance**

- 5 this relates to the operative's responsibilities regarding potential accidents and health hazards whilst working in the workplace, with tools, tooling and equipment, with materials and substances, with movement of materials and by manual and mechanical lifting

#### **Maintenance**

- 6 operative care of hand tools and/or portable power tools and ancillary equipment

#### **Methods of work**

- 7 application of knowledge for safe work practices, procedures and skills, relating to the method/area of work and materials used, to
  - 7.1 prepare and maintain wood machinery
  - 7.2 identify documentation and processing requirements
  - 7.3 use and maintain maintenance logs as appropriate
  - 7.4 identify machine principal parts and their functions
  - 7.5 identify safe working limits of machines

- 7.6 identify defects and discrepancies
- 7.7 identify requirements of maintenance programmes
- 7.8 use and maintain hydraulics and pneumatics correctly
- 7.9 identify influencing factors and their implications
- 7.10 identify correct lubricants to meet the maintenance requirements
- 7.11 identify the techniques of risk assessment
- 7.12 use hand tools and equipment
- 8 team work and communication
- 9 needs of other occupations associated with preparing and maintaining machinery and equipment

### **Personal protective equipment (PPE)**

- 10 occupational use, types, purpose of each type and work situations

### **Problems**

- 11 those arising from information, resources and methods of work
  - 11.1 own authority to rectify
  - 11.2 organisational reporting procedures

### **Programme**

- 12 types of progress charts, timetables and estimated times
- 13 organisational procedures for reporting circumstances which will affect the work programme

### **Protect work**

- 14 protect work against damage from general workplace activities and other occupations

### **Removal of waste**

- 15 environmental responsibilities, organisational procedures, manufacturers' information, statutory regulations and official guidance

### **Resources**

- 16 materials, components and equipment relating to types, quantity, quality and sizes of standard and/or specialist
  - 16.1 lubricants
  - 16.2 hand and/or powered tools and equipment
- 17 methods of calculating quantity associated with the method/procedure to prepare and maintain machinery and equipment

### **Security procedures**

- 18 workplace, company and operative

## ASSESSMENT

Assessment principles should follow recognised good practice. Assessment guidance can be found in the PIABC Centre Handbook for Competence Based Qualifications which should be used alongside the National Skills Academy for Food and Drink's Assessment Strategy for the Wood Sector.

Simulation is not permitted.

The qualification must be assessed using the following assessment method:

- Portfolio of Evidence

## QUALIFICATION CERTIFICATION

All performance and knowledge criteria are to be achieved. This qualification is not grade; certification for this qualification is issued on the basis of awarding a pass only. Whilst there is no grading to this qualification; the training delivery and feedback should promote the notion of continued improvement and craftsmanship.

## REGULATORY INFORMATION

Date Accredited From:	25/07/2018
Accreditation End Date:	31/07/2025
Certificate End Date:	31/07/2027

## GLOSSARY

Term	Definition
Performance Criteria	This describes what a learner needs to be able to do as a result of the process of learning.
Knowledge and understanding	These are the things learners are expected to know and understand as a result of the process of learning.
Centre	The organisation that is approved by PIABC for the purposes of preparing learners for assessment.

## FURTHER INFORMATION

Please contact PIABC Limited directly at:

PIABC Limited, The Boilerhouse, Caunt Road, Grantham, NG31 7FZ

Tel: 01476 513884

Email: [piabc@iom3.org](mailto:piabc@iom3.org)