

Set up and use transportable cutting and shaping machines

Overview

This standard is about preparing and using cutting and shaping machines, interpreting information, adopting safe, healthy and environmentally responsible work practices, and selecting and using materials, components, tools and equipment

This standard is for people working in the occupational area of Wood Occupations and can be used by operatives, supervisors and managers

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 and healthy 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

Knowledge and understanding

You need to know and understand: **Performance Criteria 1**

Interpretation of information

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

K4 the level of understanding operatives must have of **information** for relevant, current **legislation and official guidance** and how it is applied

K5 the types of **fire extinguishers** and how and when they are used

K6 how **emergencies** should be responded to and who should respond

K7 the organisational **security procedures** for tools, equipment and personal belongings

K8 what the accident reporting procedures are and who is responsible for making the report

K9 why, when and how **health and safety control equipment** should be used

K10 how to comply with environmentally responsible work practices to meet current **legislation and official guidance**

Performance Criteria 3

Selection of resources

K11 the characteristics, quality, uses, sustainability, limitations and defects associated with the **resources** and how defects should be rectified

K12 how the **resources** should be used and how any **problems** associated with the **resources** are reported

K13 the organisational procedures to select **resources**, why they have been developed and how they are used

K14 the **hazards** associated with the **resources** and **methods of work** and how they are overcome

Performance Criteria 4

Minimise the risk of damage

K15 how to **protect work** from damage and the purpose of protection

K16 why **disposal of waste** should be carried out safely and how it is achieved

Performance Criteria 5

Meet the contract specification

K17 how **methods of work**, to meet the specification, are carried out and **problems** reported

K18 how **maintenance** of tools and equipment is carried out

Performance Criteria 6

Allocated time

K19 what the **programme** is for the work to be carried out in the estimated, allocated time and why deadlines should be kept

Scope/range**Performance Criteria 1**

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

Performance Criteria 2

2 avoidance of risk by complying with the given information relating to at least four of the following

2.1 methods of work

2.2 safe use of health and safety control equipment

2.3 safe use of access equipment

2.4 safe use, storage and handling of materials, tools and equipment

2.5 specific risks to health

Performance Criteria 3

3 selection of resources associated with own work

3.1 materials, components and fixings

3.2 tools and equipment

3.3 accessories

Performance Criteria 4

4 protection of the work and its surrounding area from damage

5 maintain a clear and tidy work space

6 disposal of waste in accordance with current legislation

Performance Criteria 5

7 demonstration of work skills to measure, mark out, fit, fix, position, secure and operate

8 use and maintain hand and power tools

9 set up and use at least three of the following powered cutting machines to given working instructions

9.1 saw (at least three from the following: circular, chop, mitre, bench or table, jig, reciprocating, oscillating)

9.2 drill

9.3 planer

9.4 biscuit jointer

9.5 disc cutter

9.6 morticer

10 set up and use at least two of the following powered shaping machines to given working instructions

10.1 thicknesser

10.2 sander (orbital, belt, disc)

10.3 router

10.4 laminate trimmer

10.5 planer

Performance Criteria 6

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

Set up and use transportable cutting and shaping machines

Scope/range related to knowledge and understanding

Disposal of waste

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

Emergencies

2 operative's response to situations in accordance with organisational authorisation and personal skills when involved with

2.1 fires, spillages, injuries

2.2 emergencies relating to occupational activities

Fire extinguishers

3 water, CO₂, foam, powder and their uses

Hazards

4 those identified by risk assessment, methods of work, manufacturers' technical information, statutory regulations and official guidance

Health and safety control equipment

5 identified by the principles of prevention for occupational use, types and purpose of each type, work situations and general work environment

5.1 collective protective measures

5.2 personal protective equipment (PPE)

5.3 respiratory protective equipment (RPE)

5.4 local exhaust ventilation (LEV)

Information

6 drawings, specifications, schedules, method statements, risk assessments, manufacturers' information, oral and written instructions, sketches, electronic data, official guidance and current building regulations associated with setting up and using transportable cutting and shaping machines

Legislation and official guidance

7 this relates to the operative's responsibilities regarding potential accidents, health hazards and the environment whilst working in the workplace, below ground level, in confined spaces, at height, with tools and equipment, with materials and substances, with movement and storage of materials by manual handling and mechanical lifting

Maintenance

8 operative care of hand and power tools and machines

Methods of work

9 application of knowledge for safe and healthy work practices, procedures and skills relating to the method and area of work and materials used to

9.1 check powered transportable cutting and shaping machines (fuel and electric mains and battery) for serviceability

9.2 set up machines in preparation for use

9.3 check voltage requirements, safety cut offs and circuit breakers

9.4 check fuel, type, mix and additives

9.5 fix and secure work

9.6 select and ensure safety guards are in place in accordance with machine instructions

9.7 select accessories for the machine and the work

9.8 identify maintenance requirements for accessories, sharpening and aligning

9.9 cut and shape materials to agreed tolerances

9.10 change accessories: drill bits, router bits, discs, planer blades, saw blades, blades, tools, abrasives

9.11 use templates, profiles and jigs

9.12 recognise and determine when specialist skills and knowledge are required and report accordingly

9.13 use hand and power tools

9.14 work at height

9.15 use access equipment

Set up and use transportable cutting and shaping machines

- 10 team work and communication
- 11 needs of other occupations associated with setting up and using transportable cutting and shaping machines

Problems

- 12 those arising from information, resources and methods of work
 - 12.1 own authority to rectify
 - 12.2 organisational reporting procedures

Programme

- 13 types of productivity targets and time scales
- 14 how times are estimated
- 15 organisational procedures for reporting circumstances which will affect the work programme

Protect work

- 16 protect work against damage from general workplace activities, other occupations and adverse weather conditions

Resources

- 17 materials, components and equipment relating to types, quantity, quality, sizes and the sustainability of standard and/or specialist
 - 17.1 accessories
 - 17.2 attachments
 - 17.3 hand and power tools
- 18 confirm resources and materials conform with the specification including suitability, moisture and durability
- 19 methods of calculating quantity, length, area and wastage associated with the method and procedure to process materials when setting up and using transportable cutting and shaping machines

Security procedures

- 20 site, workplace, company, operative and vehicles

Set up and use transportable cutting and shaping machines

Developed by Construction Skills

Version Number 3

Date Approved April 2019

Indicative Review Date April 2022

Validity Current

Status Original

Originating Organisation ConstructionSkills

Original URN VR628

Relevant Occupations Carpenter and Joiner

Suite Wood Occupations (Construction)

Keywords Saws; Drills; Biscuit jointer; Disc cutter; Planer; Sander; Router; Thicknesser; Laminate trimmer
