

U30201: Select, use and maintain hand and power tools

Unit Descriptor:

This unit deals with the skills and knowledge required to select, use and maintain appropriate hand and power tools in the completion of work activities.

ELEMENT		PERFORMANCE CRITERIA	
		<i>To be competent you must achieve the following:</i>	
1.	Identify hand and power tools	1.1	Work operations requiring the use of hand and power tools are recognized.
		1.2	Types of hand and power tools and their functions are identified.
		1.3	Sources of and access to power supply are recognized.
2.	Select hand tools	2.1	Appropriate personal protective equipment are selected, correctly fitted and used.
		2.2	Hand tools are selected consistent with needs of the job.
		2.3	Tools checked for serviceability and safety and any faults are reported to appropriate personnel.
		2.4	Equipment is selected to hold or support material for hand tools application where applicable.
3.	Use hand tools	3.1	Occupational Health and Safety requirements for using hand tools are recognized and adhered to during work operations.
		3.2	Hand tools are used to produce desired outcomes to job specifications.
		3.3	Material is located and held in position for hand tool application.

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| | | 3.4 | Workplace health and safety requirements, including personal protection needs, are observed throughout the work. |
| | | 3.5 | All damages and faults arising from immediate use are repaired within own area of responsibility or are marked for repair according to workplace procedures . |
| | | 3.6 | Hand tools are cleaned and stored safely in appropriate location according to organisational guidelines and manufacturer's recommendations. |
| | | 3.7 | Work area is cleaned; all waste is removed and properly disposed of. |
| 4. | Select power tools | 4.1 | Occupational Health and Safety (OH&S) requirements for using power tools recognised and adhered to. |
| | | 4.2 | Appropriate personal protective equipment selected, correctly fitted and used. |
| | | 4.3 | Power tools and leads/hoses are selected consistent with needs of jobs in accordance with conventional work practice. |
| | | 4.4 | Power tools and leads/hoses visually checked for serviceability/safety in accordance with OH&S requirements and any faults are reported to the appropriate personnel. |
| | | 4.5 | Equipment is selected to hold or support materials for power tools application where applicable. |
| 5. | Establish power/air supply to work location | 5.1 | Routes are identified for safe placement of leads/hoses and are cleared of all hazards. |

- 5.2 Electric power leads are run out to power supply and are supported overhead to be clear of traffic or is covered if presenting possible trip hazard.
 - 5.3 Electric power leads are connected to supply and power board or directly to **power tools**.
 - 5.4 Air hoses are run out to compressed air supply and are covered if presenting possible trip hazard.
 - 5.5 Hoses are connected to power tool and air supply in accordance with manufacturer's specifications.
- 6. Use power tools
 - 6.1 **Power tools** are used following a determined sequence of operations to produce desired outcomes.
 - 6.2 Workplace health and safety requirements, including personal protection needs, are observed throughout the work.
 - 6.3 Unsafe or faulty tools are identified and marked for repair according to established procedures.
 - 6.4 **Power tools** are cleaned and stored safely in appropriate location according to standard workshop procedure and manufacturer's recommendations.
 - 6.5 Work area is cleaned; all waste is removed and properly disposed.
- 7. Maintain hand and power tools
 - 7.1 **Maintenance** procedures are identified.
 - 7.2 Routine maintenance of hand and power tools is performed in accordance with organisational guidelines and manufacturer's specifications.
 - 7.3 Repair needs are documented and reported to the appropriate personnel.

- 7.4 **Hand and power tools** are safely stored under the conditions recommended by the manufacturers.
- 7.5 Documentation is completed in accordance with organisational procedures.

RANGE STATEMENT

You must cover the items below:

A. Hand tools (at least 5)

- (i) torch
- (ii) staple guns
- (iii) adjustable wrench
- (iv) knife
- (v) brooms and mops
- (vi) phase tester
- (vii) wire strippers
- (viii) chisels
- (ix) saws
- (x) scissors
- (xi) hammers
- (xii) measuring tapes
- (xiii) pliers
- (xiv) sealant gun
- (xv) spirit level, straight edge
- (xvi) screwdrivers

B. Power tools (at least 3)

- (i) table saw
- (ii) sewing machine
- (iii) iron
- (iv) vacuum cleaner
- (v) drills
- (vi) nail guns
- (vii) staplers
- (viii) screwdrivers
- (ix) sanders
- (x) circular saw

C. Occupational Health and Safety requirements (at least 2)

- (i) workshop/worksite safe working practices
- (ii) use of tools and equipment
- (iii) use of power tools
- (iv) safe handling and storage of materials

D. Workplace procedures (safety and 1 other)

- (i) safety
- (ii) process-specific procedures
- (iii) use of materials
- (iv) recycling
- (v) cost control
- (vi) reporting

E. Personal protective equipment (at least 3)

- (i) raincoats
- (ii) overalls
- (iii) boots
- (iv) hard hat/cap
- (v) safety glasses/goggles
- (vi) gloves
- (vii) ear plugs/muffs
- (viii) face masks/respirators

F. Maintenance (at least 2)

- (i) painting
- (ii) cleaning
- (iii) sharpening
- (iv) lubricating
- (v) repairing

UNDERPINNING KNOWLEDGE AND SKILLS

1. Workplace and equipment safety requirements.
2. Portable power tools.
3. Hand tools and equipment.
4. Materials.
5. Materials handling whilst operating tools.
6. Work shop procedures.
7. Storage procedures.
8. Occupational Health and Safety requirements.
9. Work safely to instructions.
10. Apply appropriate hand-eye co-ordination in the use of tools.
11. Handle/hold materials during operation of tools.
12. Select appropriate tools for material usage.
13. Communicate effectively.
14. Interpret safety requirements.
15. Maintain tools.
16. Store tools correctly.
17. Basic electrical principles.

EVIDENCE GUIDE

(1) Critical Aspect of Evidence

You must provide evidence that shows you have done this over a sufficient period of time for your assessor to consider that you are competent. You have to prove that you can meet all of the performance criteria on at least two (2) occasions. This evidence must come from working in Entertainment and Events Technology.

It is essential that competence be observed in the following aspects:

- demonstrate compliance with Occupational Health and Safety regulations applicable to workplace operations
- indicate compliance with organisational policies and procedures including Quality Assurance requirements
- adopt and carry out correct procedures prior to and during use of hand tools and power tools
- demonstrate safe and effective operational use of tools and equipment
- interactively communicate with others to ensure safe and effective operations

(2) Method of Assessment

Assessment methods must confirm consistency of performance over time and in a range of workplace relevant contexts.

Assessment should be by direct observation of tasks and/or samples of work and questioning on underpinning knowledge.

- direct observation
- oral questioning
- written test
- testimonials from clients
- evaluation of qualifications/portfolio/awards/resume /workplace documents
- authenticated assessments and/or assignments from relevant training courses
- supporting statement from supervisor or previous employer

Assessment methods should closely reflect workplace demands and the needs of particular groups (e.g. people with disabilities, and people who may have literacy or numeracy difficulties).

(3) Context of Assessment

Assessment may take place on the job, off the job or a combination of both of these. However, assessment of this unit would most effectively be undertaken on the job due to the specific workplace environment requirements. Off the job assessment must be undertaken in a closely simulated workplace environment.