



Australian Government

Department of Education, Employment and Workplace Relations

LMFFDT4016A Select, use and maintain hand tools for the creation of custom furniture

Release: 1

LMFFDT4016A Select, use and maintain hand tools for the creation of custom furniture

Modification History

Not applicable.

Unit Descriptor

Unit descriptor	This unit covers the competency to select and use hand tools in applications relating to the custom furniture making sector of the furnishing industry. It also includes the manufacture of specialist hand tools to support unique functions.
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Application of the Unit

Application of the unit	This unit supports the attainment of skills and knowledge required for competent workplace performance in the wide variety of furniture maker operations. The competency applies to a work room and on site environment and involves application of skills and knowledge at the highly skilled craftsman or artisan level. These skills and knowledge are to be used within the scope of the individual's job and authority. This unit requires employability skills in planning and organising, technology use and problem solving in order to correctly select hand tools for specific woodwork operations. Communication skills are used to access and interpret work requirements and self management is applied to ensure ongoing performance of tools is maintained.
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Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Prerequisite units		

Prerequisite units		

Employability Skills Information

Employability skills	This unit contains employability skills.
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Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance Criteria describe the required performance needed to demonstrate achievement of the Element. Where bold italicised text is used, further information is detailed in the required skills and knowledge and/or the Range Statement. Assessment of performance is to be consistent with the Evidence Guide.
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Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Identify hand tools	1.1. Applicable legislative, OHS and organisational requirements relevant to the selection and use of hand tools are verified and complied with 1.2. Type and range of hand tools, their functions, manufacturing specifications and quality reputations are identified and researched
2. Select hand tools	2.1. Hand tools most appropriate for the job are selected 2.2. Selected hand tools are checked for serviceability, precision settings, maintenance compliance and safety 2.3. Faults are rectified or passed to qualified persons for rectification 2.4. Equipment is selected to hold or support material for hand tools application where applicable
3. Manufacture specialist hand tools	3.1. The need for specialist hand tools is established after full research and discounting of existing capabilities and availabilities 3.2. The design of the specialist tool is completed and verified 3.3. The material for the specialist tool is selected after full consideration of the functions and the material options 3.4. The specialist tool is manufactured to specification 3.5. The specialist tool is tested and modified to satisfy the function 3.6. Design specifications are documented and retained in the enterprise filing systems
4. Use hand tools	4.1. Hand tools are safely located when not in immediate use 4.2. Material is located and held in position for hand tool application 4.3. Hand tools safety requirements are complied with throughout the operation 4.4. The full capability of the hand tool is professionally applied and adjusted to achieve the required specificity of outcome 4.5. Mid-operation maintenance is carried out to ensure continuing achievement of specified outcomes
5. Clean up work area and tools	5.1. All tools are cleaned, maintained and stored in accordance with manufacturers' specification 5.2. Equipment is cleaned, maintained and stored 5.3. Work area is cleared and waste removed 5.4. Workplace documentation and/or reports are completed

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

This describes the essential skills and knowledge and their level, required for this unit.

Required skills

- collect, organise and understand information related to work orders, basic plans and safety procedures
- communicate ideas and information to enable confirmation of work requirements and specifications, coordination of work with site supervisor, other workers and customers, and the reporting of work outcomes and problems
- interpret and apply technical and quality information in the identification, selection and maintenance of commercially superior hand tools
- work with others and in a team by recognising dependencies and using cooperative approaches to optimise work flow and productivity
- use pre-checking and inspection techniques which relate to the use of hand tools to avoid re-work and wastage
- identify the most appropriate tool, the setting specifications and the methods for maintaining the high precision needs throughout the work sequence
- recognise and respond to circumstances outside instructions or personal competence
- design and manufacture specialist hand tools required for unique but repetitive tasks/functions
- plan and organise activities, including the preparation and layout of the worksite and the obtaining of equipment and materials to avoid any back tracking, work flow interruptions or wastage
- use mathematical ideas and techniques to correctly complete measurements, calculate area and estimate other material requirements
- clarify and confirm work instructions
- plan work within given task parameters
- accept responsibility for given tasks
- set, monitor and satisfy personal work goals
- satisfy the competency requirements for the job
- maintain current knowledge of tools and materials
- seek learning opportunities
- use the limited workplace technology related to the selection and high precision use of hand tools.

Required knowledge

- State or Territory OHS legislation, regulations, standards and codes of practice relevant to use of hand tools
- organisational and site standards, requirements, policies and procedures for use of hand tools
- types, characteristics, uses, limitations and maintenance requirements of the range of hand tools used in furniture production

REQUIRED SKILLS AND KNOWLEDGE
• manufacturing specifications for hand tools • processes for evaluating the quality of hand tools in terms of specifications, safety, maintainability and commercial reputation • established communication channels and protocols • techniques for the design of specialised hand tools and the manufacturer of one-off tools • problem identification and resolution • workplace safety requirements and OHS legislation • work flow within the workplace

Evidence Guide

EVIDENCE GUIDE

The Evidence Guide provides advice on assessment and must be read in conjunction with the Performance Criteria, Required Skills and Knowledge, the Range Statement and the Assessment Guidelines for the relevant Training Package.

Overview of assessment

Critical aspects for assessment and evidence required to demonstrate competency in this unit

- Comply with legislation, regulations, standards, codes of practice and established safe practices and procedures for the use of hand tools
- Interpret work order and locate and apply relevant information
- Apply safe handling requirements for equipment, products and materials, including use of personal protective equipment
- Locate and apply relevant information related to hand tools
- Adopt and carry out correct procedures prior to and during use of the range of hand tools stipulated in the Range Statement
- Design and manufacture one specialist hand tool for a specified production function
- Tune and sharpen:
 - chisels
 - hard planes
 - spokeshaves
- Follow work instructions, operating procedures and inspection practices to:
 - prevent damage to goods, equipment and products
 - maintain required production output and product quality
 - minimise the risk of injury to self and others
- Work effectively with others
- Modify activities to cater for variations in workplace contexts and environment

Context of, and specific resources for assessment

- The application of competency is to be assessed in the workplace or simulated workplace
- Assessment is to occur under standard and authorised work practices, safety requirements and environmental constraints
- Assessment of essential underpinning knowledge, other than confirmatory questions, will usually be conducted in an off-site context
- Assessment is to comply with relevant regulatory or Australian Standards requirements
- The following resources should be made available:
 - workplace location or simulated workplace

EVIDENCE GUIDE	
	• range of quality hand tools and support documentation • a legitimate specialist hand tool requirement • specifications and work instructions
Method of assessment	• Assessment must satisfy the endorsed assessment guidelines of the Furnishing Industry Training Package • Assessment methods must confirm consistency and accuracy of performance (over time and in a range of workplace relevant contexts) together with application of underpinning knowledge • Assessment methods must be by direct observation of tasks and include questioning on underpinning knowledge to ensure its correct interpretation and application • Assessment may be applied under project related conditions (real or simulated) and require evidence of process • Assessment must confirm a reasonable inference that competency is able not only to be satisfied under the particular circumstance, but is able to be transferred to other circumstances • Assessment may be in conjunction with assessment of other hand tools related units of competency
Guidance information for assessment	

Range Statement

RANGE STATEMENT

The Range Statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording in the Performance Criteria is detailed below. Add any essential operating conditions that may be present with training and assessment depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts.

Legislative requirements	- are to be in accordance with applicable legislation from all levels of government that affect organisational operation - requirements may include but not be limited to award and enterprise agreements, industrial relations, Australian Standards, confidentiality and privacy, OHS, the environment, equal opportunity, anti-discrimination, relevant industry codes of practice, duty of care and heritage
OHS requirements	- are to be in accordance with Commonwealth, State or Territory legislation and regulations, organisational safety policies and procedures - requirements may include but not be limited to the use of personal protective equipment and clothing, fire fighting equipment, First Aid equipment, hazard and risk control and elimination, control of hazardous materials and substances, manual handling including lifting and carrying
Organisational requirements	may include but not be limited to legal, organisational and site guidelines, policies and procedures relating to own role and responsibility, quality assurance, procedural manuals, quality and continuous improvement processes and standards, OHS, emergency and evacuation, ethical standards, recording and reporting, access and equity principles and practices, equipment use, maintenance and storage, environmental management (waste disposal, recycling and re-use guidelines)
Instructions	may include but not be limited to workplace procedures relating to the use and operation of tools and equipment, production planning figures, workplace instructions including job sheets, plans, specifications, drawings and designs, workplace procedures relating to reporting and communications, and manufacturer instructions for the use of equipment and materials
Hand tools	may include, but not be limited to hand planes, chisels, hand saws, spokeshave, hammer, mallet, marking-out tools, files, rasps, scraper, screwdrivers, hand drill, straight edges, knives, clamps, steel/bronze wool, sand paper, brushes, stone, whetstone and grinder
Fault reporting	may be verbal or written

Unit Sector(s)

Unit sector	Furniture design and technology.
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Competency field

Competency field	
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Co-requisite units

Co-requisite units		