Australian Government

Department of Education, Employment and Workplace Relations

FPIWPP3228A Dry wood flakes

Release: 1

INDUSTRY SKILLS COUNCILS

Creating Australia's Future

FPIWPP3228A Dry wood flakes

Modification History

Not Applicable

Unit Descriptor

Unit descriptor

This unit describes the outcomes required to dry wood flakes for downstream use in board production, operate dryers and other ancillary equipment

General workplace legislative and regulatory requirements apply to this unit; however there are no specific licensing or certification requirements at the time of publication

This unit replaces FPIWPP446A Dry wood furnish

Application of the Unit

Application of the unit

The unit involves drying wood flakes in a forest products factory setting. The skills and knowledge required for competent workplace performance are to be used within the scope of the person's job and authority

Licensing/Regulatory Information

Refer to Unit Descriptor

Pre-Requisites

Prerequisite units

Employability Skills Information

Employability skills This unit contains employability skills

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Prepare for drying	1.1. Applicable ***Occupational Health and Safety*** (OHS), ***environmental***, ***legislative*** and ***organisational requirements*** relevant to drying wood flakes are identified and followed
	1.2. ***Work order*** is reviewed and checked with ***appropriate personnel***
	1.3. Type and quantity of ***flakes*** to be ***dried*** is assessed and acquired from the production process
	1.4. ***Equipment*** is selected appropriate to work requirements and checked for operational effectiveness in line with manufacturer's recommendations
	1.5. Drying process is planned in line with site procedures
	1.6. ***Communication*** with others is established and maintained in line with OHS requirements
2. Dry flake	2.1. ***Pre start-up checks*** are carried out on equipment in line with site requirements
	2.2. Dryer and hot oil system are started and continually monitored in line with operational procedures
	2.3. ***Emergency shut-down*** procedures are followed in response to a fire
	2.4. Drying temperature, humidity and ***feed rate*** are set for optimal recovery of product
	2.5. Flake is positioned and fed at rate appropriate to the machine speed, capacity, flake ***moisture content***, thickness and condition
	2.6. Flake is ***visually assessed*** and moisture levels measured to ensure specified outcome has been achieved
	2.7. ***Out-feed*** is coordinated to ensure efficient recovery of dried flake
	2.8. Sub-standard flake is rejected and ***disposed of*** in line with site procedures and environmental requirements
	2.9. Drying process and equipment faults are ***recorded and reported*** to the appropriate personnel
3. Redistribute flake	3.1. Flake is ***regraded*** in line with site requirements and industry standards
	3.2. Flake is directed and ***moved*** to ***storage*** or processing

ELEMENT	PERFORMANCE CRITERIA
	operations in line with site requirements
	3.3. Sub-standard material is rejected and disposed of in line with site requirements
	3.4. Work area is cleaned in line with site requirements
4. Conduct operator maintenance	4.1. Equipment lock-out procedures are followed in line with OHS legislation and site procedures
	4.2. Drying mechanisms are checked for effective condition
	4.3. Oil levels, air filters, conveyors and chains are checked, replenished or maintained
	4.4. Drying area is kept clear of dust, shavings and debris in line with OHS requirements

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

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

Required skills

- The ability to follow legislation, regulations, standards, codes of practice and established safe practices and procedures relevant to drying wood flakes
- Technical skills sufficient to use and maintain relevant tools, machinery and equipment; efficiently and safely dry flake; safely operate dryer and hot oil systems; visually assess flake
- Communication skills and interpersonal techniques sufficient to interact appropriately with colleagues and others in the workplace
- Literacy skills sufficient to accurately record and report workplace information, and maintain documentation
- Numeracy skills sufficient to estimate, measure and calculate time required to complete a task
- Problem solving skills sufficient to identify problems and equipment faults and demonstrate appropriate response procedures

Required knowledge

- Basic knowledge and understanding of applicable Commonwealth, State or Territory legislation, regulations, standards and codes of practice relevant to the full range of processes for drying wood flakes
- Environmental protection requirements, including the safe disposal of waste material and the cleaning of plant, tools and equipment

REQUIRED SKILLS AND KNOWLEDGE

- Organisational and site standards, requirements, policies and procedures for drying wood flakes
- Environmental risks and hazards
- Drying techniques
- Methods of visual inspection and characteristics of flake
- Distribution processes
- Established communication channels and protocols
- Problem identification and resolution strategies and common fault finding techniques
- Types of tools and equipment and procedures for their use, operation and maintenance
- Appropriate mathematical procedures for estimating and measuring, including calculating time to complete tasks
- Procedures for recording and reporting workplace information
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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, range statement and the Assessment Guidelines for the Training Package.

Overview of assessment	A person who demonstrates competency in this unit must be able to provide evidence that they can safely and efficiently dry flake in line with organisational requirements
Critical aspects for assessment and evidence required to demonstrate competency in this unit	The evidence required to demonstrate competency in this unit must be relevant to and satisfy all of the requirements of the elements of this unit and include demonstration of: • following applicable Commonwealth, State or Territory legislative and regulatory requirements and codes of practice relevant to drying wood flakes • following organisational policies and procedures relevant drying wood flakes • drying flake in readiness for storage and/or processing • redistributing flake on site using designated equipment • conducting operator maintenance on drying equipment

Context of and specific resources for assessment	• Competency is to be assessed in the workplace or realistically simulated workplace
	• Assessment is to occur under standard and authorised work practices, safety requirements and environmental constraints
	• Assessment of essential required knowledge, other than confirmatory questions, will usually be conducted in an off-site context
	• Assessment is to follow relevant regulatory or Australian Standards requirements
	• The following resources should be made available:
	  • workplace location or simulated workplace
	  • materials and equipment relevant to undertaking work applicable to this unit
	  • specifications and work instructions

Method of assessment	• Assessment must satisfy the endorsed Assessment Guidelines of the FPI11 Training Package • Assessment methods must confirm consistency and

EVIDENCE GUIDE

accuracy of performance (over time and in a range of workplace relevant contexts) together with application of required knowledge

- Assessment must be by direct observation of tasks, with questioning on required knowledge and it must also reinforce the integration of employability skills
- Assessment methods must confirm the ability to access and correctly interpret and apply the essential required knowledge
- 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 units of competency
- The assessment environment should not disadvantage the candidate
- Assessment practices should take into account any relevant language or cultural issues related to Aboriginality, gender or language backgrounds other than English
- Where the participant has a disability, reasonable adjustment may be applied during assessment
- Language and literacy demands of the assessment task should not be higher than those of the work role

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, if used in the performance criteria, is detailed below. 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) may also be included.

OHS requirements: are to be in line with applicable Commonwealth, State or Territory legislation and regulations, and

RANGE STATEMENT

organisational safety policies and procedures, and may include:

- personal protective equipment and clothing
- safety equipment
- first aid equipment
- fire fighting equipment
- hazard and risk control
- fatigue management
- elimination of hazardous materials and substances
- safe forest practices including required actions relating to forest fire
- manual handling including shifting, lifting and carrying

Environmental requirements may include:

- legislation
- organisational policies and procedures
- workplace practices

Legislative requirements: are to be in line with applicable Commonwealth, State or Territory legislation, regulations, certification requirements and codes of practice and may include:

- 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

Organisational requirements may include:

- 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 procedures

RANGE STATEMENT

	• ethical standards • recording and reporting requirements • equipment use and maintenance and storage requirements • environmental management requirements (waste minimisation and disposal, recycling and re-use guidelines)
Work order is to include:	• instructions for the drying of flake and may include: • species • colour • type • size • thickness • quantity • instructions for the environmental monitoring of work and procedures • environmental care requirements relevant to the work
Appropriate personnel may include:	• supervisors • suppliers • clients • colleagues • managers
Flakes	• are used to produce chipboard • are another process of breaking down wood or wood chips
Drying may include:	• pre-dryers • dryers • cooling sections • steam • heated air • gas
Equipment may include:	• single pass or multi pass dryers • flash dryers • furnaces and ancillary equipment such as continuous conveyor • pre-dryers • cooling sections • dry and wet silo storage

RANGE STATEMENT

- fuel feed systems
- combustors
- oil heating systems
- dust silos
- emergency generators
- effluent systems
- sluice systems
- recirculated air systems
- furnace systems
- fire control and suppression systems
- knife mill systems
- wet gisiger systems
- in-feed systems

and is to include:

- procedures for equipment lock-out such as protecting operators and co-workers from accidental injury by isolating the machine from the power source

Communication may include:

- verbal and non-verbal language
- constructive feedback
- active listening
- questioning to clarify and confirm understanding
- use of positive, confident and cooperative language
- use of language and concepts appropriate to individual social and cultural differences
- control of tone of voice
- body language

Pre start-up checks are conducted to ensure:

- machinery has been set-up correctly
- systems are performing accurately
- machinery is operating to optimum performance

Emergency shut-down is the immediate shutting off of the equipment to prevent an accident or prevent damage to the machine or product

Feed rate is to include:

- the rate of speed the material is passed through the drying equipment
- the impact on equipment

RANGE STATEMENT

	• the finish • the production output
Moisture content	• is the amount of moisture maintained in timber or timber products after drying to avoid cracking and deforming • in Australia generally ranges between 10% in warmer, more humid climates to 14% in cooler climates
Visually assessed is to include:	• the assessment of flakes to determine finish quality and faults
Out-feed	is the flake exiting from the drying operation
Disposing of may include:	• recycling sub-standard material • re-using sub-standard material
Records and reports may include:	• drying requirements • product type • size • inspection • grading and labelling outcomes • storage locations • quality outcomes • hazards • incidents • equipment malfunctions • and may be: manual • using a computer-based system other appropriate organisational communication system
Regrading	is the process of visually inspecting flake to re-classify quality and use after drying has taken place
On-site movement of material may include:	the use of: • conveyor belt systems • track systems • lifting equipment lifting equipment such as: • fork lifts • slings • trolley jacks • gantry cranes

RANGE STATEMENT

- loaders

assistance with lifting such as:

- the involvement of two or more personnel to lift materials manually or to guide the movement of mechanical equipment

Storage may include:

- storage racks
- storage bays
- bins
- stacks
- pallet boxes
- modularised storage components
- temporary stacking bays (stand, frame or ground)

and may be divided into:

- standard product classification
- product designation
- size
- dimension
- stack number
- weight
- grade
- shelf life
- stock rotation position

Unit Sector(s)

Unit sector No sector assigned

Co-requisite units

Co-requisite units

Competency field

Competency field Wood Panel Products