



Australian Government

Department of Education, Employment and Workplace Relations

FPIWPP3216B Press material using the daylight process

Release: 1

FPIWPP3216B Press material using the daylight process

Modification History

Not Applicable

Unit Descriptor

Unit descriptor

This unit describes the outcomes required to set-up, operate and shut-down the press and ancillary equipment used to press material using the daylight process

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 FPIWPP3216A Press material using the daylight process

Application of the Unit

Application of the unit

The unit involves pressing material using the daylight process in a forest products 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 pressing	<p>1.1. Applicable Occupational Health and Safety (OHS), environmental, legislative and organisational requirements relevant to pressing material using the daylight process are identified and followed</p> <p>1.2. Work order is reviewed and checked with appropriate personnel</p> <p>1.3. Type and quantity of material to be pressed is acquired from the storage location</p> <p>1.4. Equipment is selected appropriate to work requirements and checked for operational effectiveness in line with manufacturer's recommendations</p> <p>1.5. Pressing process is selected in line with site procedures</p> <p>1.6. Communication with others is established and maintained in line with OHS requirements</p>
2. Press material	<p>2.1. Pre start-up checks are carried out on equipment in line with site requirements</p> <p>2.2. Press cycle times, pressures, temperatures and product parameters are set and adjusted for production requirements</p> <p>2.3. Material is pressed while monitoring and adjusting material position, feed rate, mat condition and press condition</p> <p>2.4. Unload and reload cycles are performed in line with site procedures</p> <p>2.5. Pressed material and thickness changes are regularly assessed and necessary changes to former, press set-up and blending requirements made</p> <p>2.6. Pressed material production is regularly checked to ensure it conforms with size and organisational requirements</p> <p>2.7. Pressing process and equipment faults are recorded and reported to the appropriate personnel</p>
3. Unload material	<p>3.1. Press is opened in line with operating procedures</p> <p>3.2. Material and forming equipment are separated and removed from press using unloading equipment</p> <p>3.3. Material is loaded into the cooling receiver, trimmed, checked and unloaded</p> <p>3.4. Material samples are tested to confirm that they</p>

ELEMENT**PERFORMANCE CRITERIA**

	follow industry standard and to check for <i>defects</i>
	3.5. Material with defects is rejected and <i>disposed of</i> in line with site procedures and environmental requirements
	3.6. Finished material is <i>transferred</i> for further processing in line with site requirements
4. Shut down and clean equipment	4.1. <i>Shutdown</i> procedures are coordinated with designated stop time and other line operators, and followed in line with OHS legislation and site procedures
	4.2. Blending equipment, press and handling equipment are stripped and cleaned in line with site operating procedures
	4.3. Press bars or stops, plates and screens are checked and cleaned
	4.4. Machine area is kept clear of foreign material, dust 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

- Technical skills sufficient to use and maintain relevant tools, machinery and equipment; efficiently and safely press material
- 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

- Applicable Commonwealth, State or Territory legislation, regulations, standards, codes of practice and established safe practices relevant to the full range of processes for pressing material using the daylight process
- Environmental protection requirements, including the safe disposal of waste

REQUIRED SKILLS AND KNOWLEDGE

material, the safe use and storage of chemicals, and the cleaning of plant, tools and equipment

- Organisational and site standards, requirements, policies and procedures for pressing material using the daylight process
- Environmental risks and hazards
- Material pressing processes
- Chip, flake and fibre characteristics
- Blending methods
- Storage systems and labelling
- 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

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 press material using the daylight process 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 pressing material using the daylight process
- following organisational policies and procedures relevant to pressing material using the daylight process
- pressing material in readiness for storage and/or processing
- operating blending and daylight press equipment to bond and produce pressed material
- redistributing material on site using designated 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 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

EVIDENCE GUIDE

Method of assessment

- Assessment must satisfy the endorsed Assessment Guidelines of the FPI11 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 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 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.

RANGE STATEMENT

OHS requirements:

are to be in line with applicable Commonwealth, State or Territory legislation and regulations, and 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
- legislation
- organisational policies and procedures
- workplace practices

Environmental requirements may include:

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

RANGE STATEMENT

and standards

- OHS, emergency and evacuation procedures
- 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)

Material may include:

- medium density fibreboard
- chipboard
- fibreboard
- other manufactured board products
- panels
- veneered panels
- chips (which are an output of breaking down logs into wood chips approximately the size of a 50 cent coin and then breaking these down to form smaller chips for chipboard production)
- fibre (which is the output product as a result of smashing wood chips into fibrous material which is then used to produce medium density fibreboard)
- flakes (which are the output product as a result of converting wood chips into a thinner chip material which is then used to produce panel products)

Daylight process may include:

- multi-daylight press operations

Work order is to include:

- instructions for the receipt/despatch and pressing of material to/from the designated storage location or processing

and may include:

- texture
- colour
- type
- size
- thickness
- quantity
- instructions for the environmental monitoring of work and procedures
- environmental care requirements relevant to

RANGE STATEMENT

- Appropriate personnel** may include:
- the work
 - supervisors
 - suppliers
 - clients
 - colleagues
 - managers
- Storage location** may include:
- the use of:
- 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
- Equipment** is to include:
- daylight process presses, which are driven by steam pressure and include:
 - electric
 - pneumatic or hydraulic loading and unloading equipment
 - pre-presses
 - formers
 - forming equipment
 - press bars or stops
 - cooling receivers
 - blending equipment
 - trimming equipment
- Pressing**
- is the process of compressing material using formers and a heat driven press system

RANGE STATEMENT

and includes consideration of:

- weight
- thickness
- length
- width
- bond
- porosity
- moisture content
- bare fibres
- foreign material
- visual appearance
- surface blemishes
- trimmed edge appearance

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:

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

Cycle

- is the process of forming material and pressing it until it is ready for cooling
- unloading the press and restarting the process commences another cycle
- process includes time, pressure and temperature considerations

Feed rate

is the rate of speed at which the blended material is pumped into the former

Former

is the piece of equipment which shapes the molten chips, flakes or fibre into sheet form

RANGE STATEMENT

- Blending** is the mixing of the chips, flakes or fibre with the binding ingredients and hardening agents
- Records and reports** may include:
- material type
 - 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 or other appropriate organisational communication system
- Forming equipment** is to include:
- mats
 - screens
 - trays
 - plates
- Cooling receiver** is the equipment and process used to cool the newly set and pressed material
- Testing**
- is the process of measuring moisture content, weight, thickness and density of the panels to achieve the desired outcome for all of these
 - ensures accurate forming and cycle times
 - allows for adjustment of the cycles accordingly
- Defects** may include:
- surface blemishes
 - discolouration
 - natural timber defects
 - forming deformities
- Disposing of** may include:
- recycling material with defects
 - re-using material with defects
- Transferral** may include: the use of:
- conveyor belt systems
 - track systems

RANGE STATEMENT

- lifting equipment such as:
 - fork lifts
 - slings
 - trolley jacks
 - gantry cranes
 - 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
- Shutdown** is to include:
- procedures for equipment lock-out, ie protecting operators and co-workers from accidental injury by isolating the machine from the power source
 - cleaning and maintaining all parts

Unit Sector(s)

Unit sector No sector assigned

Co-requisite units

Co-requisite units

Competency field

Competency field Wood Panel Products