



Australian Government

Department of Education, Employment and Workplace Relations

FPISAW3209B Align sawing production systems

Release: 1

FPISAW3209B Align sawing production systems

Modification History

Not Applicable

Unit Descriptor

Unit descriptor

This unit describes the outcomes required to align canter rings and chipper heads for wood chipping equipment, which are used for both primary and secondary processing of solid wood products. The unit includes checking equipment and shutdown procedures

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 FPISAW3209A Align sawing production systems

Application of the Unit

Application of the unit

The unit involves aligning sawing production systems 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. Conduct shut down	<p>1.1. Applicable <i>Occupational Health and Safety</i> (OHS), <i>environmental</i>, <i>legislative</i> and <i>organisational requirements</i> relevant to aligning sawing production systems are identified and followed</p> <p>1.2. Mechanical and safety components are removed, replaced and temporarily stored to provide access to alignment parts</p> <p>1.3. Guides are removed, replaced and temporarily located in a safe manner</p> <p>1.4. Work area is kept clear of dust, off-cuts and debris in line with OHS requirements</p>
2. Prepare for aligning	<p>2.1. <i>Work order</i> is reviewed and checked with <i>appropriate personnel</i></p> <p>2.2. Type of <i>canter rings</i> and <i>chipper heads</i> to be <i>aligned</i> are removed from the designated machinery</p> <p>2.3. <i>Equipment</i> is selected appropriate to work requirements and checked for operational effectiveness in line with manufacturer's recommendations</p> <p>2.4. Aligning process is planned in line with site procedures</p> <p>2.5. <i>Communication</i> with others is established and maintained in line with OHS requirements</p>
3. Align rings and heads	<p>3.1. <i>Equipment history</i> and records are accessed and interpreted</p> <p>3.2. Manufacturer's data and alignment instructions are obtained and interpreted</p> <p>3.3. <i>Performance</i> of rings and heads are assessed for alignment requirements</p> <p>3.4. Alignment procedure is conducted in a sequential manner in line with manufacturer's instructions</p> <p>3.5. Saw is checked for alignment and free operation</p> <p>3.6. Aligning process and equipment faults are <i>recorded and reported</i> to the appropriate personnel</p>

Required Skills and Knowledge

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 align canter rings and chipper heads
- 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 aligning sawing production systems
- Environmental protection requirements, including the safe disposal of waste material
- Organisational and site standards, requirements, policies and procedures for aligning sawing production systems
- Environmental risks and hazards
- Mechanical characteristics of sawing machines, chippers/canters and feed systems including line bars and carriages
- Equipment shutdown processes
- Alignment methods and settings
- Established communication channels and protocols
- Problem identification and resolution strategies and common fault finding techniques
- Types of tools and equipment and procedures for their safe 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 align canter rings and chipper heads within 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 aligning sawing production systems
- following organisational policies and procedures relevant to aligning sawing production systems
- aligning canter rings and chipper heads in line with the work order and within prescribed organisational requirements
- removing and replacing canter rings and chipper heads from 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

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 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. **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
- machine isolation and guarding
- 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 and standards

RANGE STATEMENT

- 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)

Work order is to include:

- instructions for the alignment of canter rings and chipper heads in designated equipment

and may include:

- 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

Canter rings

are parts associated with the movement of logs to the chipper

Chipper heads

are the cutting component of the log chipping equipment

Alignment

is the process of positioning various parts of sawing systems in relation to each other in order to:

- reduce sawing deviation, vibration, and downtime
- increase production rates
- improve quality of sawn finish

Equipment may include:

- tools for removing and adjusting mechanical parts
- special jigs and precision measuring equipment
- laser equipment
- surveying instruments
- portable electrical lighting
- feeler gauges

RANGE STATEMENT

- engineers rules
- vernier callipers
- micrometers
- plumb lines
- piano wire or string lines
- pointer
- markers
- portable computers that re-calibrate machine settings

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

Equipment history is to include:

- log of previous alignment measurements, settings, adjustments and timelines

Performance is to include:

- assessing sawing machine and system performance against recovery percentages, product sizing and/or standard deviation

Records and reports may include:

- performance
- adjustment
- historic records
- hazards
- incidents
- equipment malfunctions

and may be:

- manual
- using a computer-based system or another appropriate organisational communication system

Unit Sector(s)

Unit sector No sector assigned

Co-requisite units

Co-requisite units

Competency field

Competency field Sawmilling and Processing