



Australian Government

Department of Education, Employment and Workplace Relations

FPPSPR210A Monitor and control stock preparation systems

Release: 1

FPPSPR210A Monitor and control stock preparation systems

Modification History

Not Applicable

Unit Descriptor

Unit descriptor	This unit describes the outcomes required to monitor and control stock preparation systems in the pulp and paper industry General legislation, regulatory, licensing and certification requirements applicable to this unit are detailed in the range statement Specific high risk (and non-high risk) load shifting licensing requirements for this unit may be applicable and are to be met separately and prior to the achievement of this unit
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Application of the Unit

Application of the unit	This unit applies to operators who monitor and control stock preparation systems in the pulp and paper industry. This work typically involves complex integrated equipment and continuous operations This unit generally applies to those who: • monitor and control process and systems • control quality of stock, chemicals and water • conduct product grade change, and • record process and system information to meet safety, quality and productivity requirements It does not include starting up, shutting down or troubleshooting and rectifying stock preparation systems
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Licensing/Regulatory Information

Refer to Unit Descriptor

Pre-Requisites

Not Applicable

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. Monitor and control process and systems	1.1. Process and systems are monitored and controlled within Occupational Health and Safety (OHS) regulations, environmental and safe working requirements/practices, Standard Operating Procedures (SOP), and housekeeping requirements 1.2. Production requirements are checked at start of shift to plan day's activities as required 1.3. Operational status is confirmed by inspection, observations and other information 1.4. Process supplies are maintained and controlled to meet production requirements 1.5. Systems are monitored to ensure stock preparation systems are within parameters 1.6. Process and system variations from operating parameters are identified, rectified and/or reported 1.7. Operator level preventative maintenance is undertaken as required 1.8. Changes to machine operations are communicated to relevant personnel 1.9. Stock systems are monitored and adjusted during stock-off situations as required
2. Control quality of stock, chemicals and water	2.1. Quality of stock, chemicals and water is controlled within OHS regulations, environmental and safe working requirements/practices, SOP, and housekeeping requirements 2.2. Quality of stock, chemical and water is monitored and controlled within parameters 2.3. Test samples are taken and test results are interpreted and recorded as required 2.4. Adjustments are made to ensure quality requirements are met 2.5. Routine observations and assessments are conducted on product and system operations 2.6. Changes to product requirements are communicated to relevant personnel
3. Conduct product grade change	3.1. Product grade changes are conducted within OHS regulations, environmental and safe working requirements/practices, SOP, and housekeeping requirements 3.2. Product grade change is completed within OHS, SOP, environmental and safe working requirements

ELEMENT**PERFORMANCE CRITERIA**

	and practices
	3.3. Grade change requirements are determined and planned
	3.4. Run out of stock, chemicals and water systems are coordinated and completed as required
	3.5. Flushing, draining and cleaning of stock, chemicals and water systems are completed as required
	3.6. Process set ups/adjustments are implemented to meet new grade requirements
	3.7. Raw materials and supplies required for new grade requirements are staged ready for use
	3.8. Stock, chemicals and water systems startups are coordinated and implemented for new grade requirements as required
	3.9. Grade change is coordinated and implemented on the run as required
4. Record process and system information	4.1. Recording process and system information is completed within OHS regulations, environmental and safe working requirements/practices, SOP, and housekeeping requirements
	4.2. Systems and production information is recorded
	4.3. Problems or variations in performance are recorded and communicated

Required Skills and Knowledge**REQUIRED SKILLS AND KNOWLEDGE**

This describes the skills and knowledge required for this unit.

Required skills

- Uses required forms of communication in monitoring and controlling stock preparation systems
- Reads and interprets required documentation, procedures and reports
- Interprets instruments, gauges and data recording equipment
- Accesses, navigates and enters computer-based information
- Identifies and actions problems within level of responsibility
- Interprets and plans grade change requirements
- Co-ordinates and conducts grade changes

REQUIRED SKILLS AND KNOWLEDGE

- Takes samples, conducts tests, interprets and records results as required
- Uses measuring equipment as required
- Identifies and monitors process control points
- Maintains situational awareness in the work area
- Operates high risk (and non-high risk) load shifting equipment as required
- Analyses and uses sensory information to adjust process to maintain safety, quality and productivity
- Uses electronic and other control systems to control equipment and processes as required

Required knowledge

- Procedures, regulations and legislative requirements relevant to stock preparation systems including OHS, environmental including relevant sustainability requirements/practices, SOP, isolation procedures, safe working requirements, risks and hazard identification and housekeeping
- Relevant forms of communication
- Basic problem-solving techniques consistent with level of responsibility
- Sampling and testing process for plant and system operations, and process monitoring - purpose, standards and procedures as per site agreements
- Stock preparation in-process tests and procedures
- Working knowledge of stock preparation plant, processes, layout and associated services including operating parameters, variation and associated adjustments within level of responsibility
- Grade requirements
- Quality requirements
- Materials and supplies and how they influence paper properties
- Grade change processes and coordination
- Timing for materials and supplies run out
- Application of high risk (and non-high risk) load shifting equipment, as required
- Sensory information that indicates a deviation from standard operating parameters
- Sufficient knowledge of electronic and other control systems, operation and application to make appropriate adjustments that control stock preparation systems, within level of responsibility

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

EVIDENCE GUIDE

Guidelines for the Training Package.

Overview of assessment

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

Evidence should be relevant to the work. It should satisfy the requirements of the elements and performance criteria and include consideration of:

- the required knowledge and skills tailored to the needs of the specific workplace
- applicable OHS regulations, environmental and safe working requirements/practices, SOP and housekeeping requirements
- applicable aspects of the range statement
- practical workplace demonstration of skills in the monitoring and controlling of stock preparation systems

Context of and specific resources for assessment

A workplace assessment must be used to assess:

- the application of required knowledge on the job
- the application of skills on the job, over time and under a range of typical conditions that may be experienced in stock preparation systems

Access to the full range of equipment involved in integrated continuous manufacturing of stock preparation systems in a pulp or paper mill is required

Method of assessment

A combination of assessment methods should be used. The following examples are appropriate for this unit:

- observation of applied skills and knowledge on the job
- workplace demonstrations via a mock-up or simulation that replicate part/s of the job
- answers to written or verbal questions about specific skills and knowledge
- third-party reports from relevant and skilled personnel
- written evidence e.g. log sheet entries, checklist entries, test results

Assessment processes and techniques must be culturally appropriate and in keeping with the language and literacy capacity of the learner and the work being performed. This includes conducting an assessment in a manner that allows thoughts to be conveyed verbally so that the learner can both understand and be

EVIDENCE GUIDE

understood by the assessor (e.g. use plain English and terminology used on the job)

A holistic assessment with other units relevant to the pulp and paper industry, mill and job role is recommended

Additional information on approaches to assessment for the pulp and paper industry is provided in the Assessment Guidelines for this Training Package

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.

Productivity requirements may include:

- energy efficiency
- waste minimisation
- evaporation minimisation, including landfill and waste water reduction
- environmentally safe waste disposal
- consideration of resource utilisation, including fibre efficiency
- minimising delays
- chemical recovery maximisation
- meeting key performance indicators
- line speed
- handovers
- quality checks
- meeting output targets i.e. net tonnes per employee per annum
- machine/process time availability i.e. time the machine or process is making product
- machine/process production rate

Systems and functions involved in stock preparation may include:

- refining systems
- blending system

RANGE STATEMENT

	• proportioning system • broke system • stock chests • water chests • cleaning system • water recovery system • chemical and additive plants • bale handler • broke baler • wire coiler
Materials and supplies may include:	• water • stock • compressed air • chemicals • additives • steam • baled pulp
Equipment may include:	• refiners • pumps • valves • chests • agitators • pulpers • screens • cleaners • showers • disc deckers • consistency controllers • screw press • water recovery equipment • computer systems • electronic screens and alarms • process control systems • fully automated, semi-automated, manually operated plant and equipment appropriate to stock preparation systems
Electronic control systems may include:	• Digital Control System (DCS) • touch screens • robotics
Hazards and risks involved in	• steam and/or gas leaks

RANGE STATEMENT

stock preparation may include:

- fires
- nip points
- compressed air
- hot surfaces
- electrical
- entanglement
- slip hazards/falls
- energy
- pressures
- chemicals
- fumes
- confined spaces
- dust

Legislation, regulatory, licensing and certification requirements may include:

- OHS and environmental requirements (local, state and commonwealth)
- as applicable, activity or task specific high risk (and non-high risk) load shifting licensing requirements

Documentation, procedures and reports may include:

- SOP
- site policy and procedures
- environmental sustainability requirements/practices
- plant manufacturing operating manuals
- confined space requirements
- vendor documentation
- reference manual
- grade specifications
- quality procedures
- oil or chemical spills and disposal guidelines
- plant isolation documentation
- housekeeping
- safe work documentation e.g. plant clearance, job safety analysis, permit systems
- maintenance logs
- job sheets
- operating log
- production instructions
- Materials Safety Data Sheets (MSDS)
- process and instrument diagrams

Maintenance may include:

- operator level maintenance as per site agreements

RANGE STATEMENT

- operator maintenance schedules
 - maintenance systems
 - maintenance suppliers
 - pro-active maintenance strategies e.g. Total Productive Maintenance (TPM), Reliability Centred Maintenance (RCM)
- Actions may include:
- process adjustments
 - reporting to authorised person
 - rectifying problem within level of responsibility
- Communications may include
- interactions with:
- team members
 - production/service co-ordinators
 - internal/external customers and suppliers
 - maintenance services
 - operational management
 - statutory authorities

RANGE STATEMENT

Situational awareness may include

awareness of:

- traffic
- pedestrians
- location of equipment
- product
- hazards
- obstructions
- unexpected movement

Sensory information may include:

- visual
- sound
- feel
- touch
- smell
- vibration
- temperature

Forms of communications may include:

- written e.g. log books, emails, incident and other reports, run sheets, data entry
- reading and interpreting documentation e.g. standard operating procedures, manuals, checklists, drawings
- verbal e.g. radio skills, telephone, face to face, handover
- non-verbal e.g. hand signals, alarms, observations
- signage e.g. safety, access

Unit Sector(s)

Not Applicable