



Australian Government

Department of Education, Employment and Workplace Relations

FPPFCO210A Monitor, control and shutdown finishing and converting operations

Release: 1

FPPFCO210A Monitor, control and shutdown finishing and converting operations

Modification History

Not Applicable

Unit Descriptor

Unit descriptor

This unit describes the outcomes required to monitor, control and shut down finishing and converting operations 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

Application of the Unit

Application of the unit

This unit applies to operators who monitor, control and shut down finishing and converting operations in the pulp and paper industry. This work typically involves complex integrated equipment and continuous operations
This unit generally applies to those who:

- operate and monitor processes and systems
- control product quality and production
- conduct equipment shutdown, and
- record process and system information

to meet safety, quality and productivity requirements
It does not include preparing and starting up finishing and converting operations or troubleshooting and rectifying finishing and converting systems

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. Operate and monitor processes and systems	1.1. Processes and systems are operated and monitored 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. Planned production requirements are confirmed and communicated to relevant personnel 1.4. Operations and systems are monitored and maintained within process parameters (range of variables) consistent with production requirements 1.5. Monitoring displays and devices are interpreted and responded to 1.6. Setup for product change is undertaken as required
2. Control product quality and production	2.1. Product quality and production is controlled within OHS regulations, environmental and safe working requirements/practices, SOP, and housekeeping requirements 2.2. Product is monitored and controlled to production and quality requirements 2.3. Routine observations and assessments are conducted on product and system operations 2.4. Adjustments are made to control production and quality requirements 2.5. Test results are interpreted and recorded as required 2.6. Changes to product requirements are communicated to relevant personnel
3. Conduct equipment shutdown	3.1. Equipment shutdown is conducted within OHS regulations, environmental and safe working requirements/practices, SOP, and housekeeping requirements 3.2. Shutdown plan is communicated with relevant personnel 3.3. Shutdown procedures are carried out 3.4. Cause of unplanned shutdown is identified and rectified 3.5. Shutdown details are recorded 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. System and production information is recorded

ELEMENT**PERFORMANCE CRITERIA**

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, controlling and shutting down finishing and converting operations
- Reads and interprets required documentation, procedures and reports
- Interprets production requirements and work instructions
- Interprets instruments, gauges and data recording equipment
- Prepares written information and enters data to support groups and teams
- Accesses, navigates and enters computer-based information
- Identifies and actions problems within level of responsibility
- Identifies and monitors process control points
- Maintains situational awareness in the work area
- Implements isolation or lockout procedures
- Identifies and responds appropriately to shutdown causes
- Respond to problems associated with plant shutdown and unplanned shutdown to ensure safety quality and productivity
- Coordinates and plans shutdown activity
- Uses hand tools
- Uses cleaning equipment
- Perform tests and interprets and record results if required
- Uses measuring equipment as required
- Operates plant and equipment
- Operates high risk (and non-high risk) load shifting equipment as required
- Analyses and uses sensory information to adjust process to maintain and co-ordinate 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 finishing and converting operations including OHS, environmental including relevant sustainability requirements/practices, SOP, isolation procedures, safe working

REQUIRED SKILLS AND KNOWLEDGE

requirements, risks and hazard identification and housekeeping

- Relevant forms of communication
- Basic problem-solving techniques consistent with level of responsibility
- Working knowledge of finishing and converting operations, processes, layout and associated services sufficient to monitor, control and shut down finishing and converting operations within level of responsibility
- Types, causes and effects of finishing and converting plant shutdowns
- Required responses to all unplanned shutdowns (e.g. power outage, mechanical breakdown, blockages, jamming, air supply, control system failure) to ensure safety quality and productivity
- Process and procedures for plant shutdowns and unplanned shutdowns
- Plant and machinery functions and operations
- Emergency procedures and responses
- Sampling and testing process for plant and system operations, and process monitoring - purpose, standards and procedures as per site agreements
- Equipment setup procedures and adjustments
- Product types and quality requirements
- Designated areas for waste
- 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 finishing and converting operations, 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 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 monitoring, controlling and shutting down finishing and converting operations

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 finishing and converting operations

Access to the full range of equipment involved in integrated continuous manufacturing of finishing and converting operations 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

EVIDENCE GUIDE

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 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

RANGE STATEMENT

- machine/process production rate

RANGE STATEMENT

Finishing and converting processes may include:

- winding and re-winding
- decorating
- lotionising
- calendering
- water marking
- perforating
- slitting and cutting
- embossing
- laminating
- folding
- printing
- bonding
- core making
- wrapping and packing

Materials and supplies may include:

- parent roll or reel
- lotion
- shrink and stretch wraps
- pallets
- sheet paper
- labelling and stencilling
- wrap paper
- customer rolls
- boxes
- polythene wrap
- glues
- cartons
- strapping
- printing inks
- shippers
- reams
- signs and labels
- core board
- scent
- rolls

Equipment and systems may include:

- separate servo controlled motors and drives
- electronic sensors and proximity system
- light curtains
- category three plus guarding
- program formatting
- programmable production configurations

RANGE STATEMENT

- pre-set
- modifiable
- quick change parts e.g. snap lock
- reels and winding equipment
- wrapping and packing equipment
- guillotine, knives and cutting equipment
- conveying systems
- materials handling equipment
- flexographic printing equipment used for decorating
- overhead cranes
- testing and measuring equipment
- roll grab attachments
- warehousing equipment
- warehousing control systems
- electronic, pneumatic and hydraulic process controls
- computer systems
- electronic screens and alarms
- process control systems
- analogue and digital instruments
- fully automated, semi-automated, manually operated plant and equipment appropriate to finishing and converting operations

RANGE STATEMENT

- Auxiliary systems may include:
- air
 - lubrication
 - vacuum
 - dust extraction system
- Electronic control systems may include:
- portable control device
 - touch screens
 - robotics
- Legislation, regulatory, licensing and certification requirements may include:
- OHS and environmental requirements (local, state and commonwealth)
 - activity or task specific high risk (and non-high risk) load shifting licensing requirements
- Documentation, procedures and reports may include:
- SOP
 - enterprise policies, procedures and guidelines
 - environmental sustainability requirements/practices
 - plant manufacturing operating manuals
 - production schedules
 - production plans
 - production specifications
 - quality certification e.g. ISO
 - quality procedures
 - oil or chemical spills and disposal guidelines
 - plant isolation documentation
 - safe work documentation e.g. plant clearance, job safety analysis, permit systems
 - reference documents on theory of operation of processes and systems
 - vendor manuals
 - checklists
 - Material Safety Data Sheets (MSDS)
- Maintenance may include:
- operator level maintenance as per site agreement
 - operator maintenance schedules
 - maintenance supplies
 - maintenance systems
 - maintenance suppliers
 - pro-active maintenance strategies e.g. Total

RANGE STATEMENT

Productive Maintenance (TPM), Reliability
Centred Maintenance (RCM)

RANGE STATEMENT

Quality checks and tests may include:

- roll density
- core slippage
- damaged packaging
- reel hardness
- core size
- colour matching
- bulk
- core strength
- sheet size
- roll appearance
- print quality
- cut quality
- MD&CD tensile
- core scenting
- packaged product
- stretch
- roll size
- perforations
- product identification
- warehousing records

Required action in the event of a missing or faulty component may include:

- operator level maintenance
- involvement of maintenance personnel
- replacement of component
- communication with appropriate personnel

Actions may include:

- process adjustments
- reporting to authorised person
- rectifying problem within level of responsibility

Communications may include

interaction with:

- warehousing personnel
- internal/external customers and suppliers
- maintenance services
- team members
- operational management
- statutory authorities

Situational awareness may include awareness of:

RANGE STATEMENT

- traffic
 - pedestrians
 - location of equipment
 - product
 - hazards
 - obstruction
 - 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. SOP, 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