



**Australian Government**

**Department of Education, Employment and Workplace Relations**

# **FPPFCO320A Prepare and start up finishing and converting operations**

**Release: 1**

## **FPPFCO320A Prepare and start up finishing and converting operations**

### **Modification History**

Not Applicable

### **Unit Descriptor**

#### **Unit descriptor**

This unit describes the outcomes required to prepare and start up 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 prepare and start up 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:

- establish production requirements for startup
- conduct setup for product change, and
- start up finishing and converting operations

to meet safety, quality and productivity requirements

It does not include monitoring, controlling and shut down of 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. Establish production requirements for startup	<ul style="list-style-type: none"><li>1.1. Production requirements for start up are established within Occupational Health and Safety (OHS) regulations, environmental and safe working requirements/practices, Standard Operating Procedures (SOP), and housekeeping requirements</li><li>1.2. Production plan is interpreted</li><li>1.3. Product specification is checked</li><li>1.4. Product supplies are confirmed available for production</li></ul>
2. Conduct setup for product change	<ul style="list-style-type: none"><li>2.1. Setup for product change is conducted within OHS regulations, environmental and safe working requirements/practices, SOP, and housekeeping requirements</li><li>2.2. Pre-setup checks are conducted on required components</li><li>2.3. Required action is taken if a component is missing or faulty</li><li>2.4. Isolation procedures are followed as required</li><li>2.5. Communication and coordination with team members during product change occurs as required</li><li>2.6. Components and accessories are loaded, installed and adjusted for setup as required</li><li>2.7. All isolations are confirmed as signed off and lifted where applicable</li><li>2.8. Initial quality checks and component adjustments are made</li><li>2.9. Required documentation is completed</li></ul>
3. Start up finishing and converting operations	<ul style="list-style-type: none"><li>3.1. Finishing and converting operations are started up within OHS regulations, environmental and safe working requirements/practices, SOP, and housekeeping requirements</li><li>3.2. Quality assurance checks are conducted from startup to ensure processes are maintained</li><li>3.3. Process adjustments from start up are carried out as required</li><li>3.4. Faults are identified and rectified as required</li><li>3.5. Confirmation for start up is communicated to relevant personnel as required</li></ul>

## **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 preparing and starting up finishing and converting operations
- Reads and interprets required documentation, procedures and reports
- Accesses, navigates and enters computer-based information
- Interprets production requirements and work instructions
- Interprets instruments, gauges and data recording equipment
- Prepares written information and enters data to support groups and teams
- Identifies and actions problems within level of responsibility
- Identifies and checks process control points
- Maintains situational awareness in the work area
- Implements isolation or lockout procedures
- Uses hand tools
- Uses cleaning equipment
- Operates plant and equipment
- Operates high risk (and non-high risk) load shifting equipment as required
- Uses testing and measuring equipment required for setup 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 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 prepare finishing and/or converting systems for production within level of responsibility
- Equipment setup procedures and adjustments
- Sampling and testing process for plant and system operations, and process monitoring - purpose, standards and procedures as per site agreements
- Product types and quality requirements
- Designated areas for waste
- Application of high risk (and non-high risk) load shifting equipment, as required

## REQUIRED SKILLS AND KNOWLEDGE

- 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 preparing and starting up 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

## EVIDENCE GUIDE

- 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 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

## RANGE STATEMENT

- 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
- 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



## RANGE STATEMENT

Equipment and systems may include:

- reams
- signs and labels
- core board
- scent
- rolls
- separate servo controlled motors and drives
- electronic sensors and proximity system
- light curtains
- category three plus guarding
- program formatting
- programmable production configurations
  - 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

Auxiliary systems may include:

- air
- lubrication
- vacuum
- dust extraction system

Electronic control systems may

- portable control device

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include:

- 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)

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

## RANGE STATEMENT

	<ul style="list-style-type: none"> <li>• stretch</li> <li>• roll size</li> <li>• perforations</li> <li>• product identification</li> <li>• warehousing records</li> </ul>
Required action in the event of a missing or faulty component may include:	<ul style="list-style-type: none"> <li>• operator level maintenance</li> <li>• involvement of maintenance personnel</li> <li>• replacement of component</li> <li>• communication with appropriate personnel</li> </ul>
Actions may include:	<ul style="list-style-type: none"> <li>• process adjustments</li> <li>• reporting to authorised person</li> <li>• rectifying problem within level of responsibility</li> </ul>
Communications may include	<p>interaction with:</p> <ul style="list-style-type: none"> <li>• warehousing personnel</li> <li>• internal/external customers and suppliers</li> <li>• maintenance services</li> <li>• team members</li> <li>• operational management</li> <li>• statutory authorities</li> </ul>
Situational awareness may include	<p>awareness of:</p> <ul style="list-style-type: none"> <li>• traffic</li> <li>• pedestrians</li> <li>• location of equipment</li> <li>• product</li> <li>• hazards</li> <li>• obstruction</li> <li>• unexpected movement</li> </ul>
Sensory information may include:	<ul style="list-style-type: none"> <li>• visual</li> <li>• sound</li> <li>• feel</li> <li>• touch</li> <li>• smell</li> <li>• vibration</li> <li>• temperature</li> </ul>
Forms of communications may include:	<ul style="list-style-type: none"> <li>• written e.g. log books, emails, incident and other reports, run sheets, data entry</li> <li>• reading and interpreting documentation e.g. SOP, manuals, checklists, drawings</li> </ul>

**RANGE STATEMENT**

- 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