



**Australian Government**

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

# **FPPCSK310A Operate process control equipment**

**Release: 1**

## **FPPCSK310A Operate process control equipment**

### **Modification History**

Not Applicable

### **Unit Descriptor**

#### **Unit descriptor**

This unit describes the outcomes required to operate process control equipment in the pulp and paper industry

General legislation, regulatory, licensing and certification requirements applicable to this unit are detailed in the range statement

### **Application of the Unit**

#### **Application of the unit**

This unit applies to persons who operate process control equipment in the pulp and paper industry. This work typically involves complex integrated equipment and continuous operations

This unit generally applies to those who:

- access and navigate control system
- monitor and control process, and
- respond to process variations and problems

to meet safety, quality and productivity requirements

### **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. Access and navigate control system	<p>1.1. Accessing and navigating control system is completed within OHS regulations, environmental and safe working requirements/practices, Standard Operating Procedures (SOP), and housekeeping requirements</p> <p>1.2. Control systems are identified and interpreted</p> <p>1.3. Control systems are accessed as required</p> <p>1.4. Control systems are navigated to meet job requirements</p>
2. Monitor and control process	<p>2.1. Monitoring and controlling process is completed within OHS regulations, environmental and safe working requirements/practices, SOP, and housekeeping requirements</p> <p>2.2. Control screen/s are monitored to check process status</p> <p>2.3. Equipment adjustments are made using process control systems</p>
3. Respond to process variations and problems	<p>3.1. Response to process variations and problems is completed within OHS regulations, environmental and safe working requirements/practices, SOP, and housekeeping requirements</p> <p>3.2. Process variations are identified</p> <p>3.3. Equipment adjustments are made in response to process variations and alarms</p>

## 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 operating process control equipment
- Reads and interprets required documentation, procedures and reports
- Accesses and navigates control systems

## REQUIRED SKILLS AND KNOWLEDGE

- Makes process adjustments using the control system
- Identifies and actions problems within level of responsibility
- Interprets instruments, gauges and other recording equipment
- Understands the effect of adjustments on part or product specifications
- Maintains situational awareness in the work area
- 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 operating process control equipment 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
- Materials, equipment and process sufficient to recognise material and equipment conditions which may lead to out of specification production
- Risk management using the hierarchy of controls applied to the operation of computer controlled machines/processes
- Approved hazard control, safety procedures and the use of PPE in relation to handling materials, equipment operation and cleanup
- Symbols used in process controls
- Computer-controlled machine operating procedures
- Typical equipment malfunctions
- Procedures for reporting equipment malfunctions
- Procedures for reporting product or part deviations
- 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, 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.

**Critical aspects for assessment and** Evidence should be relevant to the work. It should

## EVIDENCE GUIDE

### evidence required to demonstrate competency in this unit

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 operating process control equipment

### 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 operating process control equipment

Access to the full range of equipment involved in operating process control equipment 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 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

## EVIDENCE GUIDE

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.

#### Procedures

All operations are performed in accordance with procedures including:

- all relevant workplace procedures
- work instructions
- temporary instructions
- relevant industry and government codes and standards

#### Typical hazards may include:

- noise
- debris
- chemicals
- heavy loads
- hazardous materials
- moving equipment
- equipment operations
- nip points
- suspended loads
- high risk equipment
- electrical equipment failure
- fire

#### Problems:

means 'apply known solutions to a limited range of predictable problems'

- typical process and product problems may include:
  - machine electrical or mechanical

## RANGE STATEMENT

- malfunction
  - process deviation/variation
  - out of specification product
  - appropriate action for problems outside of area of responsibility may be reported to an appropriate person
  - appropriate action for solving problems within area of responsibility includes asking questions and seeking assistance from appropriate persons/sources
- Key variables to be monitored may include:
- speed
  - output rate
  - product integrity and general conformance to specification
- Equipment may include:
- computer systems
  - electronic screens and alarms
  - process control systems
  - analogue and digital instrumentation
  - fully automated, semi-automated, manually operated plant and equipment appropriate to process control equipment
- Processes may include:
- primary resources processes
  - waste paper handling processes
  - waste paper operations processes
  - pulping processes
  - chemical recovery systems
  - stock preparation systems
  - wet end processes
  - dry end processes
  - finishing and converting processes
  - warehousing and dispatch processes
  - water services processes
  - coated paper processes
  - steam generation processes
  - electrical power generation processes
- Legislation, regulatory, licensing and certification requirements may include:
- OHS and environmental requirements (local, state and commonwealth)
  - HAZCHEM
  - dangerous goods
  - external licensing requirements (for example, EPA, water authorities, local councils)



## RANGE STATEMENT

- Electronic control systems may include:
  - internal environmental control standards
  - Digital Control System (DCS)
  - touch screens
  - robotics
- Actions may include:
  - process adjustments
  - reporting to authorised person
  - rectifying problem within level of responsibility
- Communications may include interaction with:
  - internal/external customers and suppliers
  - team members
  - production/service co-ordinators
  - maintenance services
  - operational support personnel
  - operational management
  - statutory authorities
- Situational awareness may include awareness of:
  - traffic
  - pedestrians
  - location of equipment
  - product
  - hazards
  - obstruction
  - unexpected movement
- Forms of communication 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
- Sensory information may include:
  - visual
  - sound
  - feel
  - touch
  - smell
  - vibration

## **RANGE STATEMENT**

- temperature

## **Unit Sector(s)**

Not Applicable