Modification history

Release	Comments
Release 1	This version released with PPM Pulp and Paper Manufacturing Training Package Version 1.0.
Release 2	This version released with PPM Pulp and Paper Manufacturing Training Package Version 2.0.

PPMCPP440	Troubleshoot and rectify coated paper processes
Application	This unit of competency describes the skills and knowledge required to diagnose, rectify and report on plant, equipment or product quality faults in coated paper processes.
	This unit applies to senior operators and production specialists who troubleshoot and rectify coated paper processes in a pulp or paper manufacturing facility. This work typically involves complex integrated equipment and continuous operations. Coated paper processes describe a range of systems and sub systems including tail feed systems, chemical and material batching, laminating and coating, splicing, clay plant operation, calendaring, pre-reeler operations, super calendaring, rewindering, drying systems, internal unloading and combine rollers.
	No licensing, legislative or certification requirements apply to this unit at the time of publication.
Prerequisite Unit	Nil
Unit Sector	Pulp and Paper Manufacturing (PPM)

Elements	Performance Criteria
Elements describe the	Performance criteria describe the performance needed to demonstrate
essential outcomes.	achievement of the element.
1. Identify and diagnose	1.1 Identify and diagnose plant or equipment faults in coated paper
causes of process	processes in accordance with production requirements, relevant workplace
variation, plant or	health and safety procedures, risks and hazards identification and
equipment faults	environmental workplace procedures
	1.2 Interpret visual assessments and machine alarm systems to determine fault type and location
	1.3 Identify faults through routine physical inspections of plant, processes
	and equipment
	1.4 Use appropriate techniques to identify and locate cause and source of
	process variation, plant or equipment faults
	1.5 Access and analyse relevant historical data, as required to confirm
	diagnosis
	1.6 Communicate problems to relevant personnel
	1.7 Select, fit, use and maintain personal protective equipment according to
	job requirements and task to be undertaken
2. Rectify process variation,	2.1 Initiate, prior to fault rectification, emergency stop or shutdown, isolation
plant and equipment faults	and lockout procedures
	2.2 Isolate, repair or replace faulty equipment or instrumentation and
	undertake appropriate adjustments and rectification
	2.3 Implement corrective operational adjustments and maintenance requirements
	2.4 Restore normal operations and communicate to relevant personnel
3. Identify and rectify	3.1 Identify by observation, systematic sampling and testing product faults
product quality faults	or variations
product quality radits	3.2 Manage out of specification product
	3.3 Undertake sampling for tests to identify product faults or variations
	3.4 Conduct required tests
	3.5 Interpret test results and adjust to correct variations

Elements	Performance Criteria
Elements describe the essential outcomes.	Performance criteria describe the performance needed to demonstrate achievement of the element.
4. Record and report troubleshooting activities	4.1 Identify recording and reporting workplace requirements for troubleshooting 4.2 Document variations from specification and machine operation faults 4.3 Record assessment and evaluation of causes of deviation, and corrective action undertaken, according to standard operating or organisational procedures 4.4 Communicate relevant information to personnel

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description	
Reading	Interpret procedure manuals and test results	
Writing	Record and report test results and rectifications accurately and legibly using correct technical vocabulary	
Oral communication	 Use appropriate spoken communication strategies with work colleagues and other personnel on site to assist with analysis and resolution of operational problems and to manage troubleshooting and maintenance 	
Numeracy	Interpret instruments, gauges and data recording equipment	
	Use measuring equipment and undertake calculations to aid testing and troubleshooting	
Navigate the world of work	Use electronic and other control systems to control equipment and processes and make appropriate adjustments for coated paper processes	
Get the work done	Maintain situational awareness in the work area	
	 Analyse and use sensory information to adjust process to maintain and co-ordinate safety, quality and productivity 	

Unit Mapping Information			
Code and title current version	Code and title previous version	Comments	Equivalence status
PPMCPP440 Troubleshoot and rectify coated paper processes Release 2	PPMCPP440 Troubleshoot and rectify coated paper processes Release 1	Performance criteria added, minor changes to knowledge evidence	Equivalent unit

Links	Companion Volumes, including Implementation Guides, are available at
	VETNet:
	https://vetnet.education.gov.au/Pages/TrainingDocs.aspx?q=12998f8d-
	d0ac-40bc-a69e-72a600d4fd93

TITLE Assessment requirements for PPMCPP440 Troubleshoot and rectify coated paper processes

Performance Evidence

An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit. There must be evidence that the individual has undertaken troubleshooting and rectification of coated processes, at least twice in line with required enterprise intervals and has:

- selected and used appropriate methods in trouble shooting coated paper processes
- identified, diagnosed and rectified faults in plant, equipment and product quality relevant to coated paper processes
- undertaken sampling and testing on products and interpreted test results
- used and interpreted electronic control systems, including digital control system, touch screens or robotics to control equipment and processes
- read and interpreted documentation, procedures and reports relevant to coated paper processes
- communicated with stakeholders about troubleshooting, including internal and external customers and suppliers, team members, production/service co-ordinators, maintenance services, operator support personnel, operational management and statutory authorities
- communicated effectively and worked safely with others, in the work area when troubleshooting and rectifying coated paper processes.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- organisational procedures relevant to workplace health and safety with particular emphasis on:
 - use of personal protective equipment (PPE)
 - equipment lock out and isolation procedures
 - handling chemicals and hazardous substances, including spill and disposal guidelines
 - plant clearance requirements
 - emergency procedures and responses
 - job safety analysis documentation and processes
 - plant permit systems and processes
 - high risk load shifting licensing requirements where relevant
 - major hazard facility requirements where relevant
- documentation and procedures relevant to troubleshooting and rectifying coated paper processes in the pulp and paper industry including:
 - standard operating procedures (SOP)
 - production needs including output targets, production scheduling quality requirements, resources and energy use, waste minimisation
 - quality procedures
 - environmental sustainability requirements/practices
 - machinery and plant manufacturing operating manuals
 - enterprise policies and procedures
 - safety data sheets
 - plant isolation documentation
 - safe work documentation
 - maintenance logs
 - job sheets
 - site agreements
 - safety instructions
 - process and instrument diagrams
 - machine manuals
 - troubleshooting guides
 - incident reports
- coated paper processes and associated services sufficient to troubleshoot including:
 - plant layout
 - operating principles
 - causes and effects of adjustments made to coated paper plant and processes

Knowledge Evidence

- relationships between coated paper processes and associated services
- troubleshooting methods applicable to the operation of coated paper processes
- sampling and testing for plant and system operations, and process monitoring purpose, standards and procedures as per site agreements
- cause and effect of test results and actions relevant to troubleshooting
- product grade and process adjustment procedures for coated paper
- electronic and other control systems, operation and application to make appropriate adjustments that control coated paper processes.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace or a productive environment that accurately reflects performance in a workplace
- resources, equipment and materials:
 - access to the full range of tools and equipment involved in troubleshooting and rectifying integrated continuous manufacturing of coated paper processes in a pulp or paper manufacturing facility
 - electronic control systems which includes digital control system, touch screens or robotics
 - PPE required for operating coated paper processes
- specifications:
 - sample workplace documentation on workplace health and safety procedures, risks and hazards identification procedures, environmental and safe working requirements/practices, SOP and housekeeping requirements.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links	Companion Volumes, including Implementation Guides, are available at VETNet: https://vetnet.education.gov.au/Pages/TrainingDocs.aspx?q=12998f8d-d0ac-40bc-
	a69e-72a600d4fd93