

Modification history

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

PPMDEO440	Troubleshoot and rectify dry end systems
Application	<p>This unit of competency describes the skills and knowledge required to analyse, rectify and report on dry end systems in the pulp and paper industry.</p> <p>This unit applies to senior operators and production specialists who troubleshoot and rectify dry end systems in a pulp and paper manufacturing facility. Dry end operations describe a range of systems and sub systems including drying processes, reeling operations, chemical additive system, monitoring systems, sheet treatment processes, tail feed systems, broke system, on-line coating systems, calendering systems, vacuum systems, laser systems, slitter systems, sheet transfer systems, accumulator, cleaning showers.</p> <p>No licensing, legislative, regulatory, or certification requirements apply to this unit at the time of publication.</p>
Prerequisite Unit	Nil
Unit Sector	Pulp and Paper Manufacturing (PPM)

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Identify and analyse causes of systems and quality faults	1.1 Identify and analyse system or quality faults in dry end operations in accordance with production requirements, relevant workplace health and safety procedures, risks and hazards identification and environmental workplace procedures 1.2 Interpret alarm systems and observations to determine faults and location 1.3 Identify faults through routine physical inspections of plant, processes and equipment 1.4 Interpret sampling and results to identify variations from operating procedures 1.5 Use appropriate techniques to identify and locate cause and source of the problem 1.6 Access and analyse relevant data, as required to assist analysis 1.7 Communicate information to relevant personnel 1.8 Select, fit, use and maintain personal protective equipment according to job requirements and task to be undertaken
2. Rectify system and equipment faults	2.1 Initiate, prior to fault rectification, emergency stop or shutdown, and isolation procedures 2.2 Isolate, repair or replace faulty equipment and undertake appropriate adjustments and rectification 2.3 Implement corrective operational adjustments and maintenance requirements according to organisational procedures 2.4. Restore normal operations and communicate to relevant personnel
3. Rectify product quality faults	3.1 Identify by observation, inspection and testing, product quality faults or variations 3.2 Undertake sampling and conduct tests for product faults or variations 3.3 Interpret test results and adjust processes to correct variations from specifications

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
4. Record and report process performance and product quality data	4.1 Identify recording and reporting workplace requirements for process performance and product quality data 4.2 Document variations from specification and performance 4.3 Deal with out of specification product according to standard operating procedures 4.3 Record corrective action undertaken, according to organisational procedures

Foundation Skills	
<i>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.</i>	
Skill	Description
Reading	<ul style="list-style-type: none"> Interpret specifications, procedure manuals and test results
Writing	<ul style="list-style-type: none"> Record and report test results and rectifications accurately and legibly using correct technical vocabulary Access, navigate and enter computer based information
Oral communication	<ul style="list-style-type: none"> Select and use appropriate spoken communication strategies with work colleagues and other personnel on site
Numeracy	<ul style="list-style-type: none"> Interpret instruments, gauges and data recording equipment
Navigate the world of work	<ul style="list-style-type: none"> Use electronic and other control systems to control equipment and processes and make appropriate adjustments for troubleshooting processes
Get the work done	<ul style="list-style-type: none"> Maintain situational awareness in the work area Analyse and use sensory information to adjust process to maintain and coordinate safety, quality and production

Unit Mapping Information			
Code and title current version	Code and title previous version	Comments	Equivalence status
PPMDEO440 Troubleshoot and rectify dry end systems Release 2	PPMDEO440 Troubleshoot and rectify dry end systems 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 PPMDEO440 Troubleshoot and rectify dry end systems
Performance Evidence	
<p>An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit. There must be evidence that the individual has:</p> <ul style="list-style-type: none"> • analysed and rectified dry end systems at least twice in line with required enterprise intervals • selected and used appropriate trouble shooting methods in dry end processes • identified and rectified faults in plant, equipment and product quality, relevant to dry end processes • used and interpreted electronic control systems, including digital control system (DCS), touch screens or robotics to control equipment and processes as required during processing • communicated effectively and working safely with others, in the work area when rectifying dry end systems. 	

Knowledge Evidence	
<p>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:</p> <ul style="list-style-type: none"> • organisational procedures relevant to workplace health and safety with particular emphasis on: <ul style="list-style-type: none"> • 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 workplace procedures relevant to troubleshooting and rectifying dry end systems in the pulp and paper industry and including: <ul style="list-style-type: none"> • 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 and safe work documentation which includes SOP, risks and hazard identification and housekeeping • maintenance logs, job sheets and production instructions • dry end plant processes and associated services sufficient to troubleshoot including: <ul style="list-style-type: none"> • plant layout • principles of operation • causes and effects of adjustments made to dry end systems • relationships between dry end systems and associated services • troubleshooting methods applicable to the operation of dry end systems • sampling and testing for plant and system operations, and process monitoring - purpose, standards and procedures as per site agreements • cause and effect of unplanned shutdown and appropriate responses • mill maintenance system as it applies to dry end plant and processes • electronic and other control systems, operation and application to make appropriate adjustments that control dry end systems. 	

Assessment Conditions
<p>Assessment of skills must take place under the following conditions:</p> <ul style="list-style-type: none">• physical conditions:<ul style="list-style-type: none">• a workplace or a productive environment that accurately reflects performance in a workplace• resources, equipment and materials:<ul style="list-style-type: none">• access to the full range of tools and equipment involved in integrated continuous manufacturing of dry end operations in a pulp or paper manufacturing facility• electronic control systems including DCS, touch screens or robotics• materials used in dry end processes including chemicals, compressed air, water, electricity, gas, steam, additives, machine clothing and ropes and belts• PPE required for trouble shooting and rectifying dry end operations• specifications:<ul style="list-style-type: none">• sample workplace documentation on workplace health and safety procedures, risks and hazards identification procedures, environmental and safe working requirements/practices, SOP and housekeeping requirements. <p>Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.</p>

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