

**Modification history**

Release	Comments
Release 1	This version released with PPM Pulp and Paper Manufacturing Training Package Version 3.0.

<b>PPMDEO2XX</b>	<b>Monitor and control dry end operations</b>
<b>Application</b>	<p>This unit of competency describes the skills and knowledge required to monitor and control dry end operations, ensure product quality, complete product grade changes and record and report production data.</p> <p>This unit applies to production workers who, under supervision, assist in the dry end operations of a paper manufacturing facility, undertaking routine work in monitoring, identifying and solving predictable problems that occur with integrated equipment and continuous operations.</p> <p>Dry end operations cover 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 and coated paper systems, calendering systems, vacuum systems, laser systems, slitter systems, sheet transfer systems, accumulator and cleaning showers.</p> <p>No licensing, legislative or certification requirements apply to this unit at the time of publication.</p>
<b>Prerequisite Unit</b>	Nil
<b>Unit Sector</b>	Dry end operations (DEO)

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. Prepare to monitor dry end operations	1.1 Check production requirements at start of shift and plan work activities according to work health and safety and standard operating procedures 1.2 Identify health and safety hazards and report safety concerns 1.3 Select and fit personal protective equipment according to safety requirements 1.4 Check tools and equipment are operational, and supplies are available
2. Monitor and maintain process	2.1 Confirm operational status by inspection, observation and other information 2.2 Maintain process supplies to meet production requirements 2.3 Monitor process to ensure dry end system operations are within specification 2.4 Identify, rectify or report routine variations from specification 2.5 Monitor and maintain process levels to maintain productivity requirements 2.6 Detect sheet breaks and re-establish sheet according to operating procedures 2.7 Complete routine preventative maintenance according to maintenance schedules
3. Maintain product quality	3.1 Monitor and maintain sheet to quality requirements 3.2 Conduct routine visual observations and assessments on product and system operations 3.3 Sample, test and record product quality to ensure production requirements are maintained 3.4 Adjust system operation to rectify out-of-specification product and maintain productivity requirements

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. Complete product grade change	4.1 Identify grade change requirements 4.2 Shut down dry end systems according to operating procedures 4.3 Carry out process setups or adjustments to meet new grade requirements 4.4 Implement equipment start-ups to meet new grade requirements 4.5 Implement grade change on the run according to product specifications
5. Record and report product and process data	5.1 Interpret production data and enter into recording system 5.2 Communicate problems or variations with process, product or equipment to relevant personnel

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"> <li>Interpret information in workplace procedures and maintenance schedules</li> </ul>
Writing	<ul style="list-style-type: none"> <li>Complete accurate basic records in the required format</li> </ul>
Oral communication	<ul style="list-style-type: none"> <li>Provide information about problems or variations with process, products and equipment using clear language and industry terminology</li> </ul>
Numeracy	<ul style="list-style-type: none"> <li>Interpret basic numerical settings on instruments, gauges and data recording equipment</li> <li>Record basic numerical data for test results and production outcomes</li> </ul>

Unit Mapping Information			
Code and title current version	Code and title previous version	Comments	Equivalence status
PPMDEO2XX Monitor and control dry end operations	PPMDEO210 Monitor and control dry end operations	Merged unit. Element added. Changes to performance criteria, foundation skills, performance and knowledge evidence. Assessment conditions updated. Addresses coated paper processes.	Not Equivalent
PPMDEO2XX Monitor and control dry end operations	PPMCP210 Monitor and control coated paper processes	Merged unit. Element added. Changes to performance criteria, foundation skills, performance and knowledge evidence. Assessment conditions updated.	Not Equivalent

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

<b>TITLE</b>	<b>Assessment requirements for PPMDEO2XX Monitor and control support for dry end operations</b>
<b>Performance Evidence</b>	
<p>An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit.</p> <p>There must be evidence that the individual has monitored and controlled dry end operations for at least two operational intervals, including for each interval:</p> <ul style="list-style-type: none"> <li>• completed checks throughout the process and responded appropriately to variations from process and product specifications</li> <li>• completed routine maintenance on equipment</li> <li>• completed a product grade change</li> <li>• completed accurate records for system operation, production outcomes and equipment faults.</li> </ul>	

<b>Knowledge Evidence</b>	
<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"> <li>• workplace procedures relevant to work health and safety for dry end operations, including: <ul style="list-style-type: none"> <li>• use of personal protective equipment</li> <li>• equipment lock out and isolation procedures</li> <li>• handling chemicals and hazardous substances, including spill and disposal guidelines</li> <li>• plant clearance requirements</li> <li>• emergency procedures and responses</li> <li>• job safety analysis documentation and processes</li> </ul> </li> <li>• permits and licensing requirements for facility hazards and high risk plant and equipment relevant to dry end operations</li> <li>• workplace environmental sustainability requirements and practices for dry end operations, including workplace biotechnological applications and processes and biomass-derived products</li> <li>• system layout for dry end plant</li> <li>• purpose, features and operation of dry end system plant, operating parameters and allowable variations</li> <li>• operation and application of electronic and other control systems to control dry end operations</li> <li>• key features of the full range of processes involved in controlling dry end operations and coordinating grade changes</li> <li>• purpose of, and processes for sampling and testing product quality, plant and system operations</li> <li>• quality requirements for different types of dry end product</li> <li>• methods used to monitor dry end system operations against specified system parameters</li> <li>• effect of process adjustments on product quality and productivity during monitoring and operation</li> <li>• grades types for dry end product and applicable terminology</li> <li>• types of raw materials used to produce dry end product and how they influence paper properties</li> <li>• standard operating procedures specific to dry end operations</li> <li>• procedures for communicating, recording and reporting for system operation, production outcomes and equipment faults.</li> </ul>	

<b>Assessment Conditions</b>	
<p>Assessment of skills in this unit of competency must take place under the following conditions:</p> <ul style="list-style-type: none"> <li>• physical conditions: <ul style="list-style-type: none"> <li>• skills must be demonstrated in a paper manufacturing facility or an environment that accurately reflects performance in a workplace</li> </ul> </li> <li>• resources, equipment and materials: <ul style="list-style-type: none"> <li>• dry end plant and equipment</li> <li>• maintenance tools and equipment and consumables for dry end plant</li> <li>• testing and diagnostic equipment</li> <li>• electronic control systems including digital control system, touch screens or robotics required for dry end operations</li> <li>• personal protective equipment for operating dry end plant</li> </ul> </li> </ul>	

Assessment Conditions	
<ul style="list-style-type: none"><li>• proforma or recording system for recording system operation and production outcomes</li><li>• specifications:<ul style="list-style-type: none"><li>• workplace and standard operating procedures relating to dry end operations including health and safety, risks and hazards identification, plant isolation, quality, housekeeping and environmental requirements</li><li>• maintenance schedules for dry end plant.</li></ul></li></ul> <p>Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.</p>	
Links	Companion Volumes, including Implementation Guides, are available at VETNet: <a href="https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=12998f8d-d0ac-40bc-a69e-72a600d4fd93">https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=12998f8d-d0ac-40bc-a69e-72a600d4fd93</a>