

Modification history

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

PPMFCO4XX	Troubleshoot and rectify paper finishing and converting systems
Application	<p>This unit of competency describes the skills and knowledge required to identify and rectify and report on faults on system and quality faults in the paper finishing and converting systems of a paper manufacturing facility.</p> <p>This unit applies to senior operators and production specialists who work in the pulp and paper manufacturing industry and troubleshoot and rectify complex faults that occur in continuous finishing and converting operations.</p> <p>Paper finishing and converting operations cover a range of systems and subsystems, including corrugating, winding and re-winding, decorating, lotionising, calendering, water marking, perforating, slitting and cutting, embossing, laminating, folding, printing, bonding, core making, wrapping and packing.</p> <p>No licensing, legislative, or certification requirements apply to this unit at the time of publication.</p>
Prerequisite Unit	Nil
Unit Sector	Finishing and converting operations (FCO)

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 Prepare for rectification of paper finishing and converting system according to productivity requirements and work health and safety and environmental procedures 1.2 Identify safety hazards and determine risk control measures with relevant personnel 1.3 Monitor control system readouts to identify process variations 1.4 Interpret trends and warning devices to determine fault type and location 1.5 Conduct systemic sampling and testing and interpret results to identify variations from operating specifications or schedule 1.6 Check for recent work undertaken on plant and relevant sources of information to assist analysis 1.7 Analyse collected information to identify cause and source of problem 1.8 Report fault and proposed corrective actions to relevant personnel
2. Rectify system faults	2.1 Shut down isolate equipment according to work health and safety and operating procedures 2.2 By-pass, repair or replace faulty equipment according to equipment specifications 2.3 Make corrective operational adjustments according to equipment specifications 2.4 Undertake operator level maintenance as required 2.5. Restore machine or system to normal operation and communicate to relevant personnel
3. Rectify product quality faults	3.1 Conduct further testing and interpret results to rectify product quality faults 3.2 Take appropriate action to rectify and report non-conforming product

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 troubleshooting and rectification activities	4.1 Document variations from process and product specifications according to workplace requirements 4.2 Record and report diagnostic and corrective action processes 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"> Interpret information from a range of documentation
Writing	<ul style="list-style-type: none"> Complete accurate detailed records and reports for system and product faults, diagnostic and corrective action processes using the required format
Oral communication	<ul style="list-style-type: none"> Provide comprehensive information about problems with equipment and products using clear language and industry terminology Provide clear unambiguous information about return to normal operations to system operators and other personnel
Numeracy	<ul style="list-style-type: none"> Interpret basic numerical settings on instruments, gauges and data recording equipment Interpret system and product data Record detailed numerical data for system and product test results Use measuring equipment to measure and undertake calculations

Unit Mapping Information			
Code and title current version	Code and title previous version	Comments	Equivalence status
PPMFCO4XX Troubleshoot and rectify paper finishing and converting systems	PPMFCO340 Troubleshoot and rectify finishing and converting systems	Minor amendment to title. Changes to elements, performance criteria, foundation skills, performance and knowledge evidence. Assessment conditions updated.	Equivalent

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

TITLE	Assessment requirements for PPMFCO4XX Troubleshoot and rectify paper finishing and converting systems
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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 carried out troubleshooting and rectification activities for paper finishing and converting systems, on at least two occasions according to operational requirements, including for each occasion:

- selected and used appropriate troubleshooting and testing methods to identify system and product quality faults
- diagnosed causes and sources of faults on system and associated processes
- identified and taken timely corrective action to rectify and maximise safety, quality and productivity
- communicated effectively and worked safely with others when undertaking troubleshooting and rectification activities
- completed accurate detailed records for system and product faults, diagnostic and corrective action processes on completion of fault rectification activity.

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:

- workplace and legislative health and safety requirements and risk measures relevant to operating, troubleshooting and rectifying paper finishing and converting systems, including emergency procedures, handling chemical and hazardous substances, high risk load shifting, licensing requirements, plant clearance and permit systems
- relevant workplace and legislative environmental sustainability requirements and practices for paper finishing and converting operations, including workplace biotechnological applications and processes considerations for troubleshooting and rectification activities
- paper finishing and converting system, processes and associated services sufficient to troubleshoot including:
 - plant layout
 - principles of operation
 - causes and effects of adjustments made to finishing and converting plant and processes
 - relationships between finishing and converting systems, processes and associated services
- manufacturer specifications and operating procedures for paper finishing and converting systems, plant and equipment, including shut down and isolation procedures
- materials used in paper finishing and converting processes
- troubleshooting methods applicable to the operation of paper finishing and converting systems
- sampling and testing for plant and system operations, process monitoring and quality checks - purpose, standards and procedures
- electronic and other control systems, operation and application to make appropriate adjustments that control paper finishing and converting processes.

Assessment Conditions

Assessment of the skills in this unit of competency must take place under the following conditions:

- physical conditions:
 - skills must be demonstrated in a paper manufacturing facility or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - tools, equipment and consumables used to troubleshoot and rectify paper finishing and converting systems
 - electronic control systems which include portable, touch screens or robotics
 - personal protective equipment required for inspecting, operating and rectifying faulty paper finishing and converting systems
 - proforma or recording system for recording diagnostic and corrective action processes
- specifications:

Assessment Conditions
<ul style="list-style-type: none">• workplace and standard operating procedures relating to troubleshooting and rectifying paper finishing and converting systems including health and safety, environmental, risks and hazards identification, plant isolation and quality and requirements• manufacturer specifications and operating procedures• relationships:<ul style="list-style-type: none">• relevant personnel for the purposes of communicating information. <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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