



Australian Government

PPMDIK401 Troubleshoot and rectify de-inking operations

Release: 1

PPMDIK401 Troubleshoot and rectify de-inking operations

Modification History

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

Application

This unit of competency describes the skills and knowledge required to identify, diagnose, rectify and report on process, equipment and quality faults in the de-inking operations of a pulp and/or paper manufacturing facility.

The unit applies to senior operators and production specialists who work in the pulp and paper manufacturing industry and troubleshoot and rectify complex system faults that occur in continuous de-inking operations.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

De-inking Operations (DIK)

Elements and Performance Criteria

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 diagnose causes of process variation, plant and equipment faults	1.1 Prepare for rectification of de-inking operations according to productivity requirements and workplace health and safety and environmental procedures 1.2 Identify safety hazards and determine risk control measures with relevant personnel 1.3 Interpret alarm system alerts and complete routine visual checks on plant and equipment to determine fault type and location

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	1.4 Conduct systemic sampling and testing and interpret results to identify variations from quality specifications or schedule 1.5 Access and interpret relevant sources of information and check for recent work undertaken to assist analysis 1.6 Analyse collected information to identify cause and source of problem 1.7 Report fault and proposed corrective actions to relevant personnel
2. Rectify plant faults	2.1 Conduct operator level on-line adjustments according to workplace health and safety and operating procedures 2.2 Shut down plant and isolate equipment according to workplace health and safety and operating procedures 2.3 By-pass, repair or replace faulty plant according to manufacturer specifications 2.4 Restore to normal operations and communicate verification to relevant personnel
3. Rectify quality faults	3.1 Conduct further testing and interpret results to determine required operational adjustments 3.2 Rectify faults and causes or recommend further action according to operating procedures 3.3 Manage out-of-specification production
4. Record and report troubleshooting and rectification activities	4.1 Document process and product faults according to workplace requirements 4.2 Record and report diagnostic and corrective action processes to relevant 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 complex information from a range of documentation

Skill	Description
Writing	• Complete accurate detailed records and reports for system and product faults, diagnostic and corrective action processes using the required format
Oral communication	• 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	• Interpret numerical settings on instruments, gauges and data recording equipment • Interpret system and stock data • Record detailed numerical data for system and product test results • Use measuring equipment to measure and inform calculations

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
PPMDIK401 Troubleshoot and rectify de-inking operations	Not applicable	The unit has been created to address a skill or task required by industry that is not covered by an existing unit	Newly created

Links

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

Assessment Requirements for PPMDIK401 Troubleshoot and rectify de-inking operations

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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 de-inking operations 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 stock 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 quality 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 de-inking operations, 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 de-inking operations, including workplace biotechnological applications and processes considerations for troubleshooting and rectification activities
- types of de-inking operations, including flotation, wash, combined and enzymatic
- purpose, standards and procedures used for troubleshooting de-inking operations, including routine physical inspections and sampling and testing for quality checks

- manufacturer specifications and operating procedures for de-inking plant and equipment, including shutdown and isolation procedures
- processes and associated services of de-inking operations, including:
 - plant layout
 - process and equipment operation
 - causes and effects of adjustments made to de-inking handling plant and processes
 - relationships between de-inking handling system, processes and associated services
- materials and supplies used in de-inking operations
- impact of process variables on production and quality, and making process adjustments
- use of electronic and other control systems to make appropriate adjustments for de-inking operations.

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 pulp and/or paper manufacturing facility or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - de-inking system and plant
 - tools, equipment and consumables used to troubleshoot and rectify de-inking operations
 - personal protective equipment required for inspecting and rectifying faulty de-inking equipment and product
 - proforma or recording system for recording diagnostic and corrective action processes
- specifications:
 - workplace and standard operating procedures relating to troubleshooting and rectifying de-inking systems, including health and safety, environmental, risks and hazards identification, plant isolation and quality and requirements
 - manufacturer specifications and operating procedures
- relationships:
 - relevant personnel for the purposes of communicating information.

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

Links

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