Modification history

|  |  |
| --- | --- |
| Release | Comments |
| Release 1 | This version released with PPM Training Package Version 1.0. |

| PPMFCO340 | Troubleshoot and rectify finishing and converting systems |
| --- | --- |
| Application | This unit of competency describes the outcomes required to identify and rectify faults and report on system performance and product quality data, related to finishing and converting systems, in a pulp or paper manufacturing facility.  This unit applies to senior operators and production specialists who troubleshoot and rectify finishing and converting systems. This typically involves working in a facility with complex integrated equipment and continuous operations. Finishing and converting operations describe a range of systems and subsystems, including winding and re-winding, decorating, lotionising, calendaring, water marking, perforating, slitting and cutting, embossing, laminating, folding, printing, bonding, core making, wrapping and packing.  No licensing, legislative, regulatory, 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 essential outcomes. | Performance criteria describe the performance needed to demonstrate achievement of the element. |
| 1. Identify and analyse causes of systems and quality faults | 1.1. Identify system or quality faults in finishing and converting systems in accordance with production requirements, relevant workplace health and safety (WHS) procedures, risks and hazards identification and environmental workplace procedures.  1.2. Monitor control system readouts to identify process variations.  1.3. Interpret trends and warning devices to determine fault type and location.  1.4. Interpret quality checks to identify variations from operating specifications or schedule.  1.5. Identify and locate cause and source of the problem.  1.6. Access and interpret relevant sources of information, as required to assist analysis. |
| 2. Rectify system faults | 2.1. Shut down equipment and implement isolation procedures, prior to fault rectification.  2.2. By- pass, repair or replace faulty equipment.  2.3. Make corrective operational adjustments and undertake operator level maintenance requirements.  2.4. Restore machine or system to normal operation and communicate to relevant personnel. |
| 3. Rectify product quality faults | 3.1. Identify product quality faults by observation or quality checks.  3.2. Undertake sampling and conduct required tests.  3.3. Interpret test results and adjust process as required.  3.4. Take appropriate action to rectify and report non-conforming product. |
| 4. Record and report process performance and product quality data | 4.1. Record variations from process specifications and troubleshooting actions.  4.2. Document indications from performance variation.  4.3. Communicate relevant information to appropriate 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 |
| Numeracy skills to: | * interpret instruments, gauges and data recording equipment. |
| Oral communication skills to: | * select and use appropriate spoken communication strategies with work colleagues and other personnel on site. |
| Reading skills to: | * read and interpret documentation, procedure manuals and test results. |
| Writing skills to: | * record and report test results and rectifications accurately and legibly using correct technical vocabulary * access, navigate and enter computer based information. |
| Problem solving skills to: | * maintain situational awareness in the work area * analyse and use sensory information to adjust process to maintain and co-ordinate safety, quality and productivity. |
| Technology skills to: | * use electronic and other control systems to control equipment and processes and make appropriate adjustments for finishing and converting processes. |

|  |  |  |  |
| --- | --- | --- | --- |
| Unit Mapping Information | | | |
| Code and title current version | Code and title previous version | Comments | Equivalence status |
| PPMFCO340 Troubleshoot and rectify finishing and converting systems | FPPFCO340A Troubleshoot and rectify finishing and converting systems |  | 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 PPMFCO340 Troubleshoot and rectify finishing and converting systems |
| --- | --- |
| Performance Evidence | |
| A person demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit, and must be able to provide evidence that they can:   * analyse and rectify finishing and converting processes and systems, at least twice in line with required enterprise intervals, in a pulp or paper manufacturing facility by: * selecting and using appropriate trouble shooting methods in finishing and converting systems * identifying and rectifying faults in plant, equipment and product quality and system performance, relevant to finishing and converting processes * using electronic and other control systems, including portable control devices, touch screens or robotics to control equipment and processes as required during troubleshooting * communicating effectively and working safely with others, in the work area when rectifying finishing and converting systems. | |

| Knowledge Evidence |
| --- |
| A person competent in this unit must be able to demonstrate 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 workplace procedures relevant to troubleshooting and rectifying finishing and converting systems in the pulp and paper industry and 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 * Material Safety Data Sheets (MSDS) * Standard Operating Procedures (SOP), risks and hazard identification and housekeeping * maintenance logs, job sheets and production instructions * process and instrument diagrams * 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 * materials used in finishing and converting processes which includes parent roll or reel, lotion, shrink and stretch wraps, pallets, sheet paper, labelling and stenciling, wrap paper, customer rolls, boxes, polythene wrap, glues, cartons, strapping, printing, inks, shippers, reams, signs and labels, core board, scent and rolls * quality tests and checks used in finishing and converting processes which includes roll density, core slippage, damaged packaging, reel hardness, core size, colour matching, bulk, core strength, sheet size, roll appearance, print quality, cut quality, MD&CD tensiles, core scenting, packaged product, stretch, roll size, perforations, product identification and warehousing records * troubleshooting methods applicable to the operation of finishing and converting systems * sampling and testing for plant and system operations, and process monitoring - purpose, standards and procedures as per site agreements * electronic and other control systems, operation and application to make appropriate adjustments that control finishing and converting processes, within level of responsibility |

| Assessment Conditions |
| --- |
| The following resources must be made available:   * access to the full range of tools, equipment and resources involved in integrated continuous manufacturing of finishing and converting operations in a pulp or paper manufacturing facility * electronic control systems which includes portable, touch screens or robotics * personal protective equipment required for operating finishing and converting systems * relevant personnel for the purposes of communicating information * sample workplace documentation on work health and safety (WHS) procedures, risks and hazards identification procedures, environmental and safe working requirements/practices, SOP and housekeeping requirements.   Competency is to be assessed in the workplace or in a productive environment that accurately reflects performance in a workplace.  Assessor requirements   * hold the appropriate assessor competency standards as outlined in regulations; and * be able to demonstrate vocational competencies at least to the level being assessed; and * be able to demonstrate how they are continuing to develop their VET knowledge and skills as well as maintaining their industry currency and assessor competence. |

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