



Australian Government

AUMFTA004 Monitor and maintain operation of metal treatment plants

Release: 1

AUMFTA004 Monitor and maintain operation of metal treatment plants

Modification History

Release	Comment
Release 1	Unit updated to reflect the new standards for Training Packages Replaces AUMFTA3004 Monitor and maintain metals treatment plant operations

Application

This unit describes the performance outcomes required to monitor and maintain a multi-stage metal treatment plant designed to clean and prepare metal bodies for painting.

It applies to individuals in an automotive manufacturing environment and involves the application of skills and knowledge at a specialist level.

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

Competency Field

Manufacturing - Passenger Vehicle

Unit Sector

Technical

Elements and Performance Criteria

Elements	Performance Criteria
Elements describe the essential outcomes	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the range of conditions section
1. Plan for work	1.1 Job instructions, plant processes, and <i>workplace procedures</i> are identified 1.2 Quality requirements, sampling and testing schedule, and inspection procedures are identified 1.3 Treatment solution specifications are identified from workplace instructions and are confirmed

Elements	Performance Criteria
2. Monitor metal treatment plant operating processes	2.1 Sample sources are identified from plant schematics, and sampling and testing schedule is followed 2.2 Sampling is carried out according to workplace procedures and sampling and testing schedule 2.3 Samples are labelled and tested to approved procedures, and results are documented in line with inspection reports, forms and quality requirements 2.4 Process non-conformance is identified and confirmed with appropriate personnel
3. Maintain product quality	3.1 Product quality checks are carried out according to work quality goals 3.2 Operation faults are diagnosed and rectified or reported for specialist support 3.3 Excess or contaminated materials are cleaned and disposed of according to workplace procedures 3.4 Defects are analysed, and causes of faults identified and investigated 3.5 Actions to restore the product quality are implemented, checked and confirmed according to workplace instructions 3.6 Defects that cannot be resolved are recorded and reported for specialist attention
4. Complete work processes	4.1 Reports covering each defect and response are completed according to workplace procedures 4.2 Tools, equipment and work areas are cleaned and made safe 4.3 Workplace documentation is completed according to workplace procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential to performance.

Skills	Description
Reading skills to:	• interpret job requirements, work instructions, work health and safety (WHS) requirements and workplace procedures • interpret schematics, sampling and testing schedules • interpret metal treatment plant operating procedures.
Writing skills to:	• complete defect reports and metal treatment work sheets.

Oral communication skills to:	• refer non-conformance to supervisor and co-workers • speak clearly and directly in order to report faults to specialist support personnel.
Numeracy skills to:	• identify job specifications • estimate material quantities.
Planning and organising skills to:	• manage time when planning, preparing and organising metal treatment operations.
Problem-solving skills to:	• identify metal treatment plant problems, particularly in teams, in order to meet performance indicators.
Technology skills to:	• operate metal treatment plant and equipment.
Teamwork skills to:	• work effectively with co-workers in a manufacturing treatment plant.

Range of Conditions

This section specifies work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included. Bold italicised wording, if used in the performance criteria, is detailed below.

<i>Workplace procedures</i> must include:	• quality standards • recording and reporting • use of equipment and metal treatment plant • waste disposal, recycling and re-use guidelines • WHS requirements relating to monitoring and maintaining a metal treatment plant.
<i>Work quality goals</i> must include:	• identifying faults • minimising and eliminating defects.
<i>Materials</i> must include:	• chemicals • solutions.

Unit Mapping Information

No equivalent unit.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=bd587669-08b3-4cd5-85f0-f9fa0c6304c1>

Assessment Requirements for AUMFTA004 Monitor and maintain operation of metal treatment plants

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Performance Evidence

Before competency can be determined, individuals must have competently monitored and maintained metal treatment plants on a minimum of three occasions.

Individuals must demonstrate they can:

- comply with work health and safety (WHS) requirements and workplace procedures relating to monitoring and maintaining metal treatment operations
- comply with workplace quality requirements
- use metal treatment equipment safely
- monitor and maintain a multi-stage metal treatment plant over five full shifts during which:
 - pre-start checks are conducted according to workplace procedures
 - solutions are maintained to specifications using approved sampling, testing and remedial processes
 - plant operations are maintained to specification
 - product quality is maintained to specification
 - treatment-related metal product faults are rectified
- complete workplace documentation and reporting requirements (some simulation may be required to ensure adequate scope).

Knowledge Evidence

Individuals must be able to demonstrate knowledge of:

- WHS requirements and workplace procedures relating to operating a metal treatment plant
- metal surface quality requirements for vehicle painting
- metal treatment plant functions, flow systems, control and documentation systems
- common metal treatment plant product faults and defects
- flow control systems and adjustment processes
- basic chemical uses and reactions in relation to the treatment of metals for painting

- testing processes and specifications relating to titration, pressure and coating integrity
- processes for the calculation of material requirements
- key components of paint safety data sheets (SDS)
- procedures for identifying and handling hazardous materials and dangerous goods
- material handling, storage and environmentally compliant waste management processes.

Assessment Conditions

Assessors must satisfy SNR/AQTF assessor requirements.

Competency is to be assessed in the workplace or a simulated environment that accurately reflects performance in a real workplace setting.

Where assessment of competency includes third-party evidence, individuals must provide evidence that links them to the metal treatment plants that they have monitored and maintained, e.g. maintenance work sheets.

Assessors must verify performance evidence through questioning on skills and knowledge to ensure correct interpretation and application.

The following resources must be made available:

- automotive manufacturing workplace or simulated workplace
- metal treatment plant tools, equipment and chemicals
- workplace procedures relating to operating a metal treatment plant
- metal cleaning products
- metal components that require treatment
- metal treatment plant work sheets.

Links

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