



Australian Government

TLIW3034 Apply protective coating systems to structures

Release: 2

TLIW3034 Apply protective coating systems to structures

Modification History

Release 2. This is the second release of this unit of competency in the TLI Transport and Logistics Training Package:

- Minor statement change in Performance Evidence
- Minor statement change in Knowledge Evidence
- Minor statement changes in Assessment Conditions.

Release 1. This is the first release of this unit of competency in the TLI Transport and Logistics Training Package.

Application

This unit involves the skills and knowledge required to apply protective coating systems to structures using manual or mechanical methods in accordance with organisational requirements.

It includes planning, preparing the surface, applying surface coatings and completing required documentation.

People achieving competence in this unit will need to fulfil any legislated work health and safety (WHS)/occupational health and safety (OHS) requirements and applicable state/territory rail safety requirements, and to comply with relevant codes of practice and/or guidelines.

Work involves applying routine operational principles and procedures when applying protective coating systems to structures, as part of workplace activities across a variety of contexts within the Australian rail system.

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

Pre-requisite Unit

Not applicable.

Competency Field

W – Equipment and Systems Operations

Unit Sector

Rail sector.

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes.

PERFORMANCE CRITERIA

Performance criteria describe the performance needed to demonstrate achievement of the element.

1 Plan surface coating process

- 1.1** Equipment, accessories and consumables are assembled and checked for applicability to the surface coating tasks
- 1.2** Safety data sheets (SDS)/material safety data sheets (MSDS), product application and safety information are read and used to inform work practices
- 1.3** Hazards are identified, risks are assessed and control measures are implemented
- 1.4** Particular process techniques, time and safety requirements are noted and used to inform work planning

2 Undertake surface preparation

- 2.1** Characteristics of uncoated surfaces and problems to be rectified are identified
- 2.2** Appropriate surface preparation is carried out in accordance with identified problems and organisational standards
- 2.3** Surface preparation is checked for compliance with required organisational standards

3 Apply surface coating

- 3.1** Required surface coating materials and methods to be used are identified and appropriate tools, equipment and materials are selected
- 3.2** Sequence of work is identified, maximising potential of the applied finish
- 3.3** Equipment and accessories are used in line with manufacturer and organisational specifications
- 3.4** Surface coating depth and coverage are checked for compliance with specifications
- 3.5** Surfaces are kept free of contamination

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| | 3.6 | Faults and problems are identified and action is taken to rectify them in accordance with manufacturer specifications and organisational procedures |
| 4 Complete workplace operations | 4.1 | Tools and equipment are cleaned prior to storage |
| | 4.2 | Tools, equipment and unused materials are relocated to storage or next operational location as required |
| | 4.3 | Waste materials are disposed of correctly following organisational and environmental policies and procedures |
| | 4.4 | Documentation and records are completed in accordance with organisational procedures |

Foundation Skills

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

Range is restricted to essential operating conditions and any other variables essential to the work environment.

Non-essential conditions can be found in the TLI Transport and Logistics Training Package Companion Volume Implementation Guide.

Unit Mapping Information

This unit replaces and is equivalent to TLIW3034A Apply protective coating systems to structures.

Links

Companion Volume Implementation Guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=df441c6e-213d-43e3-874c-0b3f7036d851>

Assessment Requirements for TLIW3034 Apply protective coating systems to structures

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Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all of the requirements of the elements and performance criteria on at least one occasion and include:

- adapting to differences in equipment in accordance with operating procedures
- applying a protective coating to component using manual or mechanical methods in accordance with safety data sheets (SDS)/material safety data sheets (MSDS) and/or manufacturer instructions and workplace procedures
- applying workplace procedures
- identifying job hazards and taking required action to minimise, control or eliminate identified hazards
- identifying problems and faults
- identifying required resources
- interpreting and following operational instructions and prioritising work
- maintaining and checking equipment to manufacturer specifications and workplace procedures
- modifying activities depending on operational contingencies, risk situations and environments
- monitoring work activities in terms of planned schedule
- planning own work, including predicting consequences and identifying improvements
- reading and interpreting relevant instructions, procedures, information and labels
- reporting and rectifying problems, faults and malfunctions within limits of own role, in accordance with workplace procedures
- working systematically with required attention to detail without injury to self or others, or damage to goods or equipment.

Knowledge Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all of

the requirements of the elements and performance criteria and include knowledge of:

- hazards that may occur when applying surface coatings, and ways of controlling the risks involved
- housekeeping standards and procedures
- methods for preventing contamination of surfaces during and after surface coating
- organisational procedures and policies for applying surface coatings to structures
- problems that may occur when applying surface coatings and action that can be taken to resolve these problems
- relevant work health and safety (WHS)/occupational health and safety (OHS) and environmental protection procedures and guidelines
- SDS/MSDS, manufacturer instructions and workplace procedures
- workplace procedures relating to applying surface coatings.

Assessment Conditions

Assessors must hold credentials specified within the Standards for Registered Training Organisations current at the time of assessment.

Assessment must satisfy the Principles of Assessment and Rules of Evidence and all regulatory requirements included within the Standards for Registered Training Organisations current at the time of assessment.

Assessment must occur in workplace operational situations or, where this is not available, in simulated workplace operational situations that replicate rail corridor workplace conditions.

Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.

Resources for assessment must include:

- a range of relevant exercises, case studies and/or simulations
- relevant and appropriate materials, tools, equipment and personal protective equipment (PPE) currently used in industry
- applicable documentation including workplace procedures, regulations, SDS/MSDS, rail industry standards, codes of practice and operation manuals.

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