



Australian Government

Assessment Requirements for TLIS3010

Test rail using ultrasonic equipment

Release: 2

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Modification History

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

- 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.

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 five separate occasions and include:

- adapting to differences in equipment in accordance with operating procedures
- applying relevant workplace procedures
- assessing inspection areas visually and identifying and classifying obvious discontinuities
- carrying out additional visual and geometry assessments for field welds
- classifying defects in accordance with workplace procedures
- completing documentation related to ultrasonic testing rail and welds
- conducting testing in accordance with rail industry standards and/or workplace procedures
- conducting visual examination and measurement of rail and welds
- determining test requirements
- identifying and preparing inspection areas for testing using appropriate procedures and materials
- identifying hazards associated with ultrasonic testing and taking required actions to minimise, control or eliminate identified hazards
- identifying types of rail defects and classifications in accordance with standards and/or procedures
- implementing contingency plans
- interpreting and following operational instructions and prioritising work
- interpreting screen indications in accordance with manufacturer instructions and workplace procedures
- locating, measuring and assessing defect size for all defect types
- modifying activities depending on operational contingencies, risk situations and environments
- monitoring work activities in terms of planned schedule
- reading and interpreting relevant instructions, procedures, information, technical data, standards and drawings

- reporting and/or rectifying identified problems, faults or malfunctions, in accordance with workplace procedures
- selecting and setting up probes to use to locate each type of defect
- 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:

- beam angles and probes required to locate various defect types
- fundamentals of rail and rail defects
- hazards that may exist when ultrasonic testing rail and welds, and ways of controlling the risks involved
- mechanical information relevant to ultrasonic testing rail and welds
- principles of ultrasonic testing
- problems that may occur when ultrasonic testing rail and welds, and actions that can be taken to report or resolve these problems
- rail defects and rail defect classification
- relevant rail danger zones
- relevant recording and documentation procedures
- relevant rail safety, work health and safety (WHS)/occupational health and safety (OHS) and environmental procedures and regulations
- ultrasonic probes, beam, their characteristics and screen display
- workplace procedures when ultrasonic testing rail and welds.

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 access to:

- 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, rail industry

standards, codes of practice and operation manuals.

Links

Companion Volume Implementation Guides are found in VETNet -

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