



Australian Government

TLIW2032 Identify the principles of tamping machine operations

Release: 2

TLIW2032 Identify the principles of tamping machine operations

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 unit Application
- 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 identify the principles of tamping machine operations for plain track and turnouts.

It includes determining components and work stations of tamping machines, identifying tamping machine functions, and identifying hazards and risks associated with tamping machine operations.

The unit provides an introduction to tamping machines and is not to be used for their operation, which must be covered by individual certification for the particular machine.

Components may include:

- clamps/roller clamps
- lasers
- lifting and lining systems
- lifting units, including third arm
- ploughs
- rail sweeps
- satellites
- tamping tools and work heads
- trolleys.

Work stations may include:

- interpret and data input
- drive station
- external work station and ground person
- front tower
- laser operation station
- main operator station.

Operators of tamping machines must have undertaken training and hold the relevant licence, permit or certificate and be recognised as competent for each type of machinery being used.

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.

1 Determine components and work stations of tamping machines

2 Identify tamping machine functions

3 Identify hazards and risks associated with tamping machine operations

PERFORMANCE CRITERIA

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

- 1.1** Tamping machine components and individual work stations are identified
- 1.2** Purpose of identified components and individual work stations is explained
- 1.3** Associated hazards of each component and appropriate control methods are identified

- 2.1** Purposes of tamping machine are identified
- 2.2** Methods by which the tamping machine constructs or maintains the track to the required track geometry in accordance with network owner's standards, are identified

- 3.1** Environmental hazards are identified
- 3.2** Potential risks to the rail infrastructure are identified

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.

Unit Mapping Information

This unit replaces and is equivalent to TLIW2032A Identify the principles of tamping machine operations.

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 TLIW2032 Identify the principles of tamping machine operations

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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:

- anticipating problems, faults and malfunctions that may occur when using a tamping machine, in accordance with workplace procedures
- applying relevant and workplace procedures
- identifying job hazards and required action to minimise, control or eliminate identified hazards
- working systematically with required attention to detail without injury to self or others, or damage to equipment in accordance with organisational procedures.

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:

- ballast profile rail industry standards
- components and work stations of tamping machines
- hazards that may exist when using a tamping machine and ways of controlling the risks involved
- problems that may occur when using a tamping machine and action that can be taken to resolve and report these problems
- relevant rail safety, work health and safety (WHS)/occupational health and safety (OHS) and environmental procedures and regulations
- track geometry and terminology
- workplace procedures for the use of tamping machines.

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.

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