Lift and move Tram and Tramway assets, materials and equipment



Overview

This standard is about lifting and moving Tram and Tramway assets, materials and equipment manually or mechanically using the correct methods and techniques. It includes understanding the type and characteristics of the load to be moved and the hazards associated. It also includes understanding the hazards associated with carrying out movement activities within a restricted space such as a depot or workshop

This standard is for those who work in engineering and construction the Tram and Tramway environment.

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Performance criteria

| You must be able to: | P1 | identify the Tram or Tramway asset, material or equipment to be lifted |
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| | | and moved |
| | P2 | confirm the route for moving the load |
| | P3 | identify the lifting equipment required for the movement of the load |
| | P4 | source information regarding the characteristics of the load |
| | P5 | identify any operational constraints on the planned movement |
| | P6 | confirm that the final location is suitable for receiving the load |
| | P7 | Identify risks to people, property, assets, materials and equipment |
| | P8 | secure and protect the load prior to lifting and moving |
| | P9 | perform a test lift, if appropriate |
| | P10 | lift and move the load over the predetermined route |
| | P11 | position and release the load safely |
| | P12 | record and report details for the move in line with organisational |
| | | requirements |
| | | |

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Knowledge and understanding

You need to know and understand:

- K1 the general principles of lifting and moving loads
- K2 the different characteristics of the loads to be moved
- K3 the range of constraints and how these affect the movement of Tram and Tramway assets, materials and equipment
- K4 the range of **lifting equipment**, **methods and techniques** available and approved for use by your organisation
- K5 the methods and techniques for assessing the risks associated with lifting and moving Tramway assets, materials and equipment
- K6 the **documentation** required prior to lifting and moving activities taking place
- K7 how **environmental considerations** may affect the planned movement of a load
- K8 why and when a test lift is performed
- K9 the communication methods and techniques used when lifting and moving a load
- K10 the methods and techniques for the safe release of the load

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Additional Information

Scope related to performance criteria

- P4 **Characteristics** may include; irregular shape, uneven weight distribution, fragility, stability, vulnerability (to damage), shape, size, length, preservation of evidence.
- P5 **Operational constraints** may include; traffic (other Tram vehicles, road vehicles), pedestrians, open working, restricted access, restricted space, route availability, clearance restrictions, tolerances, day/night work, noise/vibration level, preservation of evidence, obstructions, weather, safety.

Scope related to knowledge criteria

- K4 **Lifting equipment, methods and techniques** may include; manual, mechanical, jacks, slings, chains, straps, cranes, trolleys, forklift truck/telehandler, flags/signals/communication equipment, lighting, iron man, grabs, barrow, hoist, hydraulic platform, securing and protecting a load, preventing slippage.
- K6 **Documentation** may include; local safety certificates, location plans, calibration certificates, specifications, licence/permit, lifting plan.
- K7 **Environmental considerations** may include; day/night time, extremes of weather, terrain, line of sight, underground considerations (culverts, drains, voids),

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Additional Information

Glossary

Tram

Tramcars, tram vehicle, and any other rail vehicles that operate on tramways. It includes one or more trams coupled together and includes non-passenger-carrying vehicles.

Tramway environment

Includes the tramway (a set of rails, switches and crossings which form the route of a Tram), infrastructure (fixed assets used for the running of the Tram transport system, including, the tramway, bridges, tunnels, stops, stations and fixed equipment for signalling, communications and electrification), depots, stabling yards.

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