



Code of Practice for Load Lifting Points on Road Rail Excavator Cranes

M&EE Networking Group

No **COP0015** M&EE Networking Group Code of Practice for
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Document revision history

Issue	Date	Reason for change
1	Mar 2007	First issue
2	Jan 2009	Revised to include lifting through the jaws of the quick hitch
3	May 2013	Design requirements removed (because already incorporated in RIS-1530-PLT), with example of successful design shown. The scope widened to encompass all GB railway infrastructures.
4	Oct 2015	Non-calibrated lifting points to be blanked off because all machines should be certified to RIS-1530-PLT which has always required all load lifting points to be calibrated to RCI. Colour of load lifting point added.

Background

A sub-group of the M&EE Networking Group have looked at the arrangements for the installation, use and testing of load lifting points on road rail excavator cranes. The M&EE Networking Group recommend this COP as good practice for the industry.

M&EE COPs are produced for the benefit of any industry partner who wishes to follow the good practice on any railway infrastructure. Where an infrastructure manager has mandated their own comparable requirements, the more onerous requirements should be followed as a minimum for work on their managed infrastructure.

The M&EE Networking Group makes no warranties, express or implied, that compliance with this document is sufficient on its own to ensure safe systems of work or operation. Users are reminded of their own duties under health and safety legislation.

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Sign off

The M&EE Networking Group agreed and signed off this Code of Practice on 29/10/2015 and published on 05/12/2015.

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Purpose

This Code of Practice is intended to provide explanation and guidance to manufacturers, converters, owners and users of road rail excavator cranes being used for lifting operations.

Scope

This Code of Practice applies to design, testing and use of load lifting points, including the quick hitch jaws on road rail excavator cranes.

Definitions

Calibrated load lifting point	The load lifting point(s) that are used to calibrate the Rated Capacity Indicator (RCI).
Load Lifting Point	The points on the vehicle where lifting accessories are attached in order for the vehicle to lift a load (these are calculated from the calibrated load lifting point and include any integral lifting points on a quick hitch and includes the jaws when they meet the requirements of this Code of Practice).
Road Rail Excavator Crane	An excavator (machine) that has been converted for rail use, that can be used for lifting operations in either road or rail mode.

1 Load lifting points

1.1 General principles

- 1.1.1 Except as shown in 1.1.2, all load lifting points, should be approved by the Original Equipment Manufacturer (OEM)/converter (ie the company that issued the current CE mark) and recorded in the Technical Construction File.
- 1.1.2 All load lifting points on quick hitches should be approved by the quick hitch manufacturer and written verification provided. A copy of this information should be available on site with the machine documentation.
- 1.1.3 The owner of the vehicle should keep a copy of all approvals associated with load lifting points in their machine file. The operations manual should detail the location of the load lifting points and their Safe Working Load.
- 1.1.4 Non approved load lifting points, including all non-calculated load lifting points should be blanked off or removed.
- 1.1.5 Lifting should not be undertaken from any other unidentified point (e.g. bucket tooth etc.).
- 1.1.6 Permanently fitted lift accessories e.g. lifting hooks should as a minimum, have the same Safe Working Load rating as the load lifting point.
- 1.1.7 Any alterations to the original design of the load lifting point should comply with clause 3.8.1 of issue 1 of RIS-1710-PLT.

1.2 Design

- 1.2.1 All load lifting points should be designed, tested and labelled as specified in RIS-1530-PLT issue 6 sections 9.9 and 9.10.
- 1.2.2 All load lifting points should be coloured red.
- 1.2.3 A successful design (see Figure 1) that has been proven reliable is to have two holes on the machine (normally on lugs) and a pin that is a machine fit between them. Any shackle is attached to the pin; therefore the normal wear and tear is to the pin (which can be examined and replaced easily) rather than to the machine body (lugs etc).



Figure 1 Example of load lifting point

1.3 Maintenance and inspection

- 1.3.1 Where the current approved maintenance plan does not account for every load lifting point, then all such points not identified in the maintenance plan should be subject to a visual examination by a competent person on a three monthly basis to cover checking for fitness for purpose, deformation and unacceptable wear.
- 1.3.2 The OEM should provide the Thorough Examination scheme for the load lifting points, this is normally part of the overall machine scheme. Where this is not available guidance is provided in M&EE COP 0029 on the production of a scheme.
- 1.3.3 The Thorough Examination report (required by LOLER) should be completed every 12 months for lifting equipment and should detail each load lifting point and detail the serial number of the quick hitch if permanently attached.
- 1.3.4 If a quick hitch is not permanently attached to the machine it is classed as a lifting accessory and should have a Thorough Examination on 6 monthly basis (required by LOLER).

1.4 Pre-use checking of the lifting points

- 1.4.1 The operator should visually inspect all load lifting points as part of the pre use machine checks for any obvious deformation and correct labelling. Any defects seen should be recorded in the machine log book and the lifting point must not be used unless it is in good order.

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1.5 Use of load lifting points

- 1.5.1 The RCI must be switched on in lifting mode at all times during lifting operations.
- 1.5.2 Planning and use of calibrated load lifting points should be given priority over auxiliary load lifting points.
- 1.5.3 If the bucket crowd cylinder is not fitted with burst hose protection then lifting should not be undertaken in a manner such that it relies on pressure in the crowding cylinder. (This normally means that the lifting point is directly below the dipper arm nose pin).