

BS 7121-3:2017+A1:2019



BSI Standards Publication

## Code of practice for safe use of cranes

Part 3: Mobile cranes

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### Summary of pages

This document comprises a front cover, and inside front cover, pages i to vi, pages 1 to 64, an inside back cover and a back cover.

## Foreword

### Publishing information

This part of BS 7121 is published by BSI Standards Limited, under licence from The British Standards Institution, and came into effect on 30 June 2017. It was prepared by Subcommittee MHE/3/11, *Crane safety and testing*, under the authority of Technical Committee MHE/3, *Cranes and derricks*. A list of organizations represented on these committees can be obtained on request to their secretary.

### Supersession

BS 7121-3:2017 superseded BS 7121-3:2000, which has been withdrawn.

BS 7121-3:2017+A1:2019 supersedes BS 7121-3:2017, which is withdrawn.

### Relationship with other publications

BS 7121-1 provides general recommendations for all types of cranes. BS 7121-2 (all parts) covers in-service inspection, maintenance, thorough examination and testing for the safe use of all types of crane. BS 7121-3 provides recommendations for mobile cranes. Other parts of BS 7121 deal with the specific crane types as follows:

- Part 4: Lorry loaders;
- Part 5: Tower cranes;
- Part 11: Offshore cranes;
- Part 12: Recovery vehicles and equipment;
- Part 13: Hydraulic gantry lifting systems;
- Part 14: Side boom pipelayers.

BS 7121 has been accepted as representing the consensus of practical experience for safety on cranes.

### Information about this document

Text introduced or altered by amendment No. 1 is indicated in the text by tags A1 A1. Minor editorial changes are not tagged.

This part of BS 7121 was revised to reflect BS 7121-1:2016.

### Use of this document

As a code of practice, this part of BS 7121 takes the form of guidance and recommendations. It should not be quoted as if it were a specification and particular care should be taken to ensure that claims of compliance are not misleading.

Any user claiming compliance with this part of BS 7121 is expected to be able to justify any course of action that deviates from its recommendations.

It has been assumed in the preparation of this part of BS 7121 that the execution of its provisions will be entrusted to appropriately qualified and experienced people, for whose use it has been produced.

### Presentational conventions

The provisions of this standard are presented in roman (i.e. upright) type. Its recommendations are expressed in sentences in which the principal auxiliary verb is “should”.

*Commentary, explanation and general informative material is presented in smaller italic type, and does not constitute a normative element.*

Where words have alternative spellings, the preferred spelling of the Shorter Oxford English Dictionary is used (e.g. “organization” rather than “organisation”).

### **Contractual and legal considerations**

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

### **Compliance with a British Standard cannot confer immunity from legal obligations.**

In particular, attention is drawn to the following statutory regulations:

- The Health and Safety at Work etc. Act 1974 [1];
- The Lifting Operations and Lifting Equipment Regulations (LOLER) 1998 [2];
- The Provision and Use of Work Equipment Regulations (PUWER) 1998 [3];
- The Supply of Machinery (Safety) Regulations 2008 (as amended) [4];
- The Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 1995 (RIDDOR) [5];
- The Road Traffic Act 1991 [6];
- The Road Vehicles (Construction and Use) Regulations 1986 (as amended) [7];
- The Road Vehicles (Authorisation of Special Types) (General) Order 2003 [8];
- The Vehicle Excise and Registration Act 1994 [9].

*NOTE* Details of the Lifting Operations and Lifting Equipment Regulations 1998 [2] and the Provision and Use of Work Equipment Regulations 1998 [3], together with an HSE Approved Code of Practice and HSE Guidance, are given in HSE publications *Safe use of lifting equipment* [N2] and *Safe use of work equipment* [10].

## 1 Scope

This part of BS 7121 provides recommendations for the safe use of mobile cranes (see 3.5) used for a wide variety of lifting operations in numerous locations, and is intended to be used in conjunction with BS 7121-1, which gives general recommendations for all types of cranes, and BS 7121-2 (all parts), which gives general guidance on inspection, testing and examination of all types of cranes.

*NOTE* Mobile cranes are manufactured in many different forms. Mobility is either by means of wheels or crawler tracks. Cranes can be fully mobile and able to travel with rated capacity loads suspended (pick and carry), or semi-mobile and not permitted to travel with suspended loads. Semi-mobile cranes include wheeled and crawler-mounted cranes, fitted with stabilizers or outriggers; and cranes that, due to size and weight, are taken to the work site in parts and assembled at the site. Cranes that are assembled on site to work from a fixed base with outriggers are also covered by this part of BS 7121.

This part of BS 7121 is not applicable to rail-mounted cranes, cruciform self-erecting tower cranes, cranes covered by other parts of BS 7121, or to the use of cranes:

- a) for bungee jumping or similar entertainment activities; or
- b) specifically designed for railway applications; or
- c) as part of a fully automated storage or production system.

While the recommendations in BS 7121-1 are for planning, management, selection of equipment and personnel, etc., for safe lifting with all types of cranes, this part provides specific recommendations for safety when dealing with the hazards caused by mobility and the diversity of locations for mobile crane lifting operations.

## 2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

BS 7121-1:2016, *Code of practice for safe use of cranes — Part 1: General*

BS 7121-2 (all parts), *Code of practice for safe use of cranes — Part 2: Inspection, testing and examination*

BS 7121-2-1:2012, *Code of practice for the safe use of cranes — Part 2-1: Inspection, maintenance and thorough examination — General*

BS 7121-2-3:2012, *Code of practice for the safe use of cranes — Part 2-3: Inspection, maintenance and thorough examination — Mobile cranes*

BS 7671, *Requirements for electrical installations — IET Wiring Regulations*

BS EN 14502-1, *Cranes — Equipment for the lifting of persons — Part 1: Suspended baskets*

[N1] HEALTH AND SAFETY EXECUTIVE (HSE). *Guidance Note GS6, Avoiding danger from overhead power lines*, Sudbury, HSE Books, 2013.

[N2] HEALTH AND SAFETY EXECUTIVE (HSE). *Safe use of lifting equipment. Lifting Operations and Lifting Equipment Regulations 1998. Approved Code of Practice and guidance L113*, Second edition, Sudbury, HSE Books, 2014.

[N3] HEALTH AND SAFETY EXECUTIVE (HSE). *Guidance Note HSG 118, Electrical safety in arc welding*, Sudbury, HSE Books, 1994.