AS 1418.5—2013

Australian Standard®

Cranes, hoists and winches

Part 5: Mobile cranes (EN 13000:2010, MOD)

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- Australian Industry Group
- Australian Institute for Non-Destructive Testing
- Bureau of Steel Manufacturers of Australia
- Crane Association of New Zealand
- Crane Industry Council of Australia
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- CPE Machinery
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- Putzmeister Australia
- S and T Services
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Australian Standard®

Cranes, hoists and winches

Part 5: Mobile cranes (EN 13000:2010, MOD)

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PREFACE

This Standard was prepared by the Standards Australia Committee ME-005, Cranes, to supersede AS 1418.5—2002.

The objective of this Standard is to set out requirements for the design of mobile cranes for reference by mobile crane designers, users and regulators.

This Standard is an adoption with national modifications and has been reproduced from EN 13000:2010, *Cranes—Mobile cranes* and has been varied as indicated to take account of Australian conditions. The modifications are listed in Appendix ZZ.

As this Standard is reproduced from an International Standard, the following applies:

(a) In the source text 'this European Standard' should read 'this Australian Standard'.

(b) A full point substitutes for a comma when referring to a decimal marker.

The terms 'normative' and 'informative' have been used in this Standard to define the application of the annex or appendix to which they apply. A 'normative' annex or appendix is an integral part of a Standard, whereas an 'informative' annex or appendix is only for information and guidance.

The CEN introduction refers to Type A, B and C standards. The source document is classified as a Type C Standard. The classifications are defined as follows:

(i) Type A standards give basic concepts, principles for design and general aspects that can be applied to all machinery.

(ii) Type B standards deal with one safety aspect (e.g. minimum distances, noise, temperatures) or one type of safeguard that can be used across a wide range of machinery.

(iii) Type C standards deal with detailed safety requirements for a particular machine or group of machines. They contain performance requirements and/or descriptive specifications for individual products or product families.

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INTRODUCTION

This European Standard is a type C standard.

This European Standard has been prepared to provide one means for mobile cranes to conform with the essential health and safety requirements of the Machinery Directive.

The machinery concerned and the extent to which hazards, hazardous situations and events are covered are indicated in the scope of this document.

When provisions of this type C standard are different from those which are stated in type A or B standards, the provisions of this type C standard take precedence over the provisions of the other standards, for machines that have been designed and built according to the provisions of this type C standard.

AUSTRALIAN STANDARD

Cranes, hoists and winches

Part 5: Mobile cranes (EN 13000:2010, MOD)

1 Scope

This European Standard is applicable to the design, construction, installation of safety devices, information for use, maintenance and testing of mobile cranes as defined in ISO 4306-2 with the exception of loader cranes (see 3.1.1 of EN 12999:2002). Examples of mobile crane types and of their major parts are given in Annexes A and B.

This standard does not cover hazards related to the lifting of persons.

NOTE The use of mobile cranes for the lifting of persons is subject to specific national regulations.

Mobile cranes covered by this European Standard are designed for a limited number of stress cycles and particular properties of motions, e.g. smooth application of the driving forces and loading conditions according to ISO 4301-2:1985, group A1.

For a duty cycle such as grab, magnet or similar work, additional provisions are required which are outside the scope of this European Standard.

The hazards covered by this European Standard are identified by Annex C.

This document is not applicable to mobile cranes which are manufactured before the date of publication of this document by CEN.

2 Normative references

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

EN 2:1992, *Classification of fires*

EN 294:1992, *Safety of machinery — Safety distance to prevent danger zones being reached by the upper limbs*

EN 349:1993, *Safety of machinery — Minimum gaps to avoid crushing of parts of the human body*

EN 547-1:1996, *Safety of machinery — Human body measurements — Part 1: Principles for determining the dimensions required for openings for whole body access into machinery*

EN 614-1:2006, *Safety of machinery — Ergonomic design principles — Part 1: Terminology and general principles*

EN 626-1:1994, *Safety of machinery — Reduction of risk to health from hazardous substances emitted by machinery — Part 1: Principles and specifications for machinery manufacturers*

EN 811:1996, *Safety of machinery — Safety distances to prevent danger zones being reached by the lower limbs*

EN 842:1996, *Safety of machinery — Visual danger signals — General requirements, design and testing*

EN 853:1996, *Rubber hoses and hose assemblies — Wire braid reinforced hydraulic type — Specification*

EN 854:1996, *Rubber hoses and hose assemblies — Textile reinforced hydraulic type — Specification*

EN 856:1996, *Rubber hoses and hose assemblies — Rubber-covered spiral wire reinforced hydraulic type — Specification*

EN 894-2:1997, *Safety of machinery — Ergonomics requirements for the design of displays and control actuators — Part 2: Displays*

EN 894-3:2000, *Safety of machinery — Ergonomics requirements for the design of displays and control actuators — Part 3: Control actuators*

EN 953:1997, *Safety of machinery — Guards — General requirements for the design and construction of fixed and movable guards*