AS 5234.1:2021

Australian STANDARD®

STANDARDS Australia

Cranes — Control layout and characteristics

Part 1: General principles (ISO 7752-1:2010, MOD)

AS 5234.1:2021

This Australian Standard® was prepared by ME-005, Cranes. It was approved on behalf of the Council of Standards Australia on 20 January 2021.

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The following are represented on Committee ME-005:

Australian Chamber of Commerce and Industry
Australian Industry Group
Australian Institute for Non-Destructive Testing
Better Regulation Division (Fair Trading, Safework NSW, Testsafe)
Bureau of Steel Manufacturers of Australia
Crane Industry Council of Australia
Department of Regional NSW
Elevating Work Platform Association of Australia
Engineers Australia
National Heavy Vehicle Regulator
Office of Industrial Relations, Qld
Transport for NSW
Victorian WorkCover Authority (WorkSafe Victoria)
WorkSafe Division — Department of Mines, Industry Regulation and Safety (DMIRS) WA

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Preface

This Standard was prepared by the Australian members of the Joint Standards Australia/Standards New Zealand Committee ME-005, Cranes.

After consultation with stakeholders in both countries, Standards Australia and Standards New Zealand decided to develop this Standard as an Australian Standard rather than an Australian/New Zealand Standard.

The objective of this Standard is to establish principles and requirements for the controls of cranes.

This Standard is an adoption with national modifications and has been reproduced from ISO 7752-1:2010, *Cranes — Control layout and characteristics — Part 1: General principles* and its Amendment No 1 (2012). The modifications are additional requirements and are set out in Appendix ZZ, which has been added at the end of the source text.

Appendix ZZ list the variations to ISO 7752-1:2010, for the application of this Standard in Australia.

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

(a) In the source text "this part of ISO 7752" should read "this Australian Standard".

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

The term "normative" is used in Standards to define the application of the appendices or annexes to which it applies. A "normative" appendix or annex is an integral part of a Standard.

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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO 7752-1 was prepared by Technical Committee ISO/TC 96, *Cranes*, Subcommittee SC 7, *Tower cranes*.

This second edition cancels and replaces the first edition (ISO 7752-1:1983), which has been technically revised.

ISO 7752 consists of the following parts, under the general title *Cranes — Control layout and characteristics*:

— *Part 1: General principles*

— *Part 2: Mobile cranes*

— *Part 3: Tower cranes*

— *Part 4: Jib cranes*

— *Part 5: Overhead travelling cranes and portal bridge cranes*

Australian Standard®

Cranes — Control layout and characteristics

Part 1: General principles (ISO 7752-1:2010, MOD)

Section 1 Scope

This part of ISO 7752 establishes principles and requirements for the controls of cranes. It deals with the arrangement of those controls used in positioning loads and serves as a general basis for the elaboration of detailed standards covering the controls of particular types of cranes.

Section 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.

ISO 12100, *Safety of machinery — General principles for design — Risk assessment and risk reduction*

IEC 60068-2-27, *Environmental testing — Part 2-27: Tests — Test Ea and guidance: Shock*

IEC 60068-2-31, *Environmental testing — Part 2-31: Tests — Test Ec: Rough handling shocks, primarily for equipment-type specimens*

IEC 60204-32:2008, *Safety of machinery — Electrical equipment of machines — Part 32: Requirements for hoisting machines*

Section 3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

3.1
operator
person operating the crane for the purposes of positioning loads

3.2
address code
number used by a receiver to differentiate the frames sent by its transmitter

Note 1 to entry: The receiver only carries out commands received from a transmitter having the same address code.

3.3
wireless control
means by which the crane operator's commands are transmitted without any physical connection for at least part of the distance between the console and the crane

3.4
console
fixed or moveable arrangement of controls

3.5
control
actuating device which forms an interface between the crane operator and crane control system

3.6
control station
permanent position of controls on or off the crane