

AS 5249.3:2024



STANDARDS
Australia



Cranes — Information to be provided

Part 3: Overhead travelling cranes and portal bridge cranes (ISO 9374-5:2021, MOD)



AS 5249.3:2024

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- 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 document as an Australian Standard rather than an Australian/New Zealand Standard.

The objective of this document is to specify information to be provided by —

- (a) a purchaser in enquiring about or ordering an overhead travelling crane or portal bridge crane; and
- (b) a manufacturer in tendering for or supplying an overhead travelling crane or portal bridge crane.

This document is an adoption with national modifications, and has been reproduced from, ISO 9374-5:2021, *Cranes — Information to be provided — Part 5: Overhead travelling cranes and portal bridge cranes*. 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](#) lists the modifications to ISO 9374-5:2021 for the application of this document in Australia.

As this document has been reproduced from an International document, a full point substitutes for a comma when referring to a decimal marker.

Australian or Australian/New Zealand Standards that are identical adoptions of international normative references may be used interchangeably. Refer to the online catalogue for information on specific Standards.

The terms “normative” and “informative” are used in Standards to define the application of the appendices or annexes to which they apply. A “normative” appendix or annex is an integral part of a Standard, whereas an “informative” appendix or annex is only for information and guidance.

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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.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 96, *Cranes*, Subcommittee SC 9, *Bridge and gantry cranes*.

This second edition cancels and replaces the first edition (ISO 9374-5:1991), which has been technically revised.

The main changes compared to the previous edition are as follows:

- new [Clause 3](#) Terms and definitions has been added;
- [Figures 1](#) to [6](#) have been redrawn;
- [Annex A](#) has been rearranged.

A list of all parts in the ISO 9374 series can be found on the ISO website.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

Australian Standard®

Cranes — Information to be provided

Part 3: Overhead travelling cranes and portal bridge cranes (ISO 9374-5:2021, MOD)

1 Scope

This document specifies information to be provided by:

- a) a purchaser in enquiring about or ordering an overhead travelling crane or portal bridge crane;
- b) a manufacturer in tendering for or supplying an overhead travelling crane or portal bridge crane.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 7363, *Cranes and lifting appliances — Technical characteristics and acceptance documents*

3 Terms and definitions

No terms and definitions are listed in this document.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <https://www.iso.org/>
- IEC Electropedia: available at <https://www.electropedia.org/>

4 Information to be provided by the purchaser with the enquiry or order

The purchaser should provide the information given in [Annex A](#) to enable the crane manufacturer to offer or to supply the most suitable overhead travelling crane or portal bridge crane and equipment to satisfy the duty requirements and service conditions.

5 Information to be provided by the manufacturer

5.1 Technical information

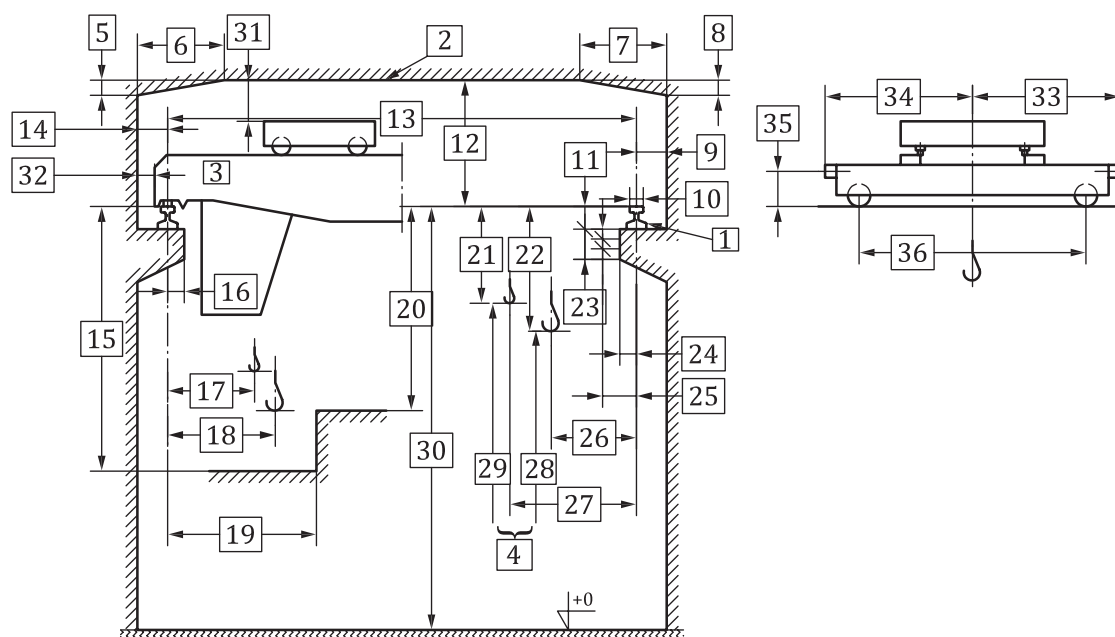
The information provided by the manufacturer shall include:

- a) technical information and test certificates for the crane to facilitate its installation, testing and use in accordance with ISO 7363 and as appropriate for the appliance;
- b) an instruction manual which should include details of routine servicing, inspection and maintenance of the crane;
- c) erection information, when requested.

All loads applied by the crane to its runway should be calculated in accordance with ISO 8686-5 or as agreed between the manufacturer and the purchaser.

5.2 Dimensions

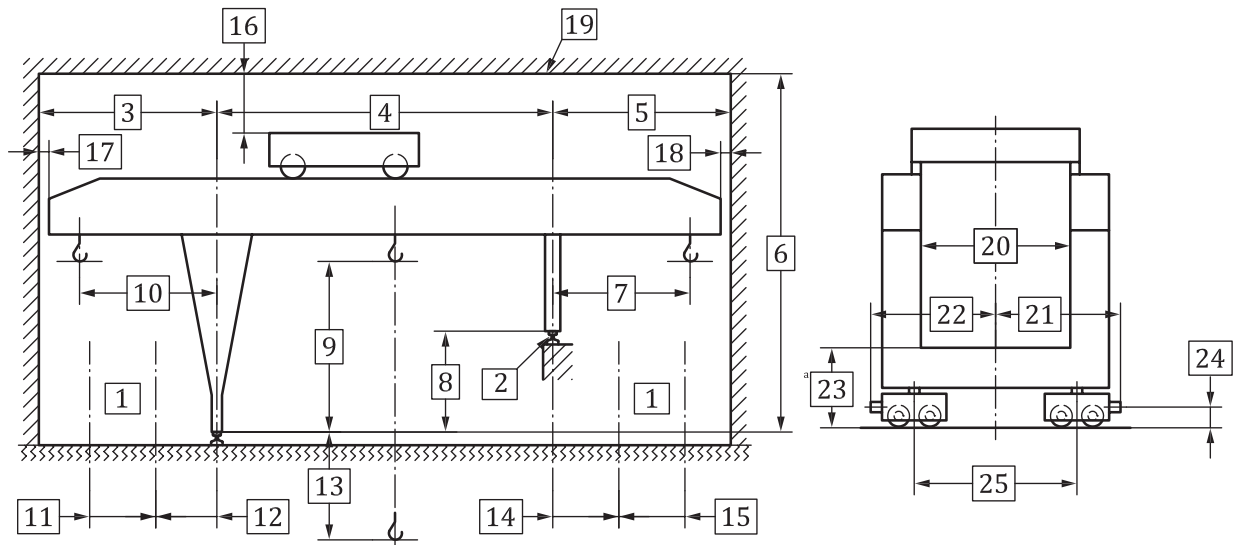
The manufacturer should provide general arrangement drawings, with dimensions, showing that the purchaser's requirements, including the restrictions stated in [Figures 1 to 6](#), are met.



Key

- | | |
|---|--|
| 1 type of rail | 19 distance between centre of rail and obstruction 2 |
| 2 clearance line | 20 distance between the top of rail and the top of obstruction 2 |
| 3 crane | 21 distance between the top of rail and the highest working position of auxiliary hook |
| 4 lifting range | 22 distance between the top of rail and the highest working position of main hook |
| 5 inclination of the clearance line on left side | 23 rail support beam outline |
| 6 inclination of the clearance line on left side | 24 distance between centre of rail and edge of rail support beam on right side |
| 7 inclination of the clearance line on right side | 25 distance between centre of rail and conductor |
| 8 inclination of the clearance line on right side | 26 main hook approach on right side |
| 9 dimension from right side rail to clearance line | 27 auxiliary hook approach on right side |
| 10 rail width | 28 main hook lifting range |
| 11 rail height | 29 auxiliary hook lifting range |
| 12 distance between the top of rail and the clearance line | 30 crane track height |
| 13 span | 31 clearance between highest point of crane and clearance line |
| 14 dimension from left side rail to clearance line | 32 clearance between outermost point of crane and clearance line |
| 15 distance between the top of rail and the top of obstruction 1 | 33 width on right side |
| 16 distance between centre of rail and edge of rail support beam on left side | 34 width on left side |
| 17 auxiliary hook approach on left side | 35 buffer height |
| 18 main hook approach on left side | 36 crane wheel base |

Figure 1 — Overhead travelling crane



Key

- | | |
|---|---|
| 1 axis of railways | 14 distance between centre of rail and railway on right side |
| 2 type of rail | 15 width of railway on right side |
| 3 dimension from left side rail to clearance line | 16 clearance between highest point of crane and clearance line |
| 4 span | 17 clearance between outermost point on left of crane and clearance line |
| 5 dimension from right side rail to clearance line | 18 clearance between outermost point on right of crane and clearance line |
| 6 distance between the top of rail and the clearance line | 19 clearance line |
| 7 outreach from right side rail | 20 clearance between the legs |
| 8 rail height difference | 21 width on right side |
| 9 load-lifting height | 22 width on left side |
| 10 outreach from left side rail | 23 height of the sill beam |
| 11 width of railway on left side | 24 buffer height |
| 12 distance between centre of rail and railway on left side | 25 crane wheel base |
| 13 load-lowering height | a Maximum, if restricted. |

Figure 2 — Portal bridge crane