

AS 1418.18:2024



# Cranes, hoists and winches

## Part 18: Crane runways and monorails



AS 1418.18:2024

This Australian Standard ® was prepared by ME-005, Cranes. It was approved on behalf of Standards Australia's Standards Development and Accreditation Committee on 03 May 2024.

This Standard was published on 24 May 2024.

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- Australian Industry Group
- Australian Institute for Non-Destructive Testing
- Better Regulation Division (Fair Trading, SafeWork NSW, TestSafe)
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- The Crane Industry Council of Australia
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This Standard was issued in draft form for comment as DR AS 1418.18:2023.

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# **Cranes, hoists and winches**

## **Part 18: Crane runways and monorails**

Originated as AS 1418.18—2001.  
Second edition AS 1418.18:2024.

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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, to supersede AS 1418.18:2001.

The objective of this document is to specify the minimum requirements for runway girders and monorail beams constructed of structural steel. This revision incorporates improvements in the understanding of the behaviour of and requirements for runway girders and monorails.

The major changes in this edition are as follows:

- (a) The removal of the distinction between “light duty” and “heavy duty” runways, with all runways now requiring design for torsion and detailed design of the web and top flange.
- (b) Differences in the calculation of eccentricities.
- (c) Changes to loads and load combinations.
- (d) A requirement to assess modifications.
- (e) Refinements to the applicable serviceability criteria.
- (f) Emphasis on the importance of top flange tie-backs.
- (g) Changes to the design of end stops, the design of monorails, the design of coped ends of girders, the use of billet rails, construction tolerances, inspection frequencies and interim design criteria.
- (h) Provisions for design by the finite element method.

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

*This Standard includes a commentary on some of the clauses. The commentary directly follows the relevant clause, is designated by 'C' preceding the clause number and is printed in italics in a box. The commentary is for information and guidance and does not form part of the document.*

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