

Australian/New Zealand Standard™

Hot-dip galvanized coatings on threaded fasteners (ISO metric coarse thread series) (ISO 10684:2004, MOD)



AS/NZS 1214:2016

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee ME-029, Fasteners. It was approved on behalf of the Council of Standards Australia on 7 March 2016 and by the Standards New Zealand Approval Board on 20 April 2016.

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The following are represented on Committee ME-029:

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Association of Wall and Ceiling Industries of Australia and New Zealand
Australasian Corrosion Association
Australian Chamber of Commerce and Industry
Australian Engineered Fasteners and Anchors Council
Australian Industry Group
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PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee ME-029, Fasteners, to supersede AS 1214—1983.

The objective of this Standard is to provide manufacturers, suppliers and users with the material, dimensional requirements and some performance requirements for hot dip spun galvanized coatings applied to coarse threaded steel fasteners and other steel parts, e.g. washers. Threaded steel fasteners covered are from M8 to M64 and for property classes up to and including 10.9 for bolts, screws and studs and 12 for nuts.

This Standard is an adoption with national modifications and has been reproduced from ISO 10684:2004, *Fasteners—Hot dip galvanized coatings*, and its Corrigendum 1 (2008), which has been added at the end of the source text. The modifications are specified in Appendix ZZ.

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

- (a) In the source text ‘this International Standard’ should read ‘this Australian/New Zealand Standard’.
- (b) A full point substitutes for a comma when referring to a decimal marker.

References to International Standards should be replaced by references to Australian or Australian/New Zealand Standards, as follows:

<i>Reference to International Standard</i>		<i>Australian/New Zealand Standard</i>	
ISO		AS	
898	Mechanical properties of fasteners made of carbon steel and alloy steel	4291	Mechanical properties of fasteners made of carbon steel and alloy steel
898-1	Part 1: Bolts, screws and studs	4291.1	Part 1: Bolts, screws and studs

Only normative references that have been adopted as Australian or Australian/New Zealand Standards have been listed.

The terms ‘normative’ and ‘informative’ have been used in this Standard to define the application of the annexes or appendices 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.

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AUSTRALIAN/NEW ZEALAND STANDARD

Hot-dip galvanized coatings on threaded fasteners (ISO metric coarse thread series) (ISO 10684:2004, MOD)**1 Scope**

This International Standard specifies material, process, dimensional and some performance requirements for hot dip spun galvanized coatings applied to coarse threaded steel fasteners from M8 up to and including M64 and for property classes up to and including 10.9 for bolts, screws and studs and 12 for nuts. It is not recommended to hot dip galvanize threaded fasteners in diameters smaller than M8 and/or with pitches below 1,25 mm.

NOTE Attention is drawn to the fact that the proof loads and stresses under proof load of oversize tapped nuts with threads M8 and M10 and the ultimate tensile loads and proof loads of undersize threaded bolts and screws with threads M8 and M10 are reduced as compared to the values specified in ISO 898-2 and ISO 898-1 respectively and are specified in Annex A.

It primarily concerns the spun hot dip galvanizing of threaded steel fasteners, but it may also be applied to other threaded steel parts.

The specifications given in this International Standard may also be applied to non-threaded steel parts such as washers.

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 898-1, *Mechanical properties of fasteners made of carbon steel and alloy steel — Part 1: Bolts, screws and studs*

ISO 898-2, *Mechanical properties of fasteners — Part 2: Nuts with specified proof load values — Coarse thread*

ISO 965-1, *ISO general purpose metric screw threads — Tolerances — Part 1: Principles and basic data*

ISO 965-2, *ISO general purpose metric screw threads — Tolerances — Part 2: Limits of sizes for general purpose external and internal screw threads — Medium quality*

ISO 965-3, *ISO general purpose metric screw threads — Tolerances — Part 3: Deviations for constructional screw threads*

ISO 965-4, *ISO general purpose metric screw threads — Tolerances — Part 4: Limits of sizes for hot-dip galvanized external screw threads to mate with internal screw threads tapped with tolerance position H or G after galvanizing*

ISO 965-5, *ISO general purpose metric screw threads — Tolerances — Part 5: Limits of sizes for internal screw threads to mate with hot-dip galvanized external screw threads with maximum size of tolerance position h before galvanizing*