



Mechanical properties of fasteners made of carbon steel and alloy steel

Part 1: Bolts, screws and studs



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- Association of Accredited Certification Bodies
 - 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
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Australian Standard[®]

**Mechanical properties of fasteners
made of carbon steel and alloy steel**

Part 1: Bolts, screws and studs

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PREFACE

This Standard was prepared by the Standards Australia Committee ME-029, Fasteners, to supersede AS 4291.1—2000.

The objective of this Standard is to provide manufacturers and users of threaded fasteners with material requirements and specifications for the mechanical properties of carbon steel and alloy steel bolts, screws and studs with ISO metric threads.

This Standard is identical with, and has been reproduced from ISO 898-1:2013, *Mechanical properties of fasteners made of carbon steel and alloy steel, Part 1: Bolts, screws and studs with specified property classes—Coarse thread and fine pitch thread*.

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

- (a) In the source text ‘this part of ISO 898’ should read ‘this Australian 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	
261	ISO general purpose metric screw threads—General plan	1721	General purpose metric screw threads
		AS/NZS	
898	Mechanical properties of fasteners made of carbon steel and alloy steel	4291	Mechanical properties of fasteners
898-2	Part 2: Nuts with specified property classes—Coarse thread and fine pitch thread	4291.2	Part 2: Nuts with specified proof load values—Coarse thread
		AS	
		4291	Mechanical properties of fasteners made of carbon steel and alloy steel
898-5	Part 5: Set screws and similar threaded fasteners with specified hardness classes—Coarse thread and fine pitch thread	4291.5	Part 5: Set screws and similar threaded fasteners not under tensile stresses
898-7	Part 7: Torsional test and minimum torques for bolts and screws with nominal diameters 1 mm to 10 mm	4291.7	Part 7: Torsional test and minimum torques for bolts and screws with nominal diameters 1 mm to 10 mm
965	ISO general purpose metric screw threads—Tolerances		
965-1	Part 1: Principles and basic data	1721	General purpose metric screw threads
965-2	Part 2: Limits of sizes for general purpose external and internal screw threads—Medium quality	1721	General purpose metric screw threads
10684	Fasteners—Hot dip galvanized coatings	1214	Hot-dip galvanized coatings on threaded fasteners (ISO metric coarse thread series)

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

The term ‘informative’ has been used in this Standard to define the application of the annex to which it applies. An ‘informative’ annex is only for information and guidance.

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