

AS 4291.1—2000
ISO 898-1:1999

AS 4291.1

Australian Standard™

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

Part 1: Bolts, screws and studs

This Australian Standard was prepared by Committee ME/29, Fasteners. It was approved on behalf of the Council of Standards Australia on 15 February 2000 and published on 3 April 2000.

The following interests are represented on Committee ME/29:

Australian Building Codes Board
Australian Chamber of Commerce and Industry
Australian Industry Group
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PREFACE

This Standard was prepared by the Standards Australia Committee ME/29, Fasteners, to supersede AS/NZS 4291.1:1995, *Mechanical properties of fasteners, Part 1: Bolts, screws and studs*.

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

The following changes have been incorporated in this edition:

- (a) Updating of references.
- (b) Addition of a permissible boron content in material composition.
- (c) Introduction of a torsional strength requirement for bolts and screws with property classes 8.8 to 12.9 with nominal thread diameters equal to or less than 4 mm and for short bolts and screws with nominal thread diameters greater than 4 mm and equal to and less than 10 mm.
- (d) Modification of marking requirements including the clock-face system for property class.

This Standard is identical with and has been reproduced from ISO 898-1:1999, *Mechanical properties of fasteners made of carbon steel and alloy steel, Part 1: Bolts, screws and studs*.

Statements expressed in mandatory terms in notes to text, tables and figures are deemed to be requirements of this Standard.

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

- (i) Its number appears on the cover and title page while the International Standard number appears only on the cover.
- (ii) In the source text, 'this part of ISO 898' should read 'this Australian Standard'.
- (iii) 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 Standard</i>	
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261	ISO general purpose metric screw threads—General plan	1721	General purpose metric screw threads
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The term ‘informative’ has been used in this Standard to define the application of the appendix to which it applies. An ‘informative’ appendix is only for information and guidance.

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