

Australian/New Zealand Standard®

**Cup head bolts with ISO metric
coarse pitch threads**

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Bureau of Steel Manufacturers of Australia
Electricity Supply Association of Australia
Fasteners Institute of Australia
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STANDARDS AUSTRALIA/STANDARDS NEW ZEALAND

RECONFIRMATION
OF
AS/NZS 1390:1997
Cup head bolts with ISO metric coarse pitch threads

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NOTES

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Cup head bolts with ISO metric coarse pitch threads

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PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee ME/29, Fasteners, to supersede AS 1390—1974, *Metric cup head bolts*.

The objective of this Standard is to provide manufacturers and suppliers of cup head bolts with ISO metric coarse pitch threads with relevant dimensional and marking requirements.

There is no equivalent ISO Standard for the product specified in this Standard.

Major technical changes incorporated in this edition relate to the mechanical properties and testing requirements, in order to align with relevant ISO requirements. Other changes include the following:

- (a) Updating of referenced documents.
- (b) Deletion of reference to plain shank bolts.
- (c) Updating of tables.
- (d) Replacement of detailed requirements for materials, mechanical properties and test procedures for steel bolts with references to a separate Standard.
- (e) Revision of the identification marking requirements.
- (f) Inclusion of a reference to SAA HB 18.22/SANZ 18.22, *Guidelines for third-party accreditation, Guide 22—Information on manufacturer's declaration of conformity with standards or other technical specifications*, in relation to a manufacturer's declaration of conformity. The Handbook contains a definition of 'manufacturer' and includes an example of a declaration of conformity which may be provided to a customer.
- (g) Editorial changes in accordance with current policy.

The identification marking on a fastener may now include that of a distributor or importer, this being a departure from the previously accepted practice of the marking being that of the fabricator of the product.

Statements expressed in mandatory terms in notes to tables are deemed to be requirements to this Standard.

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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CONTENTS

	<i>Page</i>
1 SCOPE	4
2 REFERENCED DOCUMENTS	4
3 DEFINITIONS	4
4 METHOD OF MANUFACTURE	5
5 SHAPE, DIMENSIONS AND FINISH	5
6 MATERIALS AND MECHANICAL PROPERTIES FOR STEEL CUP HEAD BOLTS	12
7 TEST METHODS FOR STEEL CUP HEAD BOLTS	12
8 MARKING	14
9 DESIGNATION	15
APPENDIX A SUGGESTED AUDIT SAMPLING PLAN FOR MECHANICAL PROPERTIES	16

STANDARDS AUSTRALIA/STANDARDS NEW ZEALAND

Australian/New Zealand Standard**Cup head bolts with ISO metric coarse pitch threads**

1 SCOPE This Standard specifies the dimensional and marking requirements for cup head bolts with ISO metric coarse pitch series threads in diameters from 5 mm to 24 mm inclusive, and the material requirements for steel cup head bolts of property class 4.6.

NOTES:

- 1 The recommended nuts suitable for assembly with cup head bolts are property class 5, style 1 nuts in accordance with AS 1112.
- 2 The purchaser, when ordering or enquiring about cup head bolts complying with this Standard, should provide the supplier with all relevant details. The complete designation for cup head bolts is given in Clause 9.

2 REFERENCED DOCUMENTS The following documents are referred to in this Standard:

AS

- 1214 Hot-dip galvanized coatings on threaded fasteners (ISO metric coarse thread series)
- 1275 Metric screw threads for fasteners
- 1654 ISO system of limits and fits
- 1654.1 Part 1: Bases of tolerances, deviations and fits
- 1897 Electroplated coating on threaded components (metric coarse series)

AS/NZS

- 1112 ISO metric hexagon nuts, including thin nuts, slotted nuts and castle nuts
- 4291 Mechanical properties of fasteners
- 4291.1 Part 1: Bolts, screws and studs

HB

- 18 Guidelines for third-party certification and accreditation
- 18.22 Guide 22: Information on manufacturer's declaration of conformity with standards or other technical specifications

ISO

- 6157 Fasteners—Surface discontinuities
- 6157.1 Part 1: Bolts, screws and studs for general requirements

3 DEFINITIONS For the purpose of this Standard, the definitions below apply.

3.1 Concentricity tolerance—the allowable deviation of the shank with respect to the screw thread.

3.2 Cup head bolt—a bolt with a curved head without any driving feature and with a holding feature under the head.

NOTE: These bolts are also known as coach bolts, carriage bolts and cup-square bolts.

3.3 Length (*l*)—of a bolt, is the distance from the bearing surface of the head to the extreme end.