AS 1897:2016
ISO 4042:1999

AS 1897:2016

Fasteners—Electroplated coatings

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The following are represented on Committee ME-029:

- 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
- Australian Industry Group
- Australian Steel Institute
- Austroads
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- Master Builders Australia
- Materials Australia
- National Association of Steel-Framed Housing
- National Association of Testing Authorities Australia
- New Zealand Heavy Engineering Research Association
- Society of Automotive Engineers Australasia
- Swinburne University of Technology

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Australian Standard®

Fasteners—Electroplated coatings

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PREFACE

This Standard was prepared by the Australian members of Joint Standards Australia/Standards New Zealand Committee ME-029, Fasteners, to supersede AS 1897—1976, *Electroplated coatings on threaded components (metric coarse series)*. After consultation with stakeholders in both countries, Standards Australia and Standards New Zealand decided to develop this Standard as an Australian Standard rather than an Australian/New Zealand Standard.

The objective of this Standard is to specify dimensional requirements for electroplated fasteners of steel or copper alloy. It specifies coating thicknesses and gives recommendations for hydrogen embrittlement relief for fasteners with high tensile strength or hardness and for surface-hardened fasteners.

This Standard is identical with, and has been reproduced from ISO 4042:1999, *Fasteners—Electroplated coatings.*

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

(a) In the source text ‘this International Standard’ should read ‘this Australian Standard’.

(b) A full point substitutes for a comma when referring to a decimal marker.

(c) The unit ‘ml’ used in the source text for millilitres should read ‘mL’.

None of the normative references in the source document have been adopted as Australian or Australian/New Zealand Standards.

The terms ‘normative’ and ‘informative’ are used to define the application of the annex to which they apply. A ‘normative’ annex is an integral part of a Standard, whereas an ‘informative’ annex is only for information and guidance.

CONTENTS

AUSTRALIAN STANDARD

Fasteners—Electroplated coatings

1 Scope

This International Standard specifies dimensional requirements for electroplated fasteners of steel or copper alloy. It specifies coating thicknesses and gives recommendations for hydrogen embrittlement relief for fasteners with high tensile strength or hardness and for surface-hardened fasteners.

This International Standard primarily concerns the electroplating of threaded fasteners, but it may also be applied to other threaded parts. For the applicability to screws that cut or form their own mating threads, see clause 8.

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

2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this International Standard. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. For undated references, the latest edition of the normative document referred to applies. Members of ISO and IEC maintain registers of currently valid International Standards.

ISO 965-1:1999, *ISO general purpose metric screw threads — Tolerances — Part 1: Principles and basic data.*

ISO 965-2:1999, *ISO general purpose metric screw threads — Tolerances — Part 2: Limits of sizes for general purpose bolt and nut threads — Medium quality*.

ISO 965-3:1999, *ISO general purpose metric screw threads — Tolerances — Part 3: Deviations for constructional threads*.

ISO 1456:1988, *Metallic coatings — Electrodeposited coatings of nickel plus chromium and of copper plus nickel plus chromium.*

ISO 1458:1988, *Metallic coating — Electrodeposited coatings of nickel*.

ISO 1502:1996, *ISO general purpose metric screw threads — Gauges and gauging*.

ISO 2064:1996, *Metallic and other non-organic coatings — Definitions and conventions concerning the measurement of thickness*.

ISO 2081:1986, *Metallic coatings — Electroplated coatings of zinc on iron or steel*.

ISO 2082:1986, *Metallic coatings — Electroplated coatings of cadmium on iron or steel*.