

Australian Standard™

**Galvanic (sacrificial) anodes for
cathodic protection**

This Australian Standard was prepared by Committee MT-014, Corrosion of Metals. It was approved on behalf of the Council of Standards Australia on 24 September 2003 and published on 24 November 2003.

The following are represented on Committee MT-014:

Australasian Corrosion Association
Australasian Institute of Metal Finishing
Australian Chamber of Commerce and Industry
Australian Electrolysis Committee
The Australian Gas Association
Australian Paint Manufacturers' Federation
Australian Paint Approval Scheme
Austroads
Bureau of Steel Manufacturers of Australia
Corrosion Prevention Centre
Department of Defence
Division of Building, Construction and Engineering, CSIRO
Galvanizers Association of Australia
Telstra
United Water International
Water Services Association of Australia

Additional interests participating in the preparation of this Standard:

Corrosion consultants
Department of Minerals and Energy
Gas and Fuel Corporation of Victoria
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Australian Standard™

**Galvanic (sacrificial) anodes for
cathodic protection**

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PREFACE

The Standard was prepared by the Australian members of the Joint Standards Australia/Standards New Zealand Committee MT-014, Corrosion of Metals to supersede AS 2239—1993, *Galvanic (sacrificial) anodes for cathodic protection*. After consultation with stakeholders in both countries, Standards Australia and Standards New Zealand decided to develop this Standard as an Australian, rather than an Australian/New Zealand Standard.

The objective of this Standard is to specify the requirements for those common anode alloys available in Australia for use in cathodic protection systems, such as those specified in the AS 2832 series of Standards.

The objective of this revision is to include new specifications and chemical composition limits for anodes.

The terms ‘normative’ and ‘informative’ have been used in this Standard to define the application of the appendix to which they apply. A ‘normative’ appendix is an integral part of a Standard, whereas an ‘informative’ appendix is only for informative and guidance.

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STANDARDS AUSTRALIA

Australian Standard**Galvanic (sacrificial) anodes for cathodic protection**

SECTION 1 SCOPE AND GENERAL

1.1 SCOPE

This Standard specifies requirements for galvanic (sacrificial) anodes for use in the cathodic protection of metals against corrosion. It specifies the composition of suitable alloys for magnesium, zinc and aluminium anodes and gives details of shapes and design features of some commonly used anodes. It also includes details of backfill compositions and properties, for buried magnesium and zinc anodes.

NOTE: Advice and recommendations on information to be supplied by the purchaser at the time of enquiry or order are contained in the purchasing guidelines set out in Appendix A.

1.2 REFERENCED DOCUMENTS

The following documents are referred to in this Standard:

AS

1042 Direct-acting indicating electrical measuring instruments and their accessories

1152 Specification for test sieves

1627 Metal finishing—Preparation and pretreatment of surfaces

1627.9 Part 9: Pictorial surface preparation standards for painting steel surfaces

2706 Numerical values—Rounding and interpretation of limiting values

2832 Cathodic protection of metals

2832.4 Part 4: Internal surfaces

AS/NZS

1125 Conductors in insulated electric cables and flexible cords

3008 Electrical installations—Selection of cables

3008.1.1 Part 1.1: Cables for alternating voltages up to and including 0.6/1 kV—Typical Australian installation conditions

ASTM

D1141 Standard practice for the preparation of substitute ocean water

MIL-A

18501k Anodes, corrosion preventive, zinc; slab disc and rod shaped

1.3 DEFINITIONS

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

1.3.1 Anode (in general)

An electrode, placed in the electrolyte, to apply cathodic protection to the structure.