Australian Standard®

Corrosion of metals—Dissimilar metals in contact in seawater

This Australian Standard was prepared by Committee MT/14, Corrosion of Metals. It was approved on behalf of the Council of Standards Australia on 8 May 1992 and published on 20 July 1992.

The following interests are represented on Committee MT/14:

Aluminium Development Council

Australasian Corrosion Association

Australian Gas Association

Australian Institute of Steel Construction

Australian Zinc Development Association

Austroads

Bureau of Steel Manufacturers of Australia

Confederation of Australian Industry

Department of Defence

Electricity Supply Association of Australia

Engineering and Water Supply Department, S.A.

Railways of Australian Committee

Standards Association of New Zealand

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Additional interests participating in preparation of Standard:

Department of Manufacturing and Industry Development

Melbourne Water Corporation

Queensland Electricity Commission

University of Queensland

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First published as AS 4036—1992.

PREFACE

This Standard was prepared under the direction of the Multitechnics Standards Policy Board by the Standards Australia Committee on Corrosion of Metals, at the request of the Department of Defence, to replace the Australian Defence Standard, DEF(AUST) 143 Corrosion and its prevention at bimetallic contacts.

In the future it is intended to expand the scope of this Standard to cover corrosion of dissimilar metals in contact when subjected to corrosive environments other than marine environments.

This Standard provides an original test method to derive ratings of galvanic corrosion activity of metallic couples immersed in artificial seawater, based on their current/time relationships.

It also lists for reference, the galvanic series comprising a number of individual metals and alloys after immersion for one hour and also for a 28 day period, in artificial seawater.

In preparing this Standard, cognizance was taken of DEF(AUST) 143 and the following documents:

PD 6484 Commentary on corrosion at bimetallic contacts and its alleviation

ASTM D 1141 Substitute ocean water

Department of Defence Navy Corrosion Source documents

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