Australian Standard®

Cathodic protection of metals

Part 3: Fixed immersed structures

This Australian Standard was prepared by Committee MT/14, Corrosion of Metals. It was approved on behalf of the Council of Standards Australia on 13 December 1991 and published on 16 April 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 Australia Committee

Standards Association of New Zealand

States electrolysis committees

Telecom Australia

Additional interests participating in preparation of Standard:

Corrosion consultants

Gas and Fuel Corporation of Victoria

Hunter Water Board

N.S.W. Office of Energy

Petroleum refineries

State Electricity Commission of Victoria

State Energy Commission of Western Australia

Water Resources Commission, Qld

Review of Australian Standards. To keep abreast of progress in industry, Australian Standards are subject to periodic review and are kept up to date by the issue of amendments or new editions as necessary. It is important therefore that Standards users ensure that they are in possession of the latest edition, and any amendments thereto.

Full details of all Australian Standards and related publications will be found in the Standards Australia Catalogue of Publications; this information is supplemented each month by the magazine 'The Australian Standard', which subscribing members receive, and which gives details of new publications, new editions and amendments, and of withdrawn Standards.

Suggestions for improvements to Australian Standards, addressed to the head office of Standards Australia, are welcomed. Notification of any inaccuracy or ambiguity found in an Australian Standard should be made without delay in order that the matter may be investigated and appropriate action taken.

Australian Standard®

Cathodic protection of metals Part 3: Fixed immersed structures

First published as AS 2832.3—1992

Incorporating: Amdt 1—1993 Amdt 2—1999

PREFACE

This Standard was prepared by the Standards Australia Committee on the Corrosion of Metals, at the request of industry to provide a Standard for the guidance of owners of immersed structures which are to be cathodically protected. It is not intended to be a complete cathodic protection design manual and those requiring further information should refer to the other Standards mentioned, to text books on the subject, or to appropriate corrosion prevention specialists.

During preparation of this Standard, account was taken of the regulations of the various state authorities which differ in their approach to cathodic protection.

This Standard forms one of the proposed AS 2832 series of Standards which cover the cathodic protection of metals. The first Standards in the series are as follows:

AS

2832 Cathodic protection of metals 2832.1 Part 1: Pipes, cables and ducts 2832.2 Part 2: Compact buried structures

Other Standards which are in the course of preparation and provide guidelines on cathodic protection cover internal surfaces of items such as water storage tanks, and the design of cathodic protection systems for boats.

© Copyright - STANDARDS AUSTRALIA

Users of Standards are reminded that copyright subsists in all Standards Australia publications and software. Except where the Copyright Act allows and except where provided for below no publications or software produced by Standards Australia may be reproduced, stored in a retrieval system in any form or transmitted by any means without prior permission in writing from Standards Australia. Permission may be conditional on an appropriate royalty payment. Requests for permission and information on commercial software royalties should be directed to the head office of Standards Australia.

Standards Australia will permit up to 10 percent of the technical content pages of a Standard to be copied for use exclusively in-house by purchasers of the Standard without payment of a royalty or advice to Standards Australia.

Standards Australia will also permit the inclusion of its copyright material in computer software programs for no royalty payment provided such programs are used exclusively in-house by the creators of the programs.

Care should be taken to ensure that material used is from the current edition of the Standard and that it is updated whenever the Standard is amended or revised. The number and date of the Standard should therefore be clearly identified.

The use of material in print form or in computer software programs to be used commercially, with or without payment, or in commercial contracts is subject to the payment of a royalty. This policy may be varied by Standards Australia at any time.

CONTENTS

3

		Page
FOREWO	RD	5
SECTION	1 SCOPE AND GENERAL	
1.1	SCOPE	6
1.2	REFERENCED DOCUMENTS	6
1.3	DEFINITIONS	6
SECTION	2 DESIGN OF STRUCTURES FOR CATHODIC PROTECTION	
2.1	GENERAL	9
2.2		
2.3	TEST POINTS	
2.4		-
	ELECTRICAL CONTINUITY	-
SECTION	3 COATINGS FOR USE WITH CATHODIC PROTECTION	
3.1	GENERAL	11
3.2		11
	COATING CHOICE	11
	COATING CHOICE	12
5.4	COATING LIFE	12
SECTION	4 CRITERIA FOR CATHODIC PROTECTION	
4.1	GENERAL	13
4.2	FERROUS STRUCTURES	13
4.3	COPPER/COPPER ALLOY STRUCTURES	13
4.4	ALUMINIUM STRUCTURES	13
4.5	MIXED METALLIC STRUCTURES	13
4.6	MEASUREMENT OF POTENTIAL	13
4.7	OVERPROTECTION	14
SECTION	5 DESIGN OF CATHODIC PROTECTION SYSTEMS	
5.1	GENERAL	15
5.2	SAFETY PRECAUTIONS	15
5.3	CHOICE OF SYSTEM—IMPRESSED CURRENT OR GALVANIC ANODES	15
5.4	CONTROL OF INTERFERENCE CURRENTS	16
5.5	CABLES	16
5.6	CHECK LIST FOR INITIAL SURVEYS	17
5.7		17
5.8	ANODE ARRANGEMENTS	21
	ANODE MATERIALS AND APPLICATIONS	22
	POWER SUPPLY FOR IMPRESSED CURRENT SYSTEMS	22
	BACKFILL	
	SYSTEM DESIGN DOCUMENTATION	
5.12		
	6 INSTALLATION OF CATHODIC PROTECTION SYSTEMS	
6.1		25
	MATERIALS AND EQUIPMENT ACCEPTANCE TESTS	25
	INSTALLATION OF GALVANIC ANODE SYSTEMS	26
	INSTALLATION OF IMPRESSED CURRENT SYSTEMS	
6.5	INSTALLATION OF INSULATING FLANGES AND DEVICES	26



The is a new provider i arenade and chare publication at the limit below	This is a free preview.	Purchase the	entire publication	at the link below:
--------------------------------------------------------------------------	-------------------------	--------------	--------------------	--------------------

Product Page

- Dooking for additional Standards? Visit Intertek Inform Infostore
- Dearn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation