This is a free page sample. Access the full version online.

AS 2885.1—1997
(Incorporating Amendment No. 1)

AS 2885.1

Australian Standard™

Pipelines—Gas and liquid Petroleum

Part 1: Design and construction

Standards Australia

This is a free page sample. Access the full version online.

This Australian Standard was prepared by Committee ME/38, Petroleum Pipelines. It was approved on behalf of the Council of Standards Australia on 2 April 1997 and published on 5 May 1997.

The following interests are represented on Committee ME/38:

Alinta Gas, Australia

Australasian Corrosion Association

Australasian Institute of Mining and Metallurgy

Australian Gas Association

Australian Institute for Non-destructive Testing

Australian Institute of Petroleum

Australian Pipeline Industry Association

Bureau of Steel Manufacturers of Australia

Co-operative Research Centre for Materials, Welding and Joining

Department of Energy, N.S.W.

Department of Minerals and Energy, N.S.W.

Department of Minerals and Energy, W.A.

Department of Mines and Energy, Qld

Department of Mines and Energy, N.T.

Department of Natural Resources and Environment, Vic.

East Australian Pipeline

Epic Energy Operation and Maintenance, S.A.

Hazardous Industry Planning Taskforce, Australia

Institution of Engineers, Australia

Metal Trades Industry Association of Australia

Mines and Energy, S.A.

Ministry of Commerce, New Zealand

Office of Energy, W.A.

Welding Technology Institute of Australia

Keeping Standards up-to-date

Standards are living documents which reflect progress in science, technology and systems To maintain their currency, all Standards are periodically reviewed, and new editions are published. Between editions, amendments may be issued. Standards may also be withdrawn. It is important that readers assure themselves they are using a current Standard, which should include any amendments which may have been published since the Standard was purchased.

Detailed information about Standards can be found by visiting the Standards Australia web site at www.standards.com.au and looking up the relevant Standard in the on-line catalogue.

Alternatively, the printed Catalogue provides information current at 1 January each year, and the monthly magazine, *The Australian Standard*, has a full listing of revisions and amendments published each month.

We also welcome suggestions for the improvement in our Standards, and especially encourage readers to notify us immediately of any apparent inaccuracies or ambiguities. Contact us via email at mail@standards.com.au, or write to the Chief Executive, Standards Australia International Ltd, GPO Box 5420, Sydney, NSW 2001.

This Standard was issued in draft form for comment as DR 93005.

This is a free page sample. Access the full version online.

AS 2885.1—1997
(Incorporating Amendment No. 1)

Australian Standard™

Pipelines—Gas and liquid petroleum

Part 1: Design and construction

Originated in part as AS CB28—1972.
Previous edition AS 2885—1987.
Revised and redesignated in part as AS 2885.1—1997.
Reissued incorporating Amendment No. 1 (April 2001).

COPYRIGHT

© Standards Australia International

All rights are reserved. No part of this work may be reproduced or copied in any form or by any means, electronic or mechanical, including photocopying, without the written permission of the publisher.

Published by Standards Australia International Ltd
GPO Box 5420, Sydney, NSW 2001, Australia

ISBN 0 7337 1193 6

This is a free page sample. Access the full version online.

PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee ME/38 on Petroleum Pipelines, to supersede AS 2018—1981, *Liquid petroleum pipelines*, and AS 2885—1987, *Pipeline—Gas and liquid petroleum*, as well as the parts of AS 1697—1981, *Gas transmission and distribution systems* that relate to an MAOP of more than 1050 kPa or a hoop stress of more than 20%.

This Standard is the result of a consensus among Australian and New Zealand representatives on the Joint Committee to produce it as an Australian Standard.

This Standard incorporates Amendment No. 1 (April 2001). The changes required by the Amendment are indicated in the text by a marginal bar and amendment number against the clause, note, table, figure or part thereof affected.

The objective of this Standard is to provide requirements for the design and construction of steel pipelines and associated piping and components that are used to transmit single phase and multiphase hydrocarbon fluids.

This Standard is one of the following series, which refers to high pressure petroleum pipelines:

AS
2885 Pipelines—Gas and liquid petroleum
2885.1 Part 1: Design and construction (this Standard)
2885.2 Part 2: Welding
2885.3 Part 3: Operation and maintenance

Gas pipelines with a pressure of less than 1050 kPa and a hoop stress of less than 20% are covered by AS 1697, and it is intended to publish a new Standard to cover low pressure liquid pipelines.

A1 Statements expressed in mandatory terms in notes to tables and figures are deemed to be requirements of the Standard.

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 information and guidance.

This is a free page sample. Access the full version online.

CONTENTS

Page

SECTION 1 SCOPE AND GENERAL
A1 1.0 BASIS OF AS 2885 SERIES OF STANDARDS 5
1.1 SCOPE 5
1.2 EXCLUSIONS 6
1.3 RETROSPECTIVE APPLICATION 6
1.4 DEPARTURES FROM THIS STANDARD 6
1.5 REFERENCED DOCUMENTS 6
1.6 INTERPRETATIONS 6
1.7 CONVERSION TO SI UNITS 6
1.8 ROUNDING OF NUMBERS 7
1.9 NOTATION 7
1.10 DEFINITIONS 7

SECTION 2 SAFETY
2.1 BASIS OF SECTION 10
2.2 GENERAL 10
2.3 RISK IDENTIFICATION 10
2.4 RISK EVALUATION 11
2.5 MANAGEMENT OF RISKS 13
2.6 OCCUPATIONAL HEALTH AND SAFETY 14
2.7 ELECTRICAL SAFETY 14
2.8 CONSTRUCTION SAFETY 14

SECTION 3 MATERIALS AND COMPONENTS
A1 3.0 BASIS OF SECTION 16
3.1 QUALIFICATION OF MATERIALS AND COMPONENTS 16
3.2 PRESSURE-CONTAINING COMPONENTS 18
3.3 CARBON EQUIVALENT 18
3.4 YIELD STRESS 18
3.5 FRACTURE TOUGHNESS 18
3.6 HEATED OR HOT-WORKED ITEMS 18
3.7 RECORDS 19

SECTION 4 PIPELINE DESIGN
4.1 BASIS OF SECTION 20
4.2 PIPELINE GENERAL 21
4.3 PIPELINE DESIGN 33
4.4 STATIONS 49

A1 SECTION 5 MITIGATION OF CORROSION
5.1 BASIS OF SECTION 57
5.2 PERSONNEL 57
5.3 RATE OF DEGRADATION 57
5.4 CORROSION MITIGATION 58
5.5 CORROSION MONITORING 58
5.6 INTERNAL CORROSION MITIGATION METHODS 59
5.7 EXTERNAL CORROSION MITIGATION METHODS 59

SAI GLOBAL

This is a free preview. Purchase the entire publication at the link below:

Product Page

Looking for additional Standards? Visit Intertek Inform Infostore

Learn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation