

Australian Standard[®]

Pipelines—Gas and liquid petroleum

Part 4: Submarine pipeline systems



This Australian Standard® was prepared by Committee ME-038, Pipelines—Gas and Liquid Pipelines. It was approved on behalf of the Council of Standards Australia on 29 April 2010. This Standard was published on 19 May 2010.

The following are represented on Committee ME-038:

- APIA Research and Standards Committee
 - Australasian Corrosion Association
 - Australian Institute of Petroleum Ltd
 - Australian Chamber of Commerce and Industry
 - Australian Petroleum Production and Exploration Association
 - Australian Pipeline Industry Association
 - Bureau of Steel Manufacturers of Australia
 - Department of Mines and Energy (Qld)
 - Department of Mines & Petroleum (WA)
 - Department of Primary Industry, Fisheries and Mines (NT)
 - Department of Water and Energy (NSW)
 - Energy Networks Association
 - Energy Safe Victoria
 - Gas Association of New Zealand
 - Petroleum Exploration and Production Association
 - Primary Industries and Resources SA
 - Welding Technology Institute of Australia
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This Standard was issued in draft form for comment as DR AS 2885.4.

Standards Australia wishes to acknowledge the participation of the expert individuals that contributed to the development of this Standard through their representation on the Committee and through the public comment period.

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Part 4: Submarine pipeline systems

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PREFACE

This Standard was prepared by the Australian members of the Joint Standards Australia/Standards New Zealand Committee ME-038, Petroleum Pipelines, to supersede AS 2885.4—2003, *Gas and liquid petroleum submarine pipelines*. 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 provide minimum requirements for submarine pipelines.

This Standard is Part 4 of the following suite of Standards, which covers high-pressure petroleum pipelines:

AS

2885	Pipelines—Gas and liquid petroleum
2885.0	Part 0: General requirements
2885.1	Part 1 Design and construction
2885.2	Part 2: Welding
2885.3	Part 3: Operation and maintenance
2885.4	Part 4: Submarine pipeline systems (this Standard)

AS/NZS

2885.5	Part 5: Field pressure testing
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Other Standards play a primary and direct role in achieving the purposes of the ME-038 Committee. The other Standards currently published by the Committee are the following:

AS

2832	Cathodic protection of metals
4822	External field joint coatings for steel pipelines

AS/NZS

1518	External extruded high-density polyethylene coating system for pipes
3862	External fusion-bonded epoxy coating for steel pipes

Significant changes in this Revision include the following:

- (a) Additional clarity on application limits of the Standard to reflect other offshore pipeline configurations.
- (b) Deviation from DNV OS-F101 ‘Det Norske Veritas Offshore Standard—Submarine pipeline systems’ with regards to drop weight tear testing (DWTT) requirements.
- (c) Inclusion of an informative Appendix providing specific information on design and integrity issues to be addressed for pipeline shore crossings.

The term ‘informative’ has been used in this Standard to define the application of the appendix to which it applies. An ‘Informative’ appendix is only for information and guidance

Statements expressed in mandatory terms in notes to tables are deemed to be requirements of this Standard.

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STANDARDS AUSTRALIA

Australian Standard**Pipelines—Gas and liquid petroleum**

Part 4: Submarine pipeline systems

1 SCOPE

This Standard specifies requirements for submarine pipeline systems with respect to safety, design, materials, fabrication, installation, testing, commissioning, operation, maintenance, and abandonment.

2 APPLICATION

This Standard applies to submarine pipeline systems constructed of carbon manganese steel, low alloy steel (forgings and castings), clad/lined steel and corrosion-resistant alloys. The application limits to pipelines and associated piping and components shall be as shown in Figures 1.1, 1.2, 1.3 and 1.4.