

Australian/New Zealand Standard™

Pipelines—Gas and liquid petroleum

Part 4: Submarine pipeline systems



AS/NZS 2885.4:2016

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The following are represented on Committee ME-038:

APGA Research and Standards Committee
Australasian Corrosion Association
Australian Industry Group
Australian Institute of Petroleum
Australian Petroleum Production and Exploration Association
Australian Pipeline and Gas Association
Department of Industry, Skills and Regional Development
Department of Mines and Energy (NT)
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PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee ME-038, Petroleum Pipelines, to supersede AS 2885.4—2010.

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
2885.3	Part 3: Operation and maintenance

AS/NZS

2885	Pipelines—Gas and liquid petroleum
2885.2	Part 2: Welding
2885.4	Part 4: Submarine pipeline systems (this Standard)
2885.5	Part 5: Field pressure testing

Significant changes in this revision include the following:

- (a) Revision of application limits to reflect other submarine pipeline configurations.
- (b) Revisiting variations to DNV OS-F101 ‘Det Norske Veritas Offshore Standard—Submarine pipeline systems’ which appeared in the 2010 edition of the Standard.
- (c) Updating of Appendix A providing specific information on design and integrity issues to be addressed for pipeline shore crossings based on recent industry experience.

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

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.

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**Australian/New Zealand Standard
Pipelines—Gas and liquid petroleum****Part 4: Submarine pipeline systems****1 SCOPE**

This Standard specifies the use of the following documents to provide requirements for submarine pipeline systems with respect to safety, design, materials, fabrication, installation, testing, operation and abandonment:

- (a) AS 2885.0, AS 2885.1, AS/NZS 2885.2, AS 2885.3 and AS/NZS 2885.5 for the onshore part of submarine pipeline systems.
- (b) DNV OSF101 for other parts of submarine pipeline systems.

This Standard also specifies application limits to define the links between the above parts of pipelines.

NOTE: Appendix A provides guidance on pipelines at the shore crossing.

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.

This Standard applies to submarine pipeline systems conveying hydrocarbon products (oil, natural gas, liquefied petroleum gas, ethane, ethylene, methanol, natural gas liquids, monoethylene glycol, etc.) and non-hydrocarbon products (water, carbon dioxide, non-flammable water based fluids, non-toxic gases, etc.).

2 APPLICATION**2.1 General**

This Standard shall be applied in conjunction with DNV OS-F101 and AS 2885 series Standards as specified in Clauses 2.2 and 2.3.

2.2 DNV OS-F101

Except as noted in Clause 2.3, all requirements for submarine pipeline systems with respect to safety, design, materials, fabrication, installation, testing, operation and abandonment shall be in accordance with DNV OS-F101. The requirements of AS 2885.0, AS 2885.1, AS/NZS 2885.2, AS 2885.3 and AS/NZS 2885.5 are not applicable.

Where DNV OS-F101 does not cover any aspect of the scope then, subject to Clause 5, guidance shall be sought in the first instance from other relevant Australian and International Standards.

2.3 Specific deviations from DNV OS-F101**2.3.1 General**

The deviation from DNV OS-F101, as specified in Clause 2.3, shall be applicable and take precedence over DNV OS-F101 requirements.

2.3.2 Onshore part of submarine pipeline systems

The requirements of AS 2885.0, AS 2885.1, AS/NZS 2885.2, AS 2885.3 and AS/NZS 2885.5 shall take precedence.