AS 2885.5:2020
(Incorporating Amendment Nos 1 - 2)

Australian STANDARD®

STANDARDS Australia

Pipeline systems — High pressure

Part 5: Field pressure testing



AS 2885.5:2020

This Australian Standard® was prepared by ME-038, Petroleum Pipelines. It was approved on behalf of the Council of Standards Australia on 17 November 2020.

This Standard was published on 4 December 2020.

This Standard was reissued incorporating changes from the latest amendment on 29 May 2026.

The following are represented on Committee ME-038:

- APGA Research and Standards Committee
- Australasian Corrosion Association
- Australian Institute of Petroleum
- Australian Petroleum Production and Exploration Association
- Australian Pipelines and Gas Association
- Department for Energy and Mining (South Australia)
- Department of Mines, Industry Regulation and Safety (Western Australia)
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- Department of Primary Industry and Resources (Northern Territory)
- Energy Networks Australia
- Energy Safe Victoria
- Weld Australia

Additional Interests:

- WorkSafe New Zealand

This Standard was issued for comment as DR AS 2885.5:2018

Status of this document

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ISBN: 978 1 76113 099 1

Australian Standard®

Pipeline systems — High pressure

Part 5: Field pressure testing

First published as AS 1978-1977.
Jointly revised and redesignated as AS/NZS 2885.5:2002.
Third edition 2012.
Revised and redesignated as AS 2885.5:2020.
Reissued incorporating Amendment No 1 (November 2022).
Reissued incorporating Amendment No 2 (May 2026).

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How to read this Standard

This page explains the meaning of the language and structure of this Standard.

Refer to Standards Australia's Standardisation Guide 006 for more details about drafting rules.

Australian and Australian/New Zealand Standards are voluntary unless they are referenced in legislation or called up in contracts.

Requirements

To conform to a Standard, all requirements in the Standard need to be met.

A requirement is any statement in the Standard which uses the word "shall".

Recommendations, permissions and possibilities

The following words are commonly used in Standards, but statements using them do not have to be followed to conform to the Standard:

(a) "should" means that something is recommended.

(b) "may" means that something is permitted.

(c) "can" means that something is possible.

Structure of Standards

A Standard always has the following parts:

(i) The Preface states who developed the Standard, what the Standard is aiming to do, and how it relates to other documents.

(ii) The Scope states what the Standard is about, what it covers and what it does not cover.

(iii) The Normative references clause lists other documents that are referenced in the Standard as part of requirements.

(iv) The Terms and definitions clause defines important terms to help with understanding the Standard.

A Standard may also include other parts, such as the following:

(1) A normative appendix sets additional requirements that need to be conformed to.

(2) An informative appendix provides additional information or guidance. They usually do not contain requirements. If an informative appendix does contain requirements, the Standard will explain when those requirements apply.

(3) A Bibliography lists documents referenced in the Standard but not as part of requirements.

Many Standards include notes. Notes provide recommendations and/or guidance only. They never contain requirements.

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/NZS 2885.5:2012, *Pipelines—Gas and liquid petroleum, Part 5: Field pressure testing.*

〖A2〗 *This Standard incorporates Amendment No. 1 (November 2022) and Amendment No. 2 (May 2026). The start and end of changes introduced by the Amendment are indicated in the text by tags including the Amendment number 1 and Amendment number 2.* 〈A2〉

After consultation with stakeholders in both countries, Standards Australia and Standards New Zealand decided to develop this document as an Australian Standard rather than an Australian/New Zealand Standard.

The objective of this document is to set out methods for the determination of the strength and the LEAK TIGHTNESS of a pipeline test section.

〖A2〗 This document forms part of the AS(AS/NZS) 2885 series, which covers high-pressure petroleum pipelines. A list of all parts in this series can be found in the Standards Australia online catalogue.

NOTE The title of this document has been amended from "*Pipelines — Gas and liquid petroleum, Part 5: Field pressure testing*" to "*Pipeline systems — High pressure, Part 5: Field pressure testing*" by Amendment No. 2 (2026). 〈A2〉

Definitions used in this document and throughout the series are now listed in AS 2885.0.

The major changes in this revision are as follows:

(a) Alignment with AS/NZS 2885.1.

(b) Revision of definitions.

(c) Amplification of STRENGTH TEST Type 2.

(d) Amendment of the reporting requirements.

(e) Relocation of Appendix P, Test section analysis using engineering software, to Part 1 of this series (AS/NZS 2885.1).

(f) Revision of Appendix N, Safety in Pressure Testing, including the method of determining EXCLUSION ZONES.

(g) Deletion of the supplementary LEAK TEST method.

(h) Clarification of the requirements for measuring instruments.

The inclusion of roles and responsibilities in this document was approved by the Standards Development and Accreditation Committee on 1 May 2015, as a one-off exemption to the directives of Standardization Guide 009: Preparation of Standards for Legislative Adoption.

SMALL CAPS have been used throughout this document to indicate terms that are defined in Clause 1.3 and in AS 2885.0:2018 (e.g. CALIBRATION). Although "may", "should" and "shall" are defined terms, they do not appear in small caps. FULL CAPS have been used throughout this document to indicate abbreviations listed in Clause 1.5.

The terms "normative" and "informative" are used in Standards to define the application of the appendices to which they apply. A "normative" appendix is an integral part of a Standard, whereas an "informative" appendix is only for information and guidance.

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Pipeline systems — High pressure

Part 5: Field pressure testing

Section 1 Scope and general

1.1 Scope and exclusions

1.1.1 General

This document sets out methods for the pressure testing of petroleum pipelines constructed of steel, designed in accordance with AS/NZS 2885.1, and operated in accordance with AS 2885.3. It may also be used for testing other pipelines, including pipelines designed or operated in accordance with AS/NZS 4645.2.

Pressure testing is used to establish —

(a) the pressure limit (PL) in accordance with AS/NZS 2885.1 (STRENGTH TEST); and

(b) the LEAK TIGHTNESS of a test section (LEAK TEST).

Pressure testing with air or gas, while not recommended, is permitted by this document within the limits specified in AS/NZS 2885.1.

NOTE 1 References in this document to liquid or fluid may be generically applied as applicable to air or gas.

This document may also be applicable to high pressure steel pipelines designed and constructed to national Standards of other countries. This document may be applied for PRETESTING of pipe and COMPONENTS and for testing sections of pipe separate from the field test.

NOTE 2 For information on the history and basis of this document, see Appendix A.

1.1.2 Exclusions

This document does not apply to pressure testing of pipe manufactured from plastic or fibreglass materials.

The determination of the pressure-volume-temperature relationship does not apply to plastic or fibreglass pipe. For fibreglass pipe, this relationship shall be established by other means for use in leak test determination.

NOTE The properties of these materials mean that the pipe may be damaged when tested by methods designed for steel pipe. Procedures appropriate to these materials and documented in another Standard should be used, or if required, developed.

1.2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document.

NOTE Documents for informative purposes are listed in the Bibliography.

AS 1210, *Pressure vessels*

AS 1349, *Bourdon tube pressure and vacuum gauges*

AS 1894, *The storage and handling of non-flammable cryogenic and refrigerated liquids*

AS 2706, *Numerical values — Rounding and interpretation of limiting values*

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