

Australian Standard™

**Gas cylinder test stations**

**Part 2: LP Gas fuel vessels for  
automotive use**

This Australian Standard was prepared by Committee ME-002, Gas Cylinders. It was approved on behalf of the Council of Standards Australia on 9 March 2004. This Standard was published on 30 April 2004.

---

The following are represented on Committee ME-002:

Air Conditioning and Refrigeration Wholesalers Association  
Australasian Institute of Engineer Surveyors  
Australian Chamber of Commerce and Industry  
Australian Liquefied Petroleum Gas Association  
Certification Bodies (Australia)  
Department for Administrative and Information Services, S.A.  
Fire Protection Association of Australia  
Institute of Materials Engineering Australasia Ltd.  
Pressure Equipment Association Incorporated  
The Australian Gas Association  
Victorian WorkCover Authority  
Welding Technology Institute of Australia  
WorkCover New South Wales

---

### **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 Standards may also be withdrawn.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 Web Shop at [www.standards.com.au](http://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 Global Standard*, has a full listing of revisions and amendments published each month.

Australian Standards™ and other products and services developed by Standards Australia are published and distributed under contract by SAI Global, which operates the Standards Web Shop.

We also welcome suggestions for 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.org.au](mailto:mail@standards.org.au), or write to the Chief Executive, Standards Australia International Ltd, GPO Box 5420, Sydney, NSW 2001.

---

STANDARDS AUSTRALIA

---

RECONFIRMATION

OF

AS 2337.2—2004

Gas cylinder test stations  
Part 2: LP Gas fuel vessels for automotive use

---

RECONFIRMATION NOTICE

Technical Committee ME-002 has reviewed the content of this publication and in accordance with Standards Australia procedures for reconfirmation, it has been determined that the publication is still valid and does not require change.

Certain documents referenced in the publication may have been amended since the original date of publication. Users are advised to ensure that they are using the latest versions of such documents as appropriate, unless advised otherwise in this Reconfirmation Notice.

Approved for reconfirmation in accordance with Standards Australia procedures for reconfirmation on 21 July 2016.

The following are represented on Technical Committee ME-002:

Australasian Fire and Emergency Service Authorities Council  
Australia New Zealand Industrial Gas Association  
Australian Chamber of Commerce and Industry  
Engineers Australia  
Environmental Protection Authority New Zealand  
Fire Protection Association Australia  
Gas Energy Australia  
Gas Technical Regulation Committee  
International Accreditation New Zealand  
National Association of Testing Authorities Australia  
SafeWork NSW  
The Australian Gas Association  
Welding Technology Institute of Australia  
Worksafe New Zealand  
WorkSafe Victoria

NOTES

Currently in preview, click buy full vers.

Australian Standard™

**Gas cylinder test stations**

**Part 2: LP Gas fuel vessels for  
automotive use**

Original as AS 2337.2—1990.  
Second edition 2004.  
Revised incorporating Amendment No. 1 (September 2004)

**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 5894 0

PREFACE

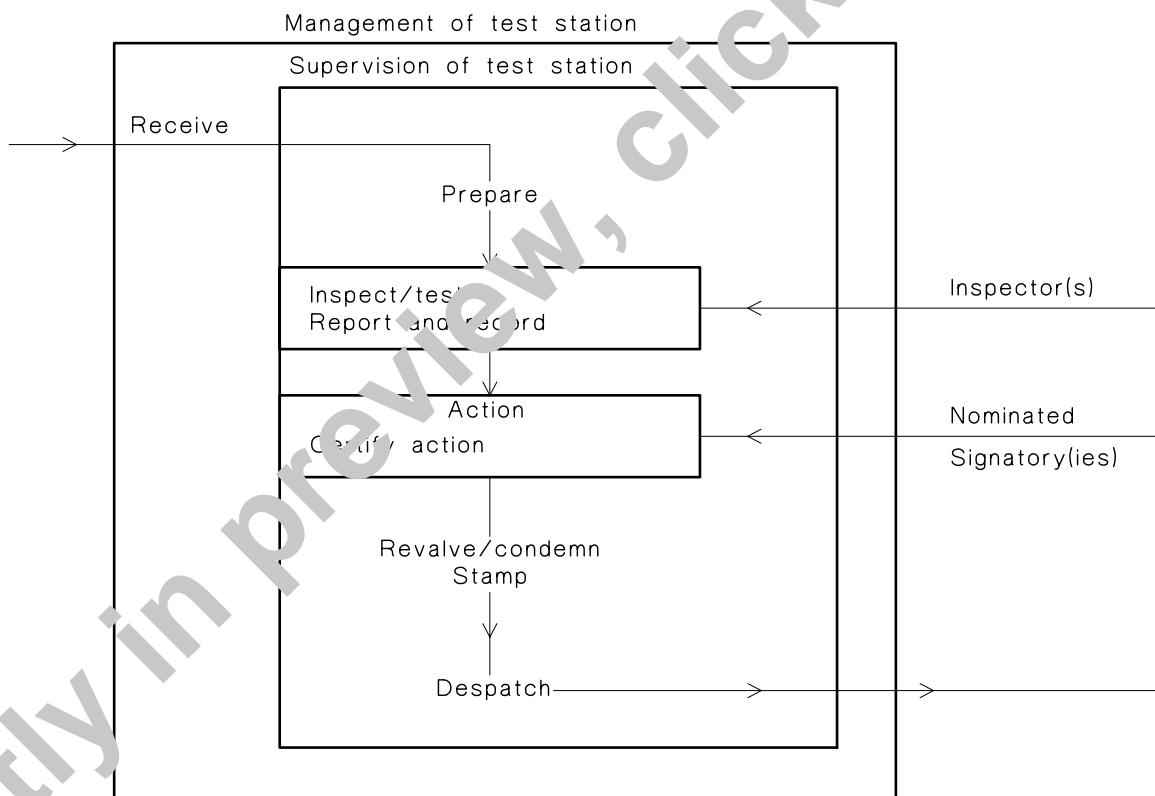
This Standard was prepared by the Australian members of Joint Australian/New Zealand Standards Committee ME-002, Gas Cylinders to supersede AS 2337.2—1990. After consultation with stakeholders in both countries, Standards Australia and Standards New Zealand decided to develop this Standard as an Australian Standard, rather than an Australian/New Zealand Standard.

*This Standard incorporates Amendment No. 1 (September 2004). 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 the related industries with requirements and procedures for gas cylinder test stations to carry out initial and periodic inspection and testing of LP Gas fuel vessels for automotive use.

The division of functions within a test station has caused some difficulties where the titles of personnel do not match their position within the organization in which the test station operates. It is necessary to cater for different types of organization, from one person to a large operation with activities other than testing.

The diagram given below may help explain the process.



NOTE: The boxes show minimum tasks that may be taken up by the nominated person where this will not interfere with their primary responsibility.

A certificated gas cylinder test station scheme is operated by the appropriate Certification Organizations in Australia. Certification Organizations carry out the initial assessment and periodic audits.

From 1995 there has been, and will continue to be, a phasing out of State and Territory regulatory authorities approving and verifying compressed gas cylinder design and testing and a phasing in of competent bodies or persons to undertake this task.

This edition of the Standard removes references to ‘approval’ with regard to State and Territorial regulatory authorities. Gas cylinder test stations will be given certificates of conformity with the appropriate Standard instead of approval. These changes align with the changes that have taken place within AS 2030.1, *The verification, filling, inspection, testing and maintenance of cylinders for storage and transport of compressed gases*, Part 1: *Cylinders for compressed gases other than acetylene*.

In the previous edition of this Standard, it was permissible for vessels to be inspected while on the vehicle. It was not always possible to adequately view all external and internal surfaces. This edition makes it mandatory to remove vessels prior to inspection (see Clause 4.1).

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.

IT SHOULD BE NOTED THAT COMPLIANCE WITH THIS STANDARD MAY NOT NECESSARILY FULFIL ALL LEGAL REQUIREMENTS.

## CONTENTS

	<i>Page</i>
<b>SECTION 1 SCOPE AND GENERAL</b>	
1.1 SCOPE .....	6
1.2 APPLICATION .....	6
1.3 REFERENCED DOCUMENTS .....	6
1.4 DEFINITIONS .....	7
1.5 TEST STATION COMPLIANCE .....	8
<b>SECTION 2 CLASSIFICATION OF TEST STATION OPERATIONS</b>	
2.1 GENERAL .....	9
2.2 MODES OF OPERATION .....	9
<b>SECTION 3 PERSONNEL, PROCEDURES AND BASIC EQUIPMENT</b>	
3.1 MANAGEMENT AND PERSONNEL .....	10
3.2 OPERATIONS AND PROCEDURES .....	11
3.3 WORKPLACE AND EQUIPMENT .....	12
<b>SECTION 4 VESSEL PREPARATION</b>	
4.1 VESSEL REMOVAL .....	14
4.2 RELEASE OF GAS .....	14
4.3 OBSTRUCTED VALVES .....	14
4.4 VALVE REMOVAL .....	15
<b>SECTION 5 INSPECTIONS AND TESTS TO BE PERFORMED</b>	
5.1 GENERAL .....	16
5.2 SPECIAL INSPECTIONS .....	16
5.3 FITTINGS .....	17
<b>SECTION 6 VISUAL INSPECTION</b>	
6.1 GENERAL .....	18
6.2 EXTERNAL EXAMINATION .....	18
6.3 INTERNAL EXAMINATION .....	18
6.4 THREADS AND SEALING SURFACES .....	22
6.5 DEFECTS AND ACTION .....	22
<b>SECTION 7 PROCEDURES FOR VESSELS WHICH HAVE FAILED AN INSPECTION OR TEST</b>	
7.1 GENERAL .....	23
7.2 REPAIRABLE VESSELS .....	23
7.3 CONDEMNED VESSELS .....	23
7.4 RE-HEAT TREATMENT (STEEL VESSELS ONLY) .....	24
<b>SECTION 8 PROCEDURES FOR VESSELS WHICH HAVE PASSED AN INSPECTION OR TEST</b>	
8.1 GENERAL .....	25
8.2 VESSEL SEALING .....	25
8.3 LEAK TEST .....	25
8.4 VALVE FUNCTION TEST .....	26
8.5 CHECKS PRIOR TO MARKING .....	26
8.6 STAMPING .....	28

*Page*

## SECTION 9 RECORDS AND TEST REPORTS

9.1	RECORDS.....	29
9.2	TEST REPORT .....	29

## APPENDICES

A	INTEGRATED GAS CYLINDER TEST STATIONS.....	30
B	SUGGESTED DEVICE FOR DETECTING OBSTRUCTED VALVE.....	32
C	LP GAS FUEL UNLOADING METHODS.....	33
D	PROCEDURE DIAGRAMS FOR LP GAS VESSEL TESTING.....	37
E	LEAK DETECTION METHODS.....	39
F	EXAMPLE OF TEST REPORT .....	41
G	AGENCY INFORMATION .....	42

Currently in preview, click buy full version

## STANDARDS AUSTRALIA

**Australian Standard**  
**Gas cylinder test stations**

**Part 2: LP Gas fuel vessels for automotive use**

## SECTION 1 SCOPE AND GENERAL

**1.1 SCOPE**

This Standard sets out requirements and procedures for a gas cylinder test station to carry out initial and periodic inspection and testing of LP Gas fuel vessels for automotive use, which are not greater than 500 kg water capacity. It also specifies requirements for test stations to obtain a certificate of conformity.

This Standard requires that all test station inspections and stampings be carried out in Australia.

This Standard does not preclude other tests which may be required to evaluate the integrity of the vessel.

**1.2 APPLICATION**

The gas cylinder test station shall have personnel, procedures and equipment in accordance with the requirements of Section 3.

This Standard applies to fixed containers complying with the requirements of AS 2030.1 and vessels manufactured to AS 1210 or AS/NZS 3509 normally filled on vehicles, whether LP Gas or propane.

This Standard does not apply to portable containers. These cylinders shall be inspected according to AS 2337.1.

**1.3 REFERENCED DOCUMENTS**

The following documents are referred to in this Standard:

AS	
1210	Pressure vessels
1674	Safety in welding and allied processes
1674.1	Part 1: Fire precautions
2050	The verification, filling, inspection, testing and maintenance of cylinders for storage and transport of compressed gases
2030.1	Part 1: Cylinders for compressed gases other than acetylene
2062	Non-destructive testing—Penetrant testing of products and components
2337	Gas cylinder test stations
2337.1	Part 1: General requirements, inspections, and tests—Gas cylinders
2381	Electrical equipment for explosive atmospheres—Selection, installation and maintenance
2381.7	Part 7: Intrinsic safety i