AS 1777—2005
Reconfirmed 2016

Australian Standard™

Aluminium cylinders for compressed gases—Seamless—0.1 kg to 130 kg

This Australian Standard was prepared by Committee ME-002, Gas Cylinders. It was approved on behalf of the Council of Standards Australia on 25 October 2005. This Standard was published on 16 November 2005.

The following are represented on Committee ME-002:

Air Conditioning and Refrigeration Wholesalers Association
Australasian Institute of Engineer Surveyors
Australia New Zealand Industrial Gas Association
Australian Chamber of Commerce and Industry
Australian Industry Group
Australian Liquefied Petroleum Gas Association
Department for Administrative and Information Services, S.A.
Fire Protection Association of Australia
Institute of Materials Engineering Australasia
International Association for Natural Gas Vehicles
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 Standards may also be withdrawn.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 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, or write to the Chief Executive, Standards Australia, GPO Box 476, Sydney, NSW 2001.

This Standard was issued in draft form for comment as DR 05319.

STANDARDS AUSTRALIA

RECONFIRMATION

OF

AS 1777—2005

Aluminium cylinders for compressed gases—Seamless—0.1 kg to 130 kg

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 Regulators 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

Australian Standard™

Aluminium cylinders for compressed gases—Seamless—0.1 kg to 130 kg

Originated as AS 1777—1975.
Previous edition 1995.
Fifth edition 2005.

Published by Standards Australia, GPO Box 476, Sydney, NSW 2001, Australia

ISBN 0 7337 7002 9

PREFACE

This Standard was prepared by the Australian members of the Joint Standards Australia/Standards New Zealand Committee ME-002, Gas Cylinders to supersede AS 1777—1995, *Aluminium cylinders for compressed gases—Seamless—0.1 kg to 130 kg.* 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 manufacturers of gas cylinders with specifications covering a range of seamless aluminium cylinders (0.1 kg to 130 kg) in the storage and transport of compressed gases.

The requirements in this Standard for seamless aluminium cylinders have not been changed from the previous edition. The referenced documents have been updated.

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.

CONTENTS

STANDARDS AUSTRALIA

Australian Standard

Aluminium cylinders for compressed gases—Seamless—0.1 kg to 130 kg

1 SCOPE

This Standard specifies requirements for seamless aluminium cylinders having a water capacity exceeding 0.1 kg but not exceeding 130 kg intended for the storage and transport of compressed gases, and designed for a hydrostatic test pressure of not less than 1.75 MPa.

NOTE: Appendix A lists the suggested minimum information that should be supplied by the purchaser when ordering gas cylinders by this Standard.

2 APPLICATION

This Standard is intended essentially for the manufacture of gas cylinders, and applies to such matters as material, design, heat treatment, inspection during manufacture, and conditions of supply. The tests specified are related to batch compliance 'at works' and provide for retesting and, in some circumstances, reheat treatment.

Subject to adequate certification with respect to the various manufacturing provisions within this Standard, and the results of batch testing, the Standard may also be used as a basis for the approval and certification of finished cylinders.

3 REFERENCED DOCUMENTS

The following documents are referred to in this Standard:

AS	
1391	Metallic materials—Tensile testing at ambient temperature
2030	The verification, filling, inspection, testing and maintenance of cylinders for the storage and transport of compressed gases
2030.1	Part 1: Cylinders for compressed gases other than acetylene
2337	Gas cylinder test stations
2337.1	Part 1: General requirements, inspections and tests—Gas cylinders
2473	Valves for compressed gas cylinders (threaded outlet) (series)
2613	Safety devices for gas cylinders
3635	Unified (ISO inch) screw threads, associated gauges, and gauging practice
CGA	
V-1	Compressed gas cylinder valve outlet and inlet connections
BS	
5045	Transportable gas containers
	Part 8: Specification for seamless aluminium alloy gas containers of water capacity 0.5 litre up to 15 litre and up to 300 bar charged pressure at 15°C for special portable application

4 DEFINITIONS

For the purpose of this Standard, the definitions given in AS 2030.1, and that below apply.

