

Australian Standard™

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

STANDARDS
Australia



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.

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Australia New Zealand Industrial Gas Association
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OF

AS 1777—2005

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

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**Aluminium cylinders for compressed
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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.

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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

- 1-1 Compressed gas cylinder valve outlet and inlet connections

AS

- 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.