

Australian Standard[®]

**Steel cylinders for compressed gases—
Welded—150 kg to 500 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 13 October 2006. This Standard was published on 6 November 2006.

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- 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
 - 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
-

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Standards Australia wishes to acknowledge the participation of the expert individuals that contributed to the development of this Standard through their representation on the Committee and through public comment period.

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STANDARDS AUSTRALIA

RECONFIRMATION

OF

AS 3577—2006

Steel cylinders for compressed gases—Welded—150 kg to 500 kg

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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.

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NOTES

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**Steel cylinders for compressed gases—
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PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee ME-002, Gas Cylinders, to supersede AS 3577—1999. 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 a specification for the design, manufacture, inspection and testing of welded steel cylinders in the water capacity range of 150 to 500 kg.

The objective of this revision is to include stainless steel as a construction material, and to more closely align the radiographic inspection requirements with those of ISO 9706, *Refillable welded steel gas cylinders*.

This Standard is one of a suite of three Standards for welded and brazed cylinders for compressed gases, the other Standards being as follows:

AS

2469 Steel cylinders for compressed gases—Welded two-piece construction—0.1 kg to 150 kg

2470 Steel cylinders for compressed gases—Welded three-piece construction with longitudinal joint—11 kg to 150 kg

This Standard provides for gas cylinders produced in large quantities. Users of this Standard should note that the relevant Inspection Body will require either quality control procedures to be employed at the point of manufacture in Australia, or sampling testing at the point of entry into Australia. It should also be noted that before a gas cylinder can be first filled in Australia, it must be stamped with a Gas Cylinder Test Station registered mark in accordance with the relevant Standard of the AS 2030 series.

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STANDARDS AUSTRALIA

Australian Standard**Steel cylinders for compressed gases—Welded—150 kg to 500 kg****1 SCOPE**

This Standard specifies requirements for welded carbon and stainless steel cylinders with one longitudinal joint, and two circumferential joints, of water capacity not less than 150 kg nor more than 500 kg, which have test pressures from 1750 kPa to 7000 kPa, and are intended for the storage and transport of compressed gases in accordance with AS 2030.1.

NOTES:

- 1 A gas cylinder manufactured by welding but which includes any brazing or solder on the pressure-retaining portions is for the purpose of this Standard considered to be a brazed gas cylinder.
- 2 Other Australian Standards for brazed and welded gas cylinders are AS 2460 and AS 2470.
- 3 Appendix A lists the suggested minimum information that should be supplied by the purchaser when ordering gas cylinders to this Standard.

2 REFERENCED DOCUMENTS

A list of documents referred to in this Standard is given in Appendix B.

3 DEFINITIONS

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

3.1 Attachment

Any fitting attached to the pressure-retaining sections of the cylinder by welding, including bosses, pads, valve protection rings and footrings.

3.2 Competent person

A person who has acquired, through training, qualification or experience, or a combination of these, the knowledge and skills enabling that person to perform the task required.

3.3 Inspection Body

A body responsible for inspection which may cover one or more of the following:

- (a) Design verification.
- (b) Fabrication inspection.
- (c) In-service inspection.

3.4 Inspector

A person, able to inspect pressure equipment for the purposes of conformity with the specified requirements.