

Australian Standard™

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

This Australian Standard was prepared by Committee ME/2, Gas Cylinders. It was approved on behalf of the Council of Standards Australia on 31 July 1998 and published on 5 September 1998.

The following interests are represented on Committee ME/2:

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Airconditioning and Refrigeration Wholesalers Association
Australasian Railway Association
Australian Association of Certification Bodies
Australian Chamber of Commerce and Industry
Australian Chamber of Manufactures
Australian Gas Association
Australian Institute of Pressure Equipment Engineers
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Boiler and Pressure Vessel Manufacturers Association of Australia
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Originated as part of AS B15—1950.
Previous edition AS 2470—1995.
Fourth edition 1998.

PREFACE

This Standard was prepared by the Standards Australia/Standards New Zealand Committee ME/2, Gas Cylinders to supersede AS 2470—1995, *Steel cylinders for compressed gases—Welded—11 kg to 150 kg*. It is one of a suite of four Standards for welded and brazed cylinders for compressed gases, the other Standards being as follows:

AS

2468 Steel cylinders for compressed gases—Brazed—0.1 kg to 11 kg

2469 Steel cylinders for compressed gases—Welded two-piece construction—0.1 kg to 35 kg

3577 Steel cylinders for compressed gases—Welded—150 kg to 500 kg

This Standard is the result of a consensus among representatives on the Joint Committee to produce it as an Australian Standard.

This Standard now provides for compressed gas cylinders manufactured from both carbon and stainless steel and produced in large quantities. Users of this Standard should note that the relevant competent person or body will require either quality control procedures to be employed, at the point of manufacture in Australia, or sampling and 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 an SAA Certified Gas Cylinder Test Station registered mark in accordance with the relevant Standard of the AS 2030 series.

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

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

1 SCOPE This Standard specifies requirements for welded carbon and stainless steel cylinders with one longitudinal and two circumferential joints, of water capacity not less than 11 kg nor more than 150 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. Requirements for stainless steel cylinders are set out in Appendix A.

NOTES:

- 1 A gas cylinder manufactured by welding but which includes any brazing of, or 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 2468, AS 2469 and AS 3577.
- 3 Appendix B 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 C.

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 or body—a person or body who, through training, practical experience and understanding of the equipment, is able to verify compliance with this Standard.

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 acceptable to the competent person or body who ensures and certifies that all the inspections specified herein have been carried out and that the cylinders comply with all the requirements of this Standard.

4 CARBON STEEL**4.1 Cylindrical sections and ends**

4.1.1 Steelmaking process The steel shall be made by the open hearth, basic oxygen, or an electric process. Rimmed steels shall not be used for arc welded components.

NOTE: Rimmed steels are considered not suitable for arc welded components because of problems associated with the welding of the slit edge due to the possibility of lamination and segregation problems.