AS/NZS 3509:1996

Australian/New Zealand Standard®

LP gas fuel vessels for automotive use

### AS/NZS 3509:1996

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committees ME/1, Pressure Equipment and ME/2, Gas Cylinders. It was approved on behalf of the Council of Standards Australia on 16 August 1996 and on behalf of the Council of Standards New Zealand on 29 July 1996. It was published on 5 December 1996.

The following interests are represented on Committee ME/1 and ME/2:

Air Conditioning and Refrigeration Wholesalers Association

Aluminium Development Council, Australia

Australasian Corrosion Association

Australasian Institute of Engineering Inspection

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# LP gas fuel vessels for automotive use

PUBLISHED JOINTLY BY:

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#### **PREFACE**

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committees on Pressure Equipment and Gas Cylinders, to supersede AS 3509—1988, LP gas fuel vessels for automotive use.

This Standard is the result of a consensus among Australian and New Zealand representatives on the Joint Committee to produce this document as an Australian/ New Zealand Standard. Consensus means general agreement by all. Consensus includes an attempt to remove all objections and implies much more than the concept of a simple majority, but not necessarily unanimity. It is consistent with this meaning that a member may be included in the Committee list and yet not be in full agreement with all clauses of this Standard.

The Standard is for vessels with welded attachments intended to be used as parts of installations complying with AS 1425, *LP gas fuel systems for vehicle engines* (known as the *SAA Automotive LP Gas Code*), or NZS 5422.1, *Code of practice for the use of LPG and CNG fuels in internal combustion engines*, Part 1: *LPG fuel*. Certain features, e.g. attachments, require reference to AS 1425 or NZS 5422.1 and manufacturers should be familiar with these Standards.

The design and manufacture of fuel vessels has strong links with both the gas cylinder industry and the pressure vessels industry, and the Standard has adopted successful practices from both these fields.

The significant changes from the 1988 edition are the following:

- (a) The inclusion of Types 304 and 316 stainless steel vessels.
- (b) Updating of referenced documents and materials.
- (c) Editorial and style changes and clarification.
- (d) Modification of batch test requirements for stainless steel to reduce risk of leakage due to intergranular corrosion at high heat input welds.
- (e) Publication as a Joint Australian/New Zealand Standard.

Duplex stainless steels are not included in this edition at the time of publication. Duplex stainless steels are being evaluated by the Committee and may be included as an amendment when this investigation is complete.

Users of this Standard are reminded that it has no legal authority in its own right, but acquires legal standing when adopted by government or an authority having jurisdiction, or if specified as part of a commercial contract.

Statements expressed in mandatory terms in notes to tables and figure are deemed to be requirements of this Standard.

The term 'normative' has been used in this Standard to define the application of the appendix to which it applies. A 'normative' appendix is an integral part of a Standard.

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