

Australian Standard™

**Gas fuel systems for forklifts and
industrial engines**

This Australian Standard was prepared by Committee ME-046, Gas Fuel Systems for Vehicle Engines. It was approved on behalf of the Council of Standards Australia on 31 July 2003 and published on 11 September 2003.

The following are represented on Committee ME-046:

Australian Automobile Association
Australian Chamber of Commerce and Industry
The Australian Gas Association
Australian Liquefied Petroleum Gas Association
Australian Industrial Truck Association
Box Hill Institute of TAFE
Department for Administrative and Information Services, S.A.
Department of Industries and Business N.T.
Department of Natural Resources and Mines, Qld
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This Standard was issued in draft form for comment as DR 01267.

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First published as AS 4983—2003.

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Published by Standards Australia International Ltd
GPO Box 5420, Sydney, NSW 2001, Australia

ISBN 0 7337 5470 8

PREFACE

This Standard was prepared by the Standards Australia Committee ME-046, Gas Fuel Systems for Vehicle Engines, as a new Standard to cover the installation of LPGas and CNG fuel systems for forklifts and industrial engines.

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

Gas fuel systems for forklifts and industrial engines

SECTION 1 SCOPE AND GENERAL

1.1 SCOPE AND APPLICATION

1.1.1 Scope

This Standard specifies requirements for liquefied petroleum gas (LP Gas) and compressed natural gas (CNG) fuel systems for engines mounted on industrial equipment, either for the propulsion of the equipment or for driving some auxiliary function, e.g. a mixer or a pump. It provides requirements for the design and construction of component parts, and for their installation in equipment, and for tests, commissioning and periodic inspection.

The Standard applies to mobile equipment such as forklifts, floor sweepers, polishers, tow tractors, elevating work platforms and industrial stationary engines.

NOTE: For installations to industrial stationary engines connected to a reticulated fuel supply, reference should be made to AS 3814.

This Standard does not apply to other LP Gas or CNG usage, such as the gas supply system for appliances in caravans, mobile homes or for the propulsion of marine craft or passenger or commercial vehicles.

This Standard does not cover the areas where major structural modifications are to be carried out to the industrial equipment (major structural modifications are those not defined in Clause 1.6). Prior to commencement of such work, guidance should be sought from the equipment manufacturer or a professional engineer who is experienced in the relevant disciplines.

1.1.2 Application

This Standard shall be read as defining the minimum requirement of acceptability.

The relevant authority having jurisdiction may determine the extent of application of this Standard.

1.2 OBJECTIVE

The objective of this Standard is to provide designers, manufacturers, installers and regulatory authorities with technical requirements for LP Gas and CNG fuel systems for forklifts and industrial engines so as to provide functional, safe installations.

1.3 REFERENCED DOCUMENTS

A list of the Standards referred to in this Standard is given in Appendix A.

1.4 NEW DESIGNS AND INNOVATIONS

Any alternative materials, equipment, designs, method of assembly or procedures, which do not comply with the specific requirements of this Standard, or are not mentioned in it, but which give equivalent results to those specified, may be acceptable. Under such conditions the regulatory authority can give advice on the procedure for approval.