

Australian/New Zealand Standard™

Gas meters—In-service compliance testing



AS/NZS 4944:2006

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee EL-011, Electricity Metering Equipment. It was approved on behalf of the Council of Standards Australia on 30 November 2005 and on behalf of the Council of Standards New Zealand on 9 December 2005.

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The following are represented on Committee EL-011:

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Australian Electrical and Electronic Manufacturers Association
Electrical Regulatory Authorities Council
Electricity Engineers Association (New Zealand)
Energy Networks Association
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OF
AS/NZS 4944:2006
Gas meters—In-service compliance testing

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NOTES

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PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee EL-011, Electricity Metering Equipment through its Subcommittee EL-011-02—In-service compliance of electricity and gas meters.

The objective of this Standard is to provide the gas metering industry with guidance for the timely sampling, testing and assessment of in-service compliance of populations of gas meters.

The term ‘informative’ has been used in this Standard to define the application of the appendix to which it applies. An ‘informative’ appendix is only for information and guidance.

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FOREWORD

This Standard is intended to provide a basis for the maintenance of the metrological performance (in-service compliance) of gas meters by utilities and metering providers. It forms the basis for a performance based asset management scheme.

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Gas meters—In-service compliance testing

1 SCOPE

This Standard specifies requirements for the timely sampling, testing, and assessment of in-service compliance of populations of diaphragm gas meters with a maximum flow rate of up to and including 25 m³/h used for fiscal measurements.

2 APPLICATION

This Standard is intended for use by utilities or meter providers responsible for maintaining metrological performance (in-service compliance) of meters throughout the life of the meters. It does not apply to—

- (i) meter populations that are not large enough to provide a statistically meaningful sample;
- (ii) meters that have been tampered with or damaged;
- (iii) other devices such as volume correctors or pressure regulators.

3 REFERENCED DOCUMENTS

The following documents are referred to in this Standard:

AS	
1199	Sampling procedures and tables for inspection by attributes
1199.1	Part 1: Sampling schemes indexed by acceptance quality limit (AQL) for lot-by-lot inspection
2490	Sampling procedures and charts for inspection by variables for percent nonconforming
4647	Domestic diaphragm gas meters
ISO	
2854	Statistical interpretation of data—Techniques of estimation and tests relating to means and variances
2859	Sampling procedures for inspection by attributes
2859-1	Part 1: Sampling schemes indexed by acceptance quality limit (AQL) for lot-by-lot inspection

4 DEFINITIONS

For the purpose of this Standard, the definitions below apply.

4.1 Definitions relating to meters**4.1.1 Gas meter**

Gas meters in accordance with this Standard shall be diaphragm gas volume meters in which the gas volume is measured by means of measuring chambers with deformable walls.