MAURITIAN STANDARD

MS ISO 10464:2004

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Gas cylinders – Refillable welded steel cylinders for liquefied petroleum gas (LPG) – Periodic inspection and testing

ICS 23.020.30; 75.200

Mauritius Standards Bureau
Moka

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National foreword

This Mauritian Standard is identical with the International Standard **ISO 10464:2004(E)**, *Gas cylinders – Refillable welded steel cylinders for liquefied petroleum gas (LPG) – Periodic inspection and testing*. It was adopted by the Mauritius Standards Bureau in 2010 on the recommendation of the **Mechanical Engineering Standards Committee** through its **Subcommittee on Pressure Vessels and Boilers** and approval of the Standards Council on **15 April 2010**. It was notified in the Government Gazette on **08 May 2010**.*

For the purpose of this standard the following change should be made:

- the words 'International Standard' should be replaced by 'Mauritian Standard'

The following Mauritian standard is identical with the International Standard, which is referenced in the adopted standard:

International Standard	**Corresponding Mauritian Standard**
ISO 10464:2004, *Gas cylinders – Refillable welded steel cylinders for liquefied petroleum gas (LPG) – Periodic inspection and testing*	**MS ISO 10464:2004,** *Gas cylinders – Refillable welded steel cylinders for liquefied petroleum gas (LPG) – Periodic inspection and testing*

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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO 10464 was prepared by Technical Committee ISO/TC 58, *Gas cylinders*, Subcommittee SC 4, *Operational requirements for gas cylinders*.

Introduction

The primary objective of the periodic inspection of transportable refillable welded steel liquefied petroleum gas (LPG) cylinders is that, at the completion of the test, the cylinders can be reintroduced into service for a further period of time.

The original periodic inspection and test procedures for transportable refillable welded steel LPG cylinders were based on those for gas cylinders or other pressure vessels, including those used for high-pressure industrial gases. These early methods relied on a periodic hydraulic proof pressure test being carried out at intervals as frequently as two years (pre-1940). With increasing experience and confidence so gained, together with improved cylinder manufacturing quality, it has been possible to allow the extension of the intervals between periodic tests to 15 years.

Periodic inspection is normally carried out at a test station operating under the supervision of a competent body.

This International Standard has been prepared to reflect the current state of the art for the periodic inspection of LPG cylinders and is based on the operating experience of millions of cylinders in service over many years.

Gas cylinders — Refillable welded steel cylinders for liquefied petroleum gas (LPG) — Periodic inspection and testing

WARNING — This International Standard calls for the use of substances and procedures that can be injurious to health if adequate precautions are not taken. It refers only to technical suitability and does not absolve the user from legal obligations relating to health and safety at any stage. It has been assumed in the drafting of this International Standard that the execution of its provisions is entrusted to appropriately qualified and experienced people.

1 Scope

This International Standard specifies the intervals and inspection and testing procedures for the periodic inspection of refillable welded steel dedicated LPG cylinders of water capacity from 0,5 l up to and including 150 l.

It applies to cylinders protected by a system to prevent external corrosion and designed and manufactured in accordance with ISO 4706, ISO 22991 or an equivalent design and construction standard. This International Standard may also apply to other refillable welded steel cylinder designs for LPG with the approval of the national authority. Cylinders for the on-board storage of LPG as a fuel for vehicles are excluded from this standard, except cylinders used for fork-lift truck applications.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 4706, *Refillable welded steel gas cylinders*

ISO 8501-1:1988, *Preparation of steel substrates before application of paints and related products — Visual assessment of surface cleanliness — Part 1: Rust grades and preparation grades of uncoated steel substrates and of steel substrates after overall removal of previous coatings*

ISO 8504-2, *Preparation of steel substrates before application of paints and related products — Surface preparation methods — Part 2: Abrasive blast-cleaning*

ISO 9162, *Petroleum products — Fuels (class F) — Liquefied petroleum gases — Specifications*

ISO 10691, *Gas cylinders — Refillable welded steel cylinders for liquified petroleum gas (LPG) — Procedures for checking before, during and after filling*

ISO 14245, *Gas cylinders — Specifications and testing of LPG cylinder valves — Self-closing*

ISO 15995, *Gas cylinders — Specifications and testing of LPG cylinder valves — Manually operated*

ISO 22991, *Gas cylinders — Transportable refillable welded steel cylinders for liquefied petroleum gas (LPG) — Design and construction*

EN 837-1, *Pressure gauges — Part 1: Bourdon tube pressure gauges — Dimensions, metrology, requirements and testing*