MAURITIAN STANDARD

MS ISO 22991:2004

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Gas cylinders – Transportable refillable welded steel cylinders for liquefied petroleum gas (LPG) – Design and construction

ICS 23.020.30; 75.200

Mauritius Standards Bureau
Moka

National foreword

This Mauritian Standard is identical with the International Standard **ISO 22991:2004(E)**, *Gas cylinders – Transportable refillable welded steel cylinders for liquefied petroleum gas (LPG) – Design and construction*. It was adopted by the Mauritius Standards Bureau in 2009 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 purposes of this standard the following change should be made:

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

- the 'decimal comma' should be replaced by 'decimal point'.

* **General Notice** no **898** of **2010**.

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Contents

Page

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 22991 was prepared by Technical Committee ISO/TC 58, *Gas cylinders*, Subcommittee SC 3, *Cylinder design*.

Introduction

This International Standard calls for the use of substances and procedures that may 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.

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

1 Scope

This International Standard specifies minimum requirements concerning material, design, construction and workmanship, procedure and test at manufacture of transportable refillable welded steel liquefied petroleum gas (LPG) cylinders of water capacity up to and including 150 l, exposed to ambient temperatures.

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 643, *Steels — Micrographic determination of the apparent grain size*

ISO 1106-1:1984, *Recommended practice for radiographic examination of fusion welded joints — Part 1: Fusion welded butt joints in steel plates up to 50 mm thick*

ISO 1106-3:1984, *Recommended practice for radiographic examination of fusion welded joints — Part 3: Fusion welded circumferential joints in steel pipes of up to 50 mm wall thickness*

ISO 2504:1973, *Radiography of welds and viewing conditions for films — Utilization of the recommended patterns of image quality indications (I.Q.I.)*

ISO 4136, *Destructive tests on welds in metallic materials — Transverse tensile test*

ISO 4978, *Flat rolled steel products for welded gas cylinders*

ISO 5178, *Destructive tests on welds in metallic materials — Longitudinal tensile test on weld metal in fusion welded joints*

ISO 5817, *Welding — Fusion-welded joints in steel, nickel, titanium and their alloys (beam welding excluded) — Quality levels for imperfections*

ISO 6892, *Metallic materials — Tensile testing at ambient temperature*

ISO 7438, *Metallic materials — Bend test*

ISO 9606-1, *Approval testing of welders — Fusion Welding — Part 1: Steels*

ISO 9956-3, *Specification and approval of welding procedures for metallic materials — Part 3: Welding procedure tests for arc welding of steels*

ISO 10920, *Gas cylinders — 25E taper thread for connection of valves to gas cylinders — Specification*

ISO 11116-1, *Gas cylinders — 17E taper thread for connection of valves to gas cylinders — Part 1: Specifications*

