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Gas cylinders — Part 1: Refillable welded low carbon cylinders for liquefied petroleum gas (LPG) exceeding 5-litre water capacity — Filling, distribution and retailing of Liquefied Petroleum Gas in cylinders — Code of practice

EAST AFRICAN COMMUNITY

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Foreword

Development of the East African Standards has been necessitated by the need for harmonizing requirements governing quality of products and services in the East African Community. It is envisaged that through harmonized standardization, trade barriers that are encountered when goods and services are exchanged within the Community will be removed.

The Community has established an East African Standards Committee (EASC) mandated to develop and issue East African Standards (EAS). The Committee is composed of representatives of the National Standards Bodies in Partner States, together with the representatives from the public and private sector organizations in the community.

East African Standards are developed through Technical Committees that are representative of key stakeholders including government, academia, consumer groups, private sector and other interested parties. Draft East African Standards are circulated to stakeholders through the National Standards Bodies in the Partner States. The comments received are discussed and incorporated before finalization of standards, in accordance with the Principles and procedures for development of East African Standards.

East African Standards are subject to review, to keep pace with technological advances. Users of the East African Standards are therefore expected to ensure that they always have the latest versions of the standards they are implementing.

The committee responsible for this document is Technical Committee EASC/TC 038.

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Gas cylinders— Part 1: Refillable welded low carbon cylinders for liquefied petroleum gas (LPG) exceeding 5-litre water capacity- Filling, distribution and retailing of Liquefied Petroleum Gas in cylinders- Code of practice

1 Scope

This Draft East African Standard gives a code of practice to be followed in the filling, distribution and retailing of liquefied petroleum gas in cylinders.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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, *Specification for refillable welded steel gas cylinders* Gas cylinders — Refillable welded steel cylinders — Test pressure 60 bar and below.

ISO 10464:2004; *Gas cylinders — Refillable welded steel cylinders for Liquefied Petroleum Gas (LPG) — Periodic inspection and testing*

3 Terms and definitions

For the purposes of this document, the following terms and definitions shall apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at <http://www.electropedia.org/>
- ISO Online browsing platform: available at <http://www.iso.org/obp>

4 Requirements

4.1 visual inspection

Before filling, all cylinders shall be visually inspected to detect and isolate from the filling line, all cylinders having dents, cracks, rust or other visible damage that could render the cylinder unsafe for use on the body, valve assembly, foot ring or handle. Defective cylinders shall be repaired by an authorized firm and be tested in accordance with ISO 10464.

4.2 Weighing scales

Balances used for filling of gas cylinders shall be subjected to calibration at least once every twelve months by authority responsible for weights and measures in each partner states in order to ascertain their continued accuracy

NOTE A: Calibration may also be done at accredited centres in partner states

4.3 Cylinder capacities

The filler shall ensure that the mass of gas in cylinders is accurate within $\pm 1\%$ of the declared capacities

4.4 Leakages

The filler shall ascertain that there are no leakages in filled cylinders either from valves, valve and bang joints or elsewhere on the body

4.5 valve seal

The filler shall ensure that each cylinder has a serviceable rubber valve seal to ensure a leak free valve-to-regulator connection.

4.6 loading of cylinders

Cylinders shall be loaded onto ventilated carrier and be transported in an upright position and in such a manner as to safeguard valves and handles from being damaged during transportation.. The liquid shall not be allowed to get into contact with the valve while being transported

4.7 warning notice

A warning notice (in the national languages in the partner state to which the product is to be traded) as shown in Annex A (shall be securely and conspicuously attached to each cylinder before distribution from the filling plant.

NOTE: Where the national language is not English the partner states shall interpret Annex A without losing the meaning.

4.8 filling authority

Only cylinder brand owner or an authorized cylinder filling agent (authorized by brand owner through a written contract) shall be allowed to fill the cylinders.

4.9 Valve seal

The filler shall ensure that cylinders sold to customers carry a serviceable rubber valve seal at the time of delivery.

4.10 tamper proof seals

Cylinder valves shall be capped with brand owner tamper proof seals

5 Distribution

5.1 Leakages

The distributor shall check all cylinders received for leaks, preferably using soap solution. Any leaking cylinder shall be returned to the filling plant.

5.2 Visual Inspection

The distributor shall identify cylinders which have physical damages through visual inspections as those given in clause 4.1 and return them to the filling plant.

5.3 Transportation and storage

The distributor shall transport and store cylinders in a well-ventilated facility, in an upright position and in such a manner as to safeguard valves and handles from being damaged.

5.4 Warning notice

The distributor shall ascertain the presence of the conspicuous warning notice as in clause 4.7 on each cylinder.

6 Retailing

6.1 Leakages

The retailer shall ensure that cylinders sold to customers are not leaking at the time of delivery to/or collection by the customer.

6.2 Warning notice

The retailer shall ensure that all cylinders carry legible and conspicuous warnings as in clause 4.7. .

6.3 tamper proof seals

The retailer shall ensure that the cylinder valve is capped with brand owner tamper proof seals.

6.4 Receipts

Receipts shall be issued for all cylinders sold to customers and shall contain cylinder serial number.

6.5 Weighing scales

Weighing scales/balances shall be provided at retail outlets to give estimates of gross weight in kg of the gas.

Annex A (normative)

Warning notice

A.1 Transport, store and use in upright position.

Do not store or keep near open fire.

A.2 In case of gas leakage distinctive smell

- a) Do not operate electrical switches.
- b) Never check for a leak with a naked flame.
- c) Open all doors and windows.
- d) Move cylinder to a well-ventilated place, with no people in the vicinity and with no source of ignition.
- e) Call the brand owner or their authorized agent immediately to attend to the leakages.

A.3 In case of fire

- a) If safe to do so, shut off gas supply; do not attempt to extinguish gas flame by any means
- b) Switch off the electricity from the mains, if safe to do so
- c) Raise alarm, call the area fire brigade;
- d) Do not go near a cylinder being heated by fire;
- e) Alert everyone in the neighbourhood to vacate the area immediately;
- f) Remove other cylinder (s) not affected by fire to safe place outside the building, if it is safe to do so

Bibliography

KS 9-3: 2009, Gas cylinders — Refillable welded low carbon cylinders for liquefied petroleum gas (LPG) exceeding 5-litre water capacity, Part 3: Code of practice for filling, distribution and retailing of liquefied petroleum gas in cylinders