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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB 13076-2009

Replacing GB 13076-1991; GB/T 13003-1991

**Periodic inspection and evaluation of dissolved acetylene gas
cylinders**

溶解乙炔气瓶定期检验与评定

(English Translation)

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Foreword

The Standard Appendix A, Appendix B, Appendix C, Appendix E, Appendix F and Appendix G are recommended, the rest are mandatory.

The reference to the standard ISO 10462 "mobile acetylene cylinders Periodic inspection and maintenance" part.

This standard replaces GB 13076-1991 "Periodic inspection and evaluation of dissolved" and GB/T 13003-1991 "acetylene gas Bottle pressure test method. " this standard compared with GB 13076-1991, the main changes are as follows.

--- Within the range includes press GB 16164-1996 "a small volume of dissolved" design, manufacture of acetylene cylinders, thereby increasing Plus acetylene bottles seamless

structure inspection requirements;

--- Acetylene bottles examination prior to registration in accordance with the relevant requirements of the contents of a bottle of acetylene bottles on product standards symbol tag content changes were Adjustments;

--- Determination of dissolved useful life of 30 years;

--- The value of the remaining wall thickness of minimum requirements are designed to improve the wall thickness of the bottle;

--- The entire contents of GB/T 13003-1991 "acetylene cylinder pressure test method" included in the Appendix to this standard;

--- Coated in accordance with the provisions of acetylene bottles GB 7144-1999 "cylinders colored sign" in the abolition of the original standard test swatch color Color and shape of the appendix.

Appendix D of this standard is a normative appendix, Appendix A, Appendix B, Appendix C, Appendix E, Appendix F and Appendix G is an informative annex.

This standard by the National Standardization Technical Committee cylinder (SAC/TC31) and focal points.

This standard was drafted. Dalian Institute of Boiler and Pressure Vessel Inspection, Quality and Technical Supervision in Dalian, Beijing Tianhai Industry Co., the company.

1 Scope

This standard specifies the use acetylene cylinders (hereinafter referred to as acetylene bottle) Periodic inspection and evaluation of the basic methods and technical requirements.

This standard applies to acetylene cylinders according to GB 11638 design, manufacture.

2 Normative references

The following documents contain provisions which, through reference in this standard and become the standard terms. For dated references, subsequent Amendments (not including errata content) or revisions do not apply to this standard, however, encourage the parties to the agreement are based on research Whether the latest versions of these documents. For undated reference documents, the latest versions apply to this standard.

GB/T 3864 industrial nitrogen GB 7144 cylinders color logo GB 8335 cylinders dedicated thread GB/T 8336 cylinders dedicated thread gauge GB 10878 cylinders tapered thread tap GB 10879 acetylene cylinder valve GB 11638 acetylene cylinders (GB 11638-2003, ISO 3807.2:2000, Cylindersforacetylene-Basic requirements-Part 2. Cylinderswithfusibleplugs, MOD) GB 12135 Periodic inspection station technical conditions GB 13591 acetylene

cylinder filling provisions

3.1 Inspection agency

Conduct periodic inspection of acetylene bottle inspection unit must meet the requirements of GB 12135, and by the national special equipment safety supervision and management unit Door approval. Inspection unit must have a performance test acetylene bottles of special test equipment.

3.2 Inspection cycle

Acetylene bottles every three years Periodic inspection and evaluation.

If it is found in the course of the following circumstances, you should stop using, at any time for inspection.

- a) found that acetylene bottle there is serious damage, corrosion;
- b) when filling, spray cooling under normal conditions, the bottle wall temperature exceeds 40 °C;
- c) under normal conditions of filling, solvent and acetylene filling GB 13591 amounted to less than a predetermined value;
- d) There are clear signs of burning and tempering.

3.3 Test Project

Acetylene bottles periodic inspection items include. visual inspection, the seat and plug seat inspection, packing inspection, and pressure test Annex.

4.1 Record

4.1.1

Only by checking the registration or check mark and acetylene bottles manufacturing inspection mark registration include. Country, license number or manufacturing units Unit code, name of the manufacturer, cylinder number, date of manufacture, tare weight, the actual volume of the bottle, the bottle wall thickness design, and the last date of inspection and testing Unit, filling a predetermined amount of acetone, the maximum amount of acetylene.

4.1.2

without obtaining national special equipment safety supervision and management department of the manufacturing license of manufacturing production of acetylene bottles manufactured does not meet the mark GB 11638 or "Gas Cylinder Safety Supervision" provides acetylene bottles manufactured flag blurred or incomplete items they can not

identify the cause can not comment Given acetylene bottles, relevant government documents prohibit the reuse of acetylene bottles, not scrapped after testing according to the recording.

4.1.3

Use of acetylene bottles for more than 30 years, will not be recorded after testing in accordance with scrap.

More than 4.2 bottle gas treatment 4.2.1 acetylene bottles must be tested to check the residual pressure and release, the release time can not be less than 8 hours after the release of at inspection workplace environment Temperature, test acetylene cylinder gas pressure does not exceed more than 0.01MPa.

4.2.2 For acetylene cylinder valve can not open the bottle, after proper disposal, residual gas pressure in line with 4.2.1 can be put into test.

4.3 Weighing and surface cleaning

4.3.1

Clear acetylene bottles surface debris, dirt and loose coatings.

4.3.2

subject acetylene bottles were weighed to check if the actual mass exceeding the acetylene bottles tare 1kg above, consider drying process after test.

5 Visual inspection

Only by acetylene bottles surface inspection, bottle and weld (welding of steel) if there are depressions, pits, drum kits, knock injury, stroke Injury, crack, mezzanine, wrinkles, corrosion, heat damage and weld defects.

5.1 Metal mechanical damage inspection and evaluation

5.1.1

bottle cracks, drum kits, scarring, wrinkles or defects such as inclusions acetylene bottles should be scrapped.

5.1.2

bottle presence gouges, scratches, pits acetylene bottles, the bottle should be measured gouges, scratches, depth measurements pits Appendix A.

Ultrasonic thickness measurement using tools such as the wall thickness of the bottle in the actual site, minus the bottle gouges, scratches, at the depth of the pit, where to get the the remaining wall thickness, the wall thickness of the remaining wall thickness less than the design of acetylene bottles should be scrapped.