Third edition
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Gas cylinders — Acetylene cylinders — Filling conditions and filling inspection

Bouteilles à gaz — Bouteilles d'acétylène — Conditions de remplissage et de contrôle au remplissage

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ISO copyright office
Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
E-mail copyright@iso.org
Web www.iso.org

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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 11372 was prepared by Technical Committee ISO/TC 58, *Gas cylinders*, Subcommittee SC 4, *Operational requirements for gas cylinders*.

This third edition cancels and replaces the second edition (ISO 11372:2005), with the following main technical revisions:

a) ISO 11372:2005 was revised taking into account EN 12754 and EN 1801.

b) The clauses concerning filling inspection were restructured in order to better reflect the actual proceeding of the filling inspection.

c) A new subclause 3.3 with requirements and information regarding the solvent content was added.

d) A new Clause 4 concerning the specific filling inspection of solvent-free acetylene cylinders was added.

e) A new informative Annex A introducing the Safe operating diagram was added in order to improve the understanding of the importance of correct filling conditions for acetylene cylinders.

f) A new normative Annex B outlining the calculations necessary for determination of the solvent content was added.

Introduction

This International Standard aims at the harmonization of the different operating and filling conditions of individual acetylene cylinders and covers requirements that reflect current practice and experience regarding the inspection at the time of filling.

ISO 11372 is intended to be used under a variety of national regulatory regimes but has been written so that it is suitable for the application of the UN Model Regulations[1].

Where there is any conflict between this International Standard and any applicable regulation, the regulation always takes precedence.

In International Standards, weight is equivalent to a force, expressed in newtons. However, in common parlance (as used in terms defined in this International Standard), the word “weight” continues to be used to mean “mass”, but this practice is deprecated (see ISO 80000-4).

In this International Standard the unit bar is used, due to its universal use in the field of technical gases. It should, however, be noted that bar is not an SI unit, and that the corresponding SI unit for pressure is pascals (Pa).

Pressure values given in this International Standard are given as gauge pressure (pressure exceeding atmospheric pressure) unless noted otherwise.