Second edition
2014-06-15

Gas cylinders — Cylinder valves — Manufacturing tests and examinations

Bouteilles à gaz — Robinets de bouteilles à gaz — Essais de fabrication et contrôles

Reference number
ISO 14246:2014(E)

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

Published in Switzerland

Contents

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.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 www.iso.org/directives.

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. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received www.iso.org/patents.

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT), see the following URL: Foreword - Supplementary information.

The committee responsible for this document is ISO/TC 58, *Gas cylinders*, Subcommittee SC 2, *Cylinder fittings*.

This second edition cancels and replaces the first edition (ISO 14246:2001), which has been technically revised.

The main changes from ISO 14246:2001 are

— the scope refers to cylinder valves, main valves for cylinder bundles and cylinder valves or main valves with integrated pressure regulators (VIPR) according to ISO 10297 only,

— the definitions were brought in line with the revision of ISO 10297 and ISO 10286,

— addition of a separate clause for the determination of the valve test pressure,

— modification/addition/deletion of manufacturing related definitions (batch/sample/shift),

— modification of tests to be performed on every valve,

— modification of inspections, verifications and examinations to be performed on a sample,

— addition of procedures to verify materials of construction and components,

— deletion of revalidation tests, and

— modification of example of test protocol on every valve.

Introduction

This International Standard covers the function of a cylinder valve as a closure (defined by the UN Model Regulations). Additional features of cylinder valves (e.g. pressure regulators, residual pressure-retaining devices, non-return devices and pressure relief devices) might be covered by other standards and/or regulations.

Cylinder valves complying with this International Standard can be expected to perform satisfactorily under normal service conditions.

This International Standard pays particular attention to manufacturing tests and examinations of cylinder valves designed and type tested according to ISO 10297.

This standard has been written to be in conformity with the UN Model Regulations. When published it will be submitted to the UN Sub Committee of Experts on the Transport of Dangerous Goods with a request that it be included in the UN Model Regulations.

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

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 Pa (1 bar = 10^5 Pa = 10^5 N/m^2).

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