Second edition 2005-02-15

Gas cylinders — Welded carbon-steel gas cylinders — Periodic inspection and testing

Bouteilles à gaz — Bouteilles à gaz soudées en acier au carbone — Contrôles et essais périodiques



Reference number ISO 10460:2005(E)

PDF disclaimer

This PDF file may contain embedded typefaces. In accordance with Adobe's licensing policy, this file may be printed or viewed but shall not be edited unless the typefaces which are embedded are licensed to and installed on the computer performing the editing. In downloading this file, parties accept therein the responsibility of not infringing Adobe's licensing policy. The ISO Central Secretariat accepts no liability in this area.

Adobe is a trademark of Adobe Systems Incorporated.

Details of the software products used to create this PDF file can be found in the General Info relative to the file; the PDF-creation parameters were optimized for printing. Every care has been taken to ensure that the file is suitable for use by ISO member bodies. In the unlikely event that a problem relating to it is found, please inform the Central Secretariat at the address given below.

© ISO 2005

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from either ISO at the address below or ISO's member body in the country of the requester.

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 iv		
Introductionv		
1	Scope	1
2	Normative references	1
3	Intervals between periodic inspections and tests	1
4	List of procedures for periodic inspections and tests	2
5	Identification of cylinder and preparation for inspections and tests	2
6	Depressurization and de-valving procedures	3
7	External visual inspection	3
8	Internal visual inspection	4
9	Supplementary tests	4
10	Inspection of cylinder neck	4
11	Pressure test	5
12	Repair of cylinders	6
13	Inspection of valve and other accessories	6
14	Final operations	6
15	Rejection and rendering cylinders unserviceable	9
Annex	A (informative) Intervals between periodic inspections and tests	. 10
Annex	B (informative) List of gases corrosive to cylinder material	. 11
Annex	C (normative) Description and evaluation of defects and conditions for rejection of welded carbon-steel gas cylinders at time of visual inspection	. 12
Annex	D (normative) Procedure to be adopted when de-valving and/or when it is suspected that a cylinder valve is obstructed	. 16
Annex	E (informative) Inspection and maintenance of valves and their junctions: recommended procedures	. 19
Annex	F (informative) Test date rings for gas cylinders	. 20
Bibliog	Bibliography	

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 10460 was prepared by Technical Committee ISO/TC 58, *Gas cylinders*, Subcommittee SC 4, *Operational requirements for gas cylinders*.

This second edition cancels and replaces the first edition (ISO 10460:1993), which has been technically revised.

Introduction

The principal aim of a periodic inspection and testing procedure is to be satisfied that at the completion of the test the cylinders can be re-introduced into service for a further period of time.

The inspection and test are to be carried out only by persons who are authorized under the relevant regulations and competent in the subject to assure all concerned that the cylinders are fit for continued safe use.

Experience of inspection and testing of cylinders that are specified in this International Standard is an important factor when determining whether a cylinder should be returned into service.