

ISBN 978-0-626-34475-7

**SANS 10460:2006**

Edition 2

**ISO 10460:2005**

Edition 2

## **SOUTH AFRICAN NATIONAL STANDARD**

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

This national standard is the identical implementation of ISO 10460:2005, and is adopted with the permission of the International Organization for Standardization.

---

Published by SABS Standards Division  
1 Dr Lategan Road Groenkloof ☒ Private Bag X191 Pretoria 0001  
Tel: +27 12 428 7911 Fax: +27 12 344 1568

[www.sabs.co.za](http://www.sabs.co.za)

© SABS

**SABS**

---

**SANS 10460:2006**

Edition 2

**ISO 10460:2005**

Edition 2

**Table of changes**

<b>Change No.</b>	<b>Date</b>	<b>Scope</b>

**National foreword**

This South African standard was prepared by National Committee SABS/TC 058, *Vessels and systems under pressure*, in accordance with procedures of the SABS, in compliance with annex 3 of the WTO/TBT agreement.

In South Africa, the requirements for periodic inspection and testing of welded carbon-steel gas cylinders for LPG are given in SANS 1825 and SANS 10019.

Whilst the shape and colour of test rings shown in this standard are identical to those used in South Africa, a different approach is followed in their use.

The ISO standard states that when a cylinder undergoes periodic inspection and testing, the test station will affix the test ring that, according to the chart, corresponds to the next test date for that particular cylinder. For example, if an oxygen cylinder undergoes a periodic inspection and test in 2006, then the test ring affixed under the valve will correspond to the colour and shape shown in the chart in the ISO standard for the year 2016 (since oxygen cylinders are tested every 10 years.)

In South Africa we have adopted the opposite practice i.e. that of affixing under the valve the test ring applicable to the year in which the current test was carried out. Therefore, in the above example, the test ring applicable to the year 2006 would be affixed under the valve.

This edition cancels and replaces SANS edition 1 (SANS 10460:2003).

**Compliance with this document cannot confer immunity from legal obligations.**

**Reaffirmed and reprinted in March 2017.  
This document will be reviewed every five years  
and be reaffirmed, amended, revised or withdrawn.**

# INTERNATIONAL STANDARD

**ISO**  
**10460**

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)

© ISO 2005

**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](mailto:copyright@iso.org)  
Web [www.iso.org](http://www.iso.org)

Published in Switzerland

## Contents

Page

<b>Foreword</b> .....	<b>iv</b>
<b>Introduction</b> .....	<b>v</b>
<b>1 Scope</b> .....	<b>1</b>
<b>2 Normative references</b> .....	<b>1</b>
<b>3 Intervals between periodic inspections and tests</b> .....	<b>1</b>
<b>4 List of procedures for periodic inspections and tests</b> .....	<b>2</b>
<b>5 Identification of cylinder and preparation for inspections and tests</b> .....	<b>2</b>
<b>6 Depressurization and de-valving procedures</b> .....	<b>3</b>
<b>7 External visual inspection</b> .....	<b>3</b>
<b>8 Internal visual inspection</b> .....	<b>4</b>
<b>9 Supplementary tests</b> .....	<b>4</b>
<b>10 Inspection of cylinder neck</b> .....	<b>4</b>
<b>11 Pressure test</b> .....	<b>5</b>
<b>12 Repair of cylinders</b> .....	<b>6</b>
<b>13 Inspection of valve and other accessories</b> .....	<b>6</b>
<b>14 Final operations</b> .....	<b>6</b>
<b>15 Rejection and rendering cylinders unserviceable</b> .....	<b>9</b>
<b>Annex A (informative) Intervals between periodic inspections and tests</b> .....	<b>10</b>
<b>Annex B (informative) List of gases corrosive to cylinder material</b> .....	<b>11</b>
<b>Annex C (normative) Description and evaluation of defects and conditions for rejection of welded carbon-steel gas cylinders at time of visual inspection</b> .....	<b>12</b>
<b>Annex D (normative) Procedure to be adopted when de-valving and/or when it is suspected that a cylinder valve is obstructed</b> .....	<b>16</b>
<b>Annex E (informative) Inspection and maintenance of valves and their junctions: recommended procedures</b> .....	<b>19</b>
<b>Annex F (informative) Test date rings for gas cylinders</b> .....	<b>20</b>
<b>Bibliography</b> .....	<b>21</b>