BS EN ISO 20475:2020

BSI Standards Publication

Gas cylinders — Cylinder bundles — Periodic inspection and testing

National foreword

This British Standard is the UK implementation of EN ISO 20475:2020. It is identical to ISO 20475:2018. It supersedes BS ISO 20475:2018, which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee PVE/3/7, Gas containers - Gas cylinder (receptacle) operations.

A list of organizations represented on this committee can be obtained on request to its committee manager.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

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Compliance with a British Standard cannot confer immunity from legal obligations.

This British Standard was published under the authority of the Standards Policy and Strategy Committee on 28 February 2018.

Amendments/corrigenda issued since publication

Date	Text affected
31 January 2021	This corrigendum renumbers BS ISO 20475:2018 as BS EN ISO 20475:2020

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN ISO 20475

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English Version

Gas cylinders - Cylinder bundles - Periodic inspection and testing (ISO 20475:2018)

Bouteilles à gaz - Cadres de bouteilles - Contrôles et essais périodiques (ISO 20475:2018)

Gasflaschen - Flaschenbündel - Wiederkehrende Inspektion und Prüfung (ISO 20475:2018)

This European Standard was approved by CEN on 13 December 2020.

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European foreword

The text of ISO 20475:2018 has been prepared by Technical Committee ISO/TC 58 "Gas cylinders" of the International Organization for Standardization (ISO) and has been taken over as EN ISO 20475:2020 by Technical Committee CEN/TC 23 "Transportable gas cylinders" the secretariat of which is held by BSI.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by June 2021, and conflicting national standards shall be withdrawn at the latest by June 2021.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Endorsement notice

The text of ISO 20475:2018 has been approved by CEN as EN ISO 20475:2020 without any modification.

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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.

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 (see www.iso.org/directives).

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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 voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see the following URL: www.iso.org/iso/foreword.html.

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

Introduction

The principal aim of a periodic inspection and testing procedure is that, at the completion of the test, the cylinder bundles may be reintroduced into service for a further period of time.

Periodic inspection and testing of cylinder bundles is carried out in conjunction with the retest period of the cylinders within the bundle in order to comply with national and regional transport regulations.

If there are any doubts, inspectors should consult the bundle/cylinder's manufacturer so that the manufacturer's current recommendations are taken into account.

This document 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[10].

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

INTERNATIONAL STANDARD **ISO 20475:2018**

Gas cylinders — Cylinder bundles — Periodic inspection and testing

CAUTION — Some of the tests specified in this document involve the use of processes which could lead to a hazardous situation.

1 Scope

This document specifies the requirements for the periodic inspection and testing of cylinder bundles containing compressed, liquefied and dissolved gas.

NOTE Additional requirements for acetylene cylinder bundles are provided in Annex A.

This document also establishes general principles for the maintenance of cylinder bundles.

This document is not applicable to acetylene bundles with solvent-free acetylene cylinders.

This document excludes the requirements for cylinder bundles when they are a part of a battery vehicle. For some specific applications, e.g. offshore, additional requirements can apply.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 10286, *Gas cylinders — Terminology*

ISO 10460, *Gas cylinders — Welded carbon-steel gas cylinders — Periodic inspection and testing*

ISO 10462, *Gas cylinders — Acetylene cylinders — Periodic inspection and maintenance*

ISO 10961, *Gas cylinders — Cylinder bundles — Design, manufacture, testing and inspection*

ISO 11372, *Gas cylinders — Acetylene cylinders — Filling conditions and filling inspection*

ISO 11623, *Gas cylinders — Composite construction — Periodic inspection and testing*

ISO 14113, *Gas welding equipment — Rubber and plastics hose and hose assemblies for use with industrial gases up to 450 bar (45 MPa)*

ISO 15996, *Gas cylinders — Residual pressure valves — Specification and type testing of cylinder valves incorporating residual pressure devices*

ISO 18119[1)], *Gas cylinders — Seamless steel and seamless aluminium-alloy gas cylinders and tubes — Periodic inspection and testing*

ISO 22434, *Transportable gas cylinders — Inspection and maintenance of cylinder valves*

ISO 25760, *Gas cylinders — Operational procedures for the safe removal of valves from gas cylinders*

1) To be published.