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Gas cylinders — Refillable seamless steel gas cylinders — Design, construction and testing —

Part 4: Stainless steel cylinders with an R_m value of less than 1 100 MPa

Bouteilles à gaz — Bouteilles à gaz rechargeables en acier sans soudure — Conception, construction et essais —

Partie 4: Bouteilles en acier inoxydable avec une valeur R_m inférieure à 1 100 MPa



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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).

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 (see 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 3, *Cylinder design*.

ISO 9809 consists of the following parts, under the general title *Gas cylinders — Refillable seamless steel gas cylinders — Design, construction and testing*:

- *Part 1: Quenched and tempered steel cylinders with tensile strength less than 1 100 MPa*
- *Part 2: Quenched and tempered steel cylinders with tensile strength greater than or equal to 1 100 MPa*
- *Part 3: Normalized steel cylinders*
- *Part 4: Stainless steel cylinders with tensile strength less than 1 100 MPa*

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Introduction

The purpose of ISO 9809 is to provide a specification for the design, manufacture, inspection, and testing of a seamless stainless steel cylinder for worldwide usage. The objective is to balance the design and economic efficiency against international acceptance and universal utility.

ISO 9809 aims to eliminate the concern about climate, duplicate inspections, and restrictions currently existing because of the lack of definitive International Standards. This International Standard should not be construed as reflecting on the suitability of the practice of any nation or region.

This part of ISO 9809 has been prepared to address the general requirements on the design, construction, and initial inspection and test of pressure receptacles of the UN model regulations for the transportation of dangerous goods.^[6]

It is intended to be used under a variety of regulatory regimes but has been written so that it is suitable for use with the conformity assessment system in paragraph 6.2.2.5 of the above mentioned model regulations.