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Gas cylinders — High pressure cylinders for the on-board storage of natural gas as a fuel for automotive vehicles

Bouteilles à gaz — Bouteilles haute pression pour le stockage de gaz naturel utilisé comme carburant à bord des véhicules automobiles



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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.

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 11439 was prepared by Technical Committee ISO/TC 58, *Gas cylinders*, Subcommittee SC 3, *Cylinder design*.

This second edition cancels and replaces the first edition (ISO 11439:2000), which has been technically revised. In addition to editorial improvements, the principal technical difference between the first and second editions is the clarification and alteration of the "Change of Design" requirements for the various cylinder types.

Introduction

Cylinders for the on-board storage of fuel for natural gas vehicle service are required to be light-weight, at the same time maintaining or improving on the level of safety currently existing for other pressure vessels.

Owners or users of cylinders designed to this International Standard should note that the cylinders are designed to operate safely if used in accordance with specified service conditions for a specified finite service life only. The expiry date is marked on each cylinder and it is the responsibility of owners and users to ensure that cylinders are not used after that date, and that they are inspected in accordance with the manufacturer's instructions.

Users of this International Standard are encouraged to consider the environmental impacts associated with performing certain tests.