Second edition 2013-04-15

# Gas cylinders — Refillable composite gas cylinders and tubes

## Part 3:

Fully wrapped fibre reinforced composite gas cylinders and tubes up to 450L with non-load-sharing metallic or non-metallic liners

Bouteilles à gaz — Bouteilles à gaz rechargeables en matériau composite et tubes

Partie 3: Bouteilles à gaz composites entièrement bobinées renforcées par des fibres et tubes d'une contenance allant jusqu'à 450 l avec liners métalliques ou non métalliques ne transmettant pas la charge



Reference number ISO 11119-3:2013(E)

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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 11119-3 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 11119-3:2002), which has been technically revised.

ISO 11119 consists of the following parts, under the general title *Gas cylinders* — *Refillable composite gas cylinders and tubes* — *Design, construction and testing*:

- Part 1: Hoop wrapped fibre reinforced composite gas cylinders and tubes up to 450 I
- Part 2: Fully wrapped fibre reinforced composite gas cylinders and tubes up to 450 l with load-sharing metal liners
- Part 3: Fully wrapped fibre reinforced composite gas cylinders and tubes up to 450L with non-loadsharing metallic or non-metallic liners

The following part is under preparation:

— Part 4: Fully wrapped fibre reinforced composite gas cylinders with load-sharing welded metal liners

### Introduction

The purpose of ISO 11119 is to provide a specification for the design, manufacture, inspection and testing of cylinders for world-wide usage. The objective is to balance design and economic efficiency against international acceptance and universal utility.

ISO 11119 aims to eliminate the concern about climate, duplicate inspection and restrictions currently existing because of lack of definitive International Standards and is not to be construed as reflecting on the suitability of the practice of any nation or region.

This part of ISO 11119 addresses the general requirements on design, construction and initial inspection and testing of pressure receptacles of the United Nations "Recommendations on the Transport of Dangerous Goods Model Regulations."