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**Road vehicles — Compressed gaseous  
hydrogen (CGH<sub>2</sub>) and hydrogen/  
natural gas blends fuel system  
components —**

**Part 13:  
Rigid fuel line in stainless steel**

*Véhicules routiers — Composants des circuits d'alimentation pour  
hydrogène gazeux comprimé (CGH<sub>2</sub>) et mélanges de gaz naturel et  
hydrogène —*

*Partie 13: Tuyauterie rigide pour combustible en acier inoxydable*

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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](http://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](http://www.iso.org/patents)).

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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](http://www.iso.org/iso/foreword.html).

This document was prepared by Technical Committee ISO/TC 22, *Road vehicles*, Subcommittee SC 41, *Specific aspects for gaseous fuels*.

A list of all parts in the ISO 12619 series can be found on the ISO website.

# Road vehicles — Compressed gaseous hydrogen (CGH<sub>2</sub>) and hydrogen/natural gas blends fuel system components —

## Part 13: Rigid fuel line in stainless steel

### 1 Scope

This document specifies tests and requirements for the rigid fuel line in stainless steel, a compressed gaseous hydrogen (CGH<sub>2</sub>) and hydrogen/natural gas blend fuel system component intended for use on the types of motor vehicles defined in ISO 3833.

It is applicable to vehicles using CGH<sub>2</sub> in accordance with ISO 14687-1 or ISO 14687-2 and hydrogen/natural gas blend using natural gas in accordance with ISO 15403-1 and ISO/TR 15403-2. It is not applicable to the following:

- a) liquefied hydrogen (LH<sub>2</sub>) fuel system components;
- b) fuel containers;
- c) stationary gas engines;
- d) container mounting hardware;
- e) electronic fuel management;
- f) refuelling receptacles;
- g) fuel cell vehicles.

NOTE 1 It is recognized that miscellaneous components not specifically covered herein can be examined to meet the criteria of this document and tested according to the appropriate functional tests.

NOTE 2 All references to pressure in this document are considered gauge pressures unless otherwise specified.

### 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 12619-1, *Road vehicles — Compressed gaseous hydrogen (CGH<sub>2</sub>) and hydrogen/natural gas blend fuel system components — Part 1: General requirements and definitions*

ISO 12619-2:2014, *Road vehicles — Compressed gaseous hydrogen (CGH<sub>2</sub>) and hydrogen/natural gas blend fuel system components — Part 2: Performance and general test methods*

ISO 1127, *Stainless steel tubes — Dimensions, tolerances and conventional masses per unit length*

### 3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 12619-1 apply.