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Road vehicles — Compressed natural gas (CNG) fuel system components —

Part 20: Rigid fuel line in material other than stainless steel

Véhicules routiers — Composants des systèmes de remplissage en gaz naturel comprimé —

Partie 20: Circuit de combustible rigide en matériaux autres que l'acier inoxydable

Reference number
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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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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 22, *Road vehicles*, Subcommittee SC 41, *Specific aspects for gaseous fuels*.

This second edition cancels and replaces the first edition (ISO 15500-20:2007), which has been technically revised.

ISO 15500 consists of the following parts, under the general title *Road vehicles — Compressed natural gas (CNG) fuel system components*:

— *Part 1: General requirements and definitions*

— *Part 2: Performance and general test methods*

— *Part 3: Check valve*

— *Part 4: Manual valve*

— *Part 5: Manual cylinder valve*

— *Part 6: Automatic valve*

— *Part 7: Gas injector*

— *Part 8: Pressure indicator*

— *Part 9: Pressure regulator*

— *Part 10: Gas-flow adjuster*

— *Part 11: Gas/air mixer*

— *Part 12: Pressure relief valve (PRV)*

— *Part 13: Pressure relief device (PRD)*

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— *Part 14: Excess flow valve*

— *Part 15: Gas-tight housing and ventilation hose*

— *Part 16: Rigid fuel line in stainless steel*

— *Part 17: Flexible fuel line*

— *Part 18: Filter*

— *Part 19: Fittings*

— *Part 20: Rigid fuel line in material other than stainless steel*

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Road vehicles — Compressed natural gas (CNG) fuel system components —

Part 20: Rigid fuel line in material other than stainless steel

1 Scope

This part of ISO 15500 provides specific requirements and tests applicable to the rigid fuel line in carbon steel, intended for use on the types of motor vehicles, as defined in ISO 3833, with a service pressure for natural gas as a fuel of 20 MPa (200 bar) settled at 15 °C.

ISO 15500 is intended to be applied to vehicles using natural gas which comply with requirements established in ISO 15403-1 (mono-fuel, bi-fuel, or dual-fuel applications). This part of ISO 15500 does not apply to the following:

a) liquefied natural gas (LNG) fuel system components located upstream of, and including, the vaporizer;

b) fuel containers;

c) stationary gas engines;

d) container mounting hardware;

e) electronic fuel management;

f) refuelling receptacles.

NOTE All references to pressure in this part of ISO 15500 are considered gauge pressures unless otherwise specified.[1)]

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For the undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 15500-1, *Road vehicles — Compressed natural gas (CNG) fuel system components — Part 1: General requirements and definitions*

ISO 15500-2:—[2)], *Road vehicles — Compressed natural gas (CNG) fuel system components — Part 2: Performance and general test methods*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 15500-1 apply.

1) 1 bar = 100 kPa = 0,1 MPa.

2) To be published. (Revision of ISO 15500-2:2012)

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