TECHNICAL SPECIFICATION

ISO/TS 20100

First edition
2008-12-01

Gaseous hydrogen — Fuelling stations

Carburant d'hydrogène gazeux — Stations-service

Reference number
ISO/TS 20100:2008(E)

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Published in Switzerland

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Foreword

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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.

In other circumstances, particularly when there is an urgent market requirement for such documents, a technical committee may decide to publish other types of document:

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— an ISO Technical Specification (ISO/TS) represents an agreement between the members of a technical committee and is accepted for publication if it is approved by 2/3 of the members of the committee casting a vote.

An ISO/PAS or ISO/TS is reviewed after three years in order to decide whether it will be confirmed for a further three years, revised to become an International Standard, or withdrawn. If the ISO/PAS or ISO/TS is confirmed, it is reviewed again after a further three years, at which time it must either be transformed into an International Standard or be withdrawn.

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/TS 20100 was prepared by Technical Committee ISO/TC 197, *Hydrogen technologies*.

Gaseous hydrogen — Fuelling stations

1 Scope

This Technical Specification specifies the characteristics of outdoor public and non-public fuelling stations that dispense gaseous hydrogen used as fuel onboard land vehicles of all types.

Residential and home applications to fuel land vehicles are excluded from this Technical Specification.

The fuelling station may comprise, as applicable, the following as shown in Figure 1:

— Delivery of hydrogen by pipeline, trucked-in gaseous and/or liquid hydrogen;

— On-site hydrogen generators using water electrolysis process or hydrogen generators using fuel processing technologies;

— Liquid hydrogen storage, pumping and vaporizing systems;

— Gaseous hydrogen compression and purification systems;

NOTE When the fuelling station comprises an on-site hydrogen generator, the compressor/purifier system is commonly integrated into it.

— Gaseous hydrogen buffer storage;

— Gaseous hydrogen dispensers.

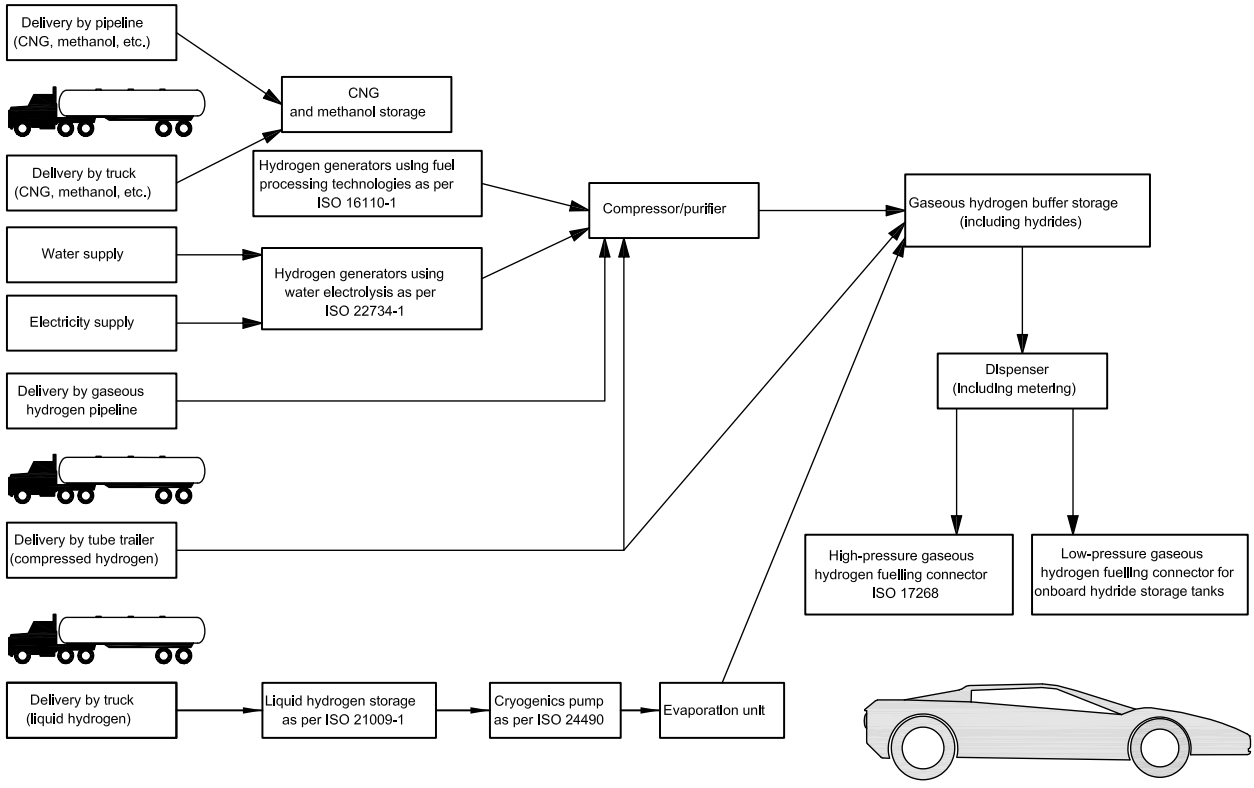

Figure 1 — Gaseous hydrogen — Fuelling station