
Natural gas fuelling stations — LNG stations for fuelling vehicles

*Stations-service de gaz naturel — Stations GNL pour le ravitaillement
de véhicules*



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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.

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The committee responsible for this document is ISO/PC 252, *Natural gas fuelling stations for vehicles*.

Natural gas fuelling stations — LNG stations for fuelling vehicles

1 Scope

This document specifies the design, construction, operation, maintenance and inspection of stations for fuelling liquefied natural gas (LNG) to vehicles, including equipment, safety and control devices.

This document also specifies the design, construction, operation, maintenance and inspection of fuelling stations for using LNG as an onsite source for fuelling CNG to vehicles (LCNG fuelling stations), including safety and control devices of the station and specific LCNG fuelling station equipment.

NOTE Specific CNG equipment is dealt with in ISO 16923.

This document is applicable to fuelling stations receiving LNG and other liquefied methane-rich gases that comply with local applicable gas composition regulation or with the gas quality requirements of ISO 13686.

This document includes all equipment from the LNG storage tank filling connection up to the fuelling nozzle on the vehicle. The LNG storage tank filling connection itself and the vehicle fuelling nozzle are not covered in this document.

This document includes fuelling stations having the following characteristics:

- private access;
- public access (self-service or assisted);
- metered dispensing and non metered dispensing;
- fuelling stations with fixed LNG storage;
- fuelling stations with mobile LNG storage;
- movable fuelling stations;
- mobile fuelling stations;
- multi-fuel stations.

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 4126 (all parts), *Safety devices for protection against excessive pressure*

ISO 9606-1, *Qualification testing of welders — Fusion welding — Part 1: Steels*

ISO 12100, *Safety of machinery — General principles for design — Risk assessment and risk reduction*

ISO 12617, *Road vehicles — Liquefied natural gas (LNG) refuelling connector — 3,1 MPa connector*

ISO 13709, *Centrifugal pumps for petroleum, petrochemical and natural gas industries*