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Hydrogen Dispensers
加氢机

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Hydrogen Dispensers

1 Scope

This document specifies the technical requirements, test methods, inspection rules, marking, packaging, transportation, storage, installation, and maintenance of hydrogen dispensers.

This document is applicable to the hydrogen dispensers with a nominal working pressure (NWP) ≤ 70 MPa of the hydrogen refueling facilities intended for hydrogen energy vehicles, while the hydrogen refueling facilities intended for hydrogen energy vessels, trams, aircrafts, engineering vehicles, and generating sets may use this document as a reference.

2 Normative References

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

- GB/T 191 Packaging - Pictorial Marking for Handling of Goods
- GB/T 2423.1 Environmental testing - Part 2: Test methods - Tests A: Cold
- GB/T 2423.2 Environmental testing - Part 2: Test methods - Tests B: Dry heat
- GB/T 2423.4 Environmental testing for electric and electronic products - Part 2: Test method - Test Db: Damp heat, cyclic (12h+12h cycle)
- GB/T 3836 (all parts) Explosive atmospheres
- GB 4943.1 Information technology equipment - Safety - Part 1: General requirements
- GB/T 10543 Rubber hoses and hose assemblies for aircraft ground fueling and defueling—Specification
- GB/T 13384 General specifications for packing of mechanical and electrical product
- GB/T 19237 Compressed natural gas dispenser for vehicles
- GB/T 24499 Technology glossary for gaseous hydrogen, hydrogen energy and hydrogen energy system
- GB/T 34425 Fuel cell electric vehicles—Hydrogen refueling nozzle
- GB/T 37244 Fuel specification for proton exchange membrane fuel cell vehicles—Hydrogen
- GB 50156 Technical standard of fueling station
- GB 50516 Technical code for hydrogen fueling station
- SJ/T 10694 General specification of testing method for electrostatic protection in electronic production manufacturing and using system

3 Terms and Definitions

For the purpose of this document, the terms and definitions given in GB/T 24499, GB 50156, and GB 50516, as well as the following apply.

- 3.1 hydrogen dispenser
special device with such functions as control, metering, and calculating, intended for providing the hydrogen energy vessels, trams, aircrafts, engineering vehicles, and generating sets with hydrogen refueling service
- 3.2 onboard hydrogen storage system
the device concerning the refueling, storage, transportation, supply, and control of high-pressure hydrogen from the hydrogen refueling receptacle to the inlet of pressure regulator
Note: See Annex A for the diagram of onboard hydrogen storage system.



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