

## Vehicles - System Design/Testing

Japanese Government Regulations Hydrogen Fuel Cell Vehicles (Japan)

GB/T 23645-2009 Test method of fuel cell power system for passenger car (China)

GB/T 25319-2010 Fuel Cell test system used for motor vehicles - Technical specification (China)

GB/T 28183-2011 Test methods of fuel cell power system for bus (China)

## Vehicles - Safety

SAE J1766 Recommended Practice for Electric and Hybrid Electric Vehicle Battery Systems Crash Integrity Testing (United States & Other Locales)

SAE J2990/1- Hydrogen and Fuel Cell Vehicle First and Second Responder Recommended Practice (United States)

SAE J2578 Recommended Practice for General Fuel Cell Vehicle Safety (United States & Other Locales)

ISO 6469-1 Electrically propelled road vehicles – Safety specifications – Part 1: On-board rechargeable energy storage systems (RESS) (International)

ISO 6469-2 Electrically propelled road vehicles – Safety specifications – Part 2: Vehicle operational safety means and protection against failures (International)

ISO 6469-3:2011 Electrically propelled road vehicles – Safety specifications – Part 3: Protection of persons against electric shock (International)

ISO 6469-4:2015 Electrically propelled road vehicles – Safety specifications – Part 4: Post crash electrical safety requirements (International)

ISO 23273:2013 Fuel Cell Road Vehicle – Safety specifications - Protection against hydrogen hazards for vehicles fueled with compressed hydrogen (International)

KS R ISO 23273-1 Fuel cell road vehicles- Safety specification - Part 1: Vehicle functional safety (Korea)

KS R ISO 23273-2 Fuel cell road vehicles- Safety specification - Part 2: Protection against hydrogen hazard for vehicles fuelled with compressed hydrogen (Korea)

KS R ISO 23273-3 Fuel cell road vehicles- Safety specification - Part 3: Protection of persons against electric shock (Korea)

CNS 15499-1 Electrically propelled road vehicles – Safety specifications Part 1: On-board rechargeable energy storage systems (RESS) (Taiwan)

CNS 15499-2 Electrically propelled road vehicles – Safety specifications Part 2: Vehicle operational safety means and protection against failure (Taiwan)

CNS 15499-3 Electrically propelled road vehicles – Safety specifications Part 3: Protection of persons against electric shock (Taiwan)

## Vehicles - System Design/Testing

European Integrated Hydrogen Project (EIHP) - Work Package 4 Vehicles (European Union)

United Nations Working Party 29 Global Technical Regulations (GTR) on Pollution and the Environment Hydrogen Vehicles (International)

20130682-T-604 Proton exchange membrane fuel cell module for road vehicle (China)

## Vehicles - Safety

European Integrated Hydrogen Project (EIHP) - Work Package 5 Safety (European Union)

China Safety Requirements for Fuel Cell Vehicles (China)

## Vehicles - Performance - efficiency, emissions, durability

[SAE J2572](#) Recommended Practice for Measuring the Exhaust Emissions, Energy Consumption and Range of Fuel Cell Powered Electric Vehicles Using Compressed Hydrogen (United States & Other Locales)

[ISO 23828:2013](#) Fuel Cell Road Vehicle- Energy Consumption Measurement Part 1: Vehicles fuelled with compressed hydrogen (International)

[ISO/TR 11954](#) Fuel Cell Road Vehicles- Road Maximum Speed Measurement (International)

## Vehicles - Terminology

[SAE J2754](#) Fuel Cell Electric Vehicle Terminology (United States & Other Locales)

[SAE J2760 - TIR](#) Pressure Terminology Used in Fuel Cells and Other Hydrogen Vehicle Applications (United States & Other Locales)

[ISO/TR 8713:2012](#) Electrically propelled road vehicles – Vocabulary (International)

## Vehicles - Hydrogen Sensors

## Vehicles - Fuel Systems

[CSA America HGV3.1](#) Fuel System Components for Hydrogen Gas Powered Vehicles (United States)

[NFPA 52](#) Vehicle Fuel System Code (United States)

[SAE J2579](#) Standard for Fuel Systems in Fuel Cell and Other Hydrogen Vehicles (United States & Other Locales)

[CGA Publication PS31](#) Cleanliness for PEM Hydrogen Piping / Components (United States)

[EC No.79/2009](#) Type-approval of hydrogen-powered motor vehicles (European Union)

[ISO 12619-1 Road vehicles](#) – Compressed gaseous hydrogen and hydrogen/methane blends fuel components Part 1: General requirements and definitions (International)

[ISO 12619-2 Road vehicles](#) – Compressed gaseous hydrogen and hydrogen/methane blends fuel components Part 2: Performance and general test methods (International)

[ISO 12619-3 Road vehicles](#) – Compressed gaseous hydrogen and hydrogen/methane blends fuel components Part 3: Pressure regulator (International)

## Fuel Cells - System Design/Testing

## Fuel Cells - Performance - efficiency, emissions, durability

[SAE J2615](#) Performance Test Procedure for Fuel Cell

## Vehicles - Performance - efficiency, emissions, durability

## Vehicles - Terminology

[China](#) Glossary for Fuel Cell Vehicles (China)

## Vehicles - Hydrogen Sensors

[SAE J 3089](#) Technical Information Report (TIR) for Vehicular Hydrogen Sensor Test Method (United States)

## Vehicles - Fuel Systems

## Fuel Cells - System Design/Testing

## Fuel Cells - Performance - efficiency, emissions, durability

**Systems for Automotive Applications** (United States & Other Locales)

**SAE 2617** Performance Test Procedure of PEM Fuel Cell Stack Subsystem for Automotive Application (United States & Other Locales)

## Fuel Cells - Recyclability

**SAE J2594** Design for Recycling Proton Exchange Membrane (PEM) Fuel Cell Systems (United States & Other Locales)

## Fuel Processors - Performance

**SAE J2616** Performance Test Procedure of Fuel Processing Subsystem for Automotive Applications (United States & Other Locales)

## Fuel Tanks

**ISO 13985** Liquid Hydrogen - Land Vehicle Fuel Tanks (International)

**ISO TC197 Working Group 6 / ISO/TS 15869** Gaseous Hydrogen Blends & Hydrogen Fuels: Land Vehicle Fuel Tanks (International)

**CSA America HGV2** Standards for Hydrogen Vehicle Fuel Containers (United States)

**CSA America HPRD1** Basic Requirements for Pressure Relief Devices for Compressed Hydrogen Vehicle Fuel Containers (United States)

**CGA Publication C6.4** Methods for External Visual Inspection of Natural Gas Vehicle (NGV) and Hydrogen Vehicle (HV) Fuel Containers and Their Installation (United States)

**EC No.79/2009** Type-approval of hydrogen-powered motor vehicles (European Union)

**KS B ISO 13985** Liquid hydrogen - Land vehicle fuel tanks (Korea)

## Refueling / Dispensing Connections

**SAE J2600** Compressed Hydrogen Vehicle Fueling Connection Devices (United States & Other Locales)

**SAE J2601** Fueling Protocols for Light Duty Gaseous Hydrogen Surface Vehicles (United States & Other Locales)

**SAE J 2601/2** Fueling Protocols for Heavy Duty Gaseous Hydrogen Surface Vehicles (buses) (United States & Other Locales)

**ISO 17268** Gaseous Hydrogen Land Vehicle Refueling Connection Devices (International)

**SAE J2799** 70 MPa Compressed Hydrogen Surface Vehicle Refueling Connection Device & Optional Vehicle to Station Communication (United States & Other Locales)

**EC No.79/2009** Type-approval of hydrogen-powered motor vehicles (European Union)

**KS B ISO 13984** Liquid hydrogen - Land vehicle fueling system interface (Korea)

**KS B ISO 17268** Compressed hydrogen surface vehicle

## Fuel Cells - Recyclability

## Fuel Processors - Performance

## Fuel Tanks

**CNS xxxxx** Gaseous Hydrogen Blends & Hydrogen Fuels - Land Vehicles Fuel Tanks (Taiwan)

**CNS xxxxx** Liquid Hydrogen, Land Vehicle Fuel Tanks (Taiwan)

## Refueling / Dispensing Connections

**European Integrated Hydrogen Project (EIHP) - Work Package 3** Refueling Interface (European Union)

**SAE J 2601/4** Ambient Temperature Fixed Orifice Fueling (United States & Other Locales)

[KS B ISO 17200](#) Compressed hydrogen surface vehicle refueling connection devices (Korea)

## Fuel Specifications

[SAE J2719](#) Hydrogen Fuel Quality for Fuel Cell Vehicles (United States & Other Locales)

[ISO 14687-2](#) Hydrogen Fuel - Product Specification, Part 2: PEM fuel cell applications for road vehicles (International)

[State of California Regulations](#) Hydrogen Fuel Standard (California)

## Fuel Specifications

[ASTM WK21162](#) Standard Test Method for the Characterization of Particles from Hydrogen Fuel Streams by Scanning Electron Microscope (United States)

[ASTM WK21597](#) Microscopic Measurement of Particulates in Hydrogen Fuel (United States)

[ASTM WK21611](#) Gravimetric Measurement of Particulate Concentration in Hydrogen Fuel (United States)

[CEN/TC19](#) Expert Watch Group on Fuels for Fuel Cells (European Union)

[CNS Draft 1010243](#) Hydrogen Technologies – Product Specification – Part 2 – PEM Hydrogen Fuel for Road Vehicles (Taiwan)

[SAE J3075](#) Hydrogen System and Component Cleaning and Packaging (United States)