HYDROGEN

TECHNICAL COMMITTEES RELATED TO HYDROGEN TECHNOLOGIES STANDARDIZATION

- International level -

ISO/TC 197 – Hydrogen technologies

Scope

ISO/TC 197 is responsible for the standardization in the field of systems and devices for the production, storage, transport, measurement and use of hydrogen.

IEC/TC 105 – Fuel cell technologies

Scope

IEC/TC 105 addresses standardization needs in the field of Fuel Cell (FC) technologies for all FC types and various associated applications such as stationary FC power systems for distributed power generators and combined heat and power systems, FCs for transportation such as propulsion systems.

- European level -

CEN/TC 408 – Natural gas and biomethane for use in transport and biomethane for injection in the natural gas grid

Scope

CEN/TC 408 is dedicated to standardization of specifications for natural gas and biomethane as fuel for engines and of biomethane for injection in the natural gas grid, including any necessary related methods of analysis and testing.

CEN/TC 234 – Gas infrastructure

Scope

CEN/TC 234 addresses standardization needs in the field of gas pipeline infrastructure for gaseous energy carriers (such as hydrogen, hydrogen rich, and methane rich gases) and blends thereof from the input into the on-shore transmission network up to the inlet connection of gas appliances.

CEN/CLC/JTC 6 – Hydrogen in energy systems

Scope

CEN/CLC/JTC 6 is dedicated to standardization in the field of systems, devices and connections for the production, storage, transport and distribution, measurement and use of hydrogen from renewable energy sources and other sources, in the context of the European strategy for the development and acceptance of the hydrogen market.

RELEVANT PUBLISHED STANDARDS ON HYDROGEN TECHNOLOGIES

ISO/TC 197 – Hydrogen technologies

ISO 14687:2019	Hydrogen fuel quality — Product specification
ISO 19881:2018	Gaseous hydrogen — Land vehicle fuel containers
ISO 19880 series	Gaseous hydrogen — Fueling stations — • Part 1: General requirements • Part 3: Valves • Part 5: Dispenser hoses and hose assemblies • Part 8: Fuel quality control
ISO 16111:2018	Transportable gas storage devices — Hydrogen absorbed in reversible metal hydride
ISO/TS 19883:2017	Safety of pressure swing adsorption systems for hydrogen separation and purification
ISO 22734:2019	Hydrogen generators using water electrolysis — Industrial, commercial, and residential applications
ISO 26142:2010	Hydrogen detection apparatus — Stationary applications
ISO/TR 15916:2015	Basic considerations for the safety of hydrogen systems
ISO 19882:2018	Gaseous hydrogen — Thermally activated pressure relief devices for compressed hydrogen vehicle fuel containers
ISO 13985:2006	Liquid hydrogen — Land vehicle fuel tanks
ISO 13984:1999	Liquid hydrogen — Land vehicle fueling system interface

IEC/TC 105 – Fuel cell technologies

IEC 62282 series	Fuel cell technologies — • Part 2: Fuel cell modules - Safety • Part 3: Stationary fuel cell power systems - Safety • Part 4: Fuel cell power systems for electrically powered industrial trucks - Safety • Part 5: Portable fuel cell power systems - Safety • Part 6: Micro fuel cell power systems - Safety

CEN/TC 408 – Natural gas and biomethane for use in transport and biomethane for injection in the natural gas grid

CEN/TR 17238:2018	Proposed limit values for contaminants in biomethane based on health assessment criteria
EN 16723 series	Natural gas and biomethane for use in transport and biomethane for injection in natural gas network • Part 1: Specifications for biomethane for injection in the natural gas network • Part 2: Automotive fuels specification

CEN/TC 234 – Gas infrastructure

CEN/TS 17977:2023	Gas infrastructure - Quality of gas - Hydrogen used in rededicated gas systems
EN 12583:2022	Gas Infrastructure - Compressor stations - Functional requirements
EN 17649:2022	Gas infrastructure - Safety Management System (SMS) and Pipeline Integrity Management System (PIMS) - Functional requirements
CEN/TR 16395:2012	Gas Infrastructure - CEN/TC 234 Pressure Definitions - Guideline Document
EN 1918 series	Gas infrastructure - Underground gas storage – • Part 1: Functional recommendations for storage in aquifers • Part 2: Functional recommendations for storage in oil and gas fields • Part 3: Functional recommendations for storage in solution-mined salt caverns • Part 4: Functional recommendations for storage in rock caverns • Part 5: Functional recommendations for surface facilities