ISO/TC 197
Hydrogen technologies

Email of secretary: jim.ferrero@bnq.qc.ca
Secretariat: SCC (Canada)

H2 fuel quality (TC197 plenary Torrance 2015) ref. WG 27

Document type: Other meeting document

Date of document: 2016-11-27

Expected action: INFO

Background: This is a presentation from the 2015 plenary meeting in California.

Committee URL: http://isotc.iso.org/livelink/livelink/open/tc197

Dec. 2015
Kazuo Koseki

New Work Item

ISO 14687

Hydrogen fuel quality –product specification

Purpose

The purpose of this work is to combine the existing three standards on hydrogen quality:14687-1,14687-2 and 14687 -3, into one document, incorporating their revisions at the same time.

NOTE: 14687-1 All applications except PEMFC

14687-2 PEMFC vehicles

14687-3 PEMFC stationary appliances

Progress

1. NWIP was submitted from Japan for the revision of ISO 14687 series on 2015-07-22.
2. NWIP was approved by 12 countries with no negative vote on 2015-09-30.

Following 9 countries expressed the participation in developing the standard:
Argentina, Canada, China, France, Japan, Netherlands, Russian Federation, United Kingdom, United States

Target date

IS publication: October, 2018 (36 months)

Scope:

This International Standard specifies the quality characteristics of gaseous and liquid hydrogen fuel for the following applications:

1. PEM fuel cell applications for road vehicles
2. PEM fuel cell applications for stationary appliances
3. Applications except PEM fuel cells

How to proceed the work

For the implementation of the revision work, the following task groups (TGs) with different roles have been set up:

TG 1: revision of 14687-2 (PEMFC vehicles);
TG 2: revision of 14687-3 (PEMFC stationary appliances);
TG 3: compilation of 14687-1, -2, and -3.

NOTE: 14687-1 will be basically unchanged.

Convener

- First convener: Yasuo Takagi

(TG1 leader, former WG12 convener)

- Second convener: Osamu Tajima

(TG2 leader, former WG14 convener)

Table of contents (provisional)

Hydrogen classification

Type	Grade	Category	Application	Existing ISO
I Gas	A	—	Internal combustion engines for transportation; Residential/commercial appliances;	14687-1
	B	—	Industrial fuel for power generation and heat generation	
	C	—	Aircraft and space-vehicle ground support systems	
	D	—	PEM fuel cells for road vehicles	14687-2
	E	1	PEM fuel cells for stationary appliances	14687-3
		2		
		3		
II Liq.	C	—	Aircraft and space-vehicle on-board propulsion and electrical energy requirements; Off-road vehicles.	14687-1
	D	—	PEM fuel cells for road vehicles	14687-2
III Slush	—	—	Aircraft and space-vehicle on-board propulsion	14687-1