



ISO/TC 197  
Hydrogen technologies

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**Information on CEN TC 268 for ISO TC 197**

Document type: Other meeting document

Date of document: 2016-11-26

Expected action: INFO

Background: Here is a report from CEN/TC 268.

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



<b>«Cryogenic vessels and specific hydrogen technology applications»</b>	<b>CEN/TC 268</b>
Date: <b>2016-11-16</b>	Doc. Number:
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## **CEN/TC 268 Cryogenic vessels and specific hydrogen technology applications**

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### **Information on CEN/TC 268 works for the plenary meeting of ISO/TC 197**

#### **C**OMMENTARIES

CEN/TC 268 decided in June 2014 to establish a liaison with ISO/TC 197 because CEN/TC 268 extended its scope in 2014 in order to standardize standards on hydrogen technologies in a specific European context.

Information on CEN/TC 268 works are available below.

# CEN TC 268 "Cryogenic vessels"

## 1 Scope

Standardization in the field of insulated vessels (vacuum or non- vacuum) for the storage and the transport of refrigerated liquefied gases, as defined in Class 2 of "Recommendations on the Transport of dangerous goods - Model regulation", in particular concerning the design of the vessels and their safety accessories, gas/materials compatibility, insulation performance, the operational requirements of the equipment and accessories. The one-off preparation of standards for hydrogen technologies strictly meeting the European mandate on the draft Directive deployment of alternative fuels infrastructure.

## 2 Structure and organization

CEN/TC 268 Chairman	CEN/TC 268 Secretariat
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### CEN/TC 268 Working groups:

- ✓ **CEN/TC 268/WG 1 " Design "**  
Convenor: To be nominated by UK (UK)
- ✓ **CEN/TC 268/WG 2 " Compatibility, insulation and accessories "**  
Convenor: Mr Hervé BARTHÉLÉMY (France)
- ✓ **CEN/TC 268/WG 3 " Operational requirements "**  
Convenor: Mr Wolfgang OTTE (Germany)
- ✓ **CEN/TC 268/WG 4 " Fundamental requirements "**  
Convenor: Mr Wolfgang OTTE (Germany)
- ✓ **CEN/TC 268/WG 5 "Specific hydrogen technologies applications "**  
Convenor: Mr Hervé BARTHÉLÉMY (France)

## 4 Directives and European mandate

The European Directive on the deployment of alternative fuels infrastructure 2014/94/UE has been published in the Official Journal of the European Union on 28<sup>th</sup> October 2014 (n° OJEU L 307). The Directive is available via this link:

<http://eur-lex.europa.eu/legal-content/FR/TXT/?uri=CELEX:32014L0094>

The mandate concerning CEN/TC 268, M/533, has been approved and specifies that CEN/TC 268 shall provide solution based on international standards for:

- One technical solution for interoperability with a technical specification for outdoor hydrogen refuelling points dispensing gaseous hydrogen compatible with ISO/TS 20100:2008 or its latest edition;
- One technical solution for interoperability with a technical specification for hydrogen purity dispensed by hydrogen refuelling points compatible with ISO 14687-2:2015;
- One technical solution for interoperability with a technical specification for fuelling algorithms and equipment of hydrogen refuelling points compatible with ISO/TS 20100:2008 or its latest edition;

- One technical solution for interoperability with a technical specification for connectors for vehicles for the refuelling of gaseous hydrogen compatible with ISO 17268:2012.

## **5 Works of interest for ISO/TC 197**

A dedicated working group for the development of standards on hydrogen technologies has been created in June 2014.

The last meeting was held on 2016-10-05 in order to continue the development of the working plan to elaborate standards in accordance with mandate M/533.

- ✓ EN ISO 17268:2012 was adopted by CEN/TC 268 by UAP (Unique Acceptance Procedure) in July 2016, without modification.
- ✓ ISO 19880-1 "Gaseous hydrogen - Fuelling stations - Part 1: General requirements" is under development at ISO/TC 197 but ISO target dates are not complying with European mandate requirements. CEN/TC 268 decided in October 2016 to stop Vienna agreement and to prepare its own standard with the minimum requirements to fulfill AFI Directive. The draft will be finalized to proceed to CEN enquiry during the next meeting on 2016-12-20.
- ✓ Regarding the purity of hydrogen, CEN/TC 268/WG 5 decided to adapt ISO 14687-2 "Hydrogen fuel - Product specification - Part 2: Proton exchange membrane (PEM) fuel cell applications for road vehicles" as European standard. The new version will not be published before end of 2017. Discussions with OEM (Original Equipment Manufacturers) and EIGA are engaged. The draft will be finalized to proceed to CEN enquiry during the next meeting on 2016-12-20.

The next meeting of WG 5 will be held on 2016-12-20 in NEN.

- ✓ Possibility to join the work on ISO 19884 « Gaseous hydrogen - Cylinders and tubes for stationary storage » prepared by ISO/TC 197.