



ISO/TC 197
Hydrogen technologies

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

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WG19

Gaseous hydrogen - Fueling stations -- Dispensers ISO 19880-2

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**Shogo Watanabe
Convener**

Basic idea of WG19 procedure

1. Cooperation with WG24 (19880-1: stations)
Consistent with WG24 on terms and definitions, specific number such as pressure, temperature, safety margin and so on.
2. It is understood that in the beginning WG24 will have some overlap of dispenser and other components due to timing constraints.
However it is the intention of WG24 to have a normative reference to the published ISO TC197 components standards by the IS version 2 ~~in 2017~~.

Proposed scope change (original)

This standard provides the requirements and test methods on the safety of complete hydrogen dispensers with **the normal working pressure of 35 MPa and/or 70 MPa** for gaseous hydrogen fueling stations.

This standard does not provide:

- the safety of individual components composing the hydrogen dispenser;**
- fueling protocols for vehicle hydrogen tanks or vehicle filling tests for hydrogen fueling stations;**
- the accuracy verification of fill content for vehicle hydrogen tanks.

This standard covers the components within the boundary of a dispenser, an example of which is shown in Figure 1.

NOTE Component presence and location may differ from what is shown.

When components that are considered critical for the safe operation of a hydrogen fuel dispenser are provided separately to the dispenser, **such external components are considered to be outside the scope of this standard**. Such components shall not be assessed as part of the dispenser; however, an equivalent level of safety and performance to those components included in this standard should be achieved when the dispenser is integrated into a hydrogen fuelling station.

Proposed scope change (continued)

This document provides the requirements for hydrogen dispensers and **may provide specific references to other standards for individual components included in the hydrogen dispenser such as valves (ISO 19880-3) and hoses (ISO 19880-5).**


This document addresses the general requirements of the fueling protocol and directs the user to ISO 19880-1 for additional requirements and the test methods required to verify proper fueling protocol implementation.

This document does not address the accuracy of flow meters that may be used to meter dispensed fuel.

The process diagram in Figure 2 shows components in the dispenser typically required to meet the dispensing functionality and safety requirements. The actual process configuration and equipment selections may be different, but ultimately the requirements defined by this document need to be met by the dispensing system.

Additionally, not all equipment has to be physically housed within the enclosure- at the dispensing area as long as the specification of component design or type and location are adequate to ensure that the overall process meets requirements in this standard.

Road Map of WG19 (Dispensers)

| | 2015 | | | | 2016 | | | | 2017 | | | |
|------------|--|--------------------|--|-----------------------|----------------|--|----------------|------------------------|--|--|--|--|
| Document | CD approved negative (US, FR, GB) | | | | pre-DIS | | pre-DIS | |  waiting ISO/DIS 19880-1 | | | |
| WG Meeting | | WG Paris | | WG Torrance | | | | WG Vancouver | | | | |

I appreciate the contribution of Mr. Bob Boyd and Mr. Glenn Scheffler to prepare pre-DISs.