

Compilation of comments received on ISO/CD 17268 *Compressed hydrogen land vehicle fueling connection devices*

Date: 2009-07-16	ISO/TC 197 N416 Annex A
	Document: ISO/CD 17268 (ISO/TC 197 N414)

1	2	(3)	4	5	(6)	(7)
MB ¹	Clause No./ Subclause No./ Annex (e.g. 3.1)	Paragraph/ Figure/Table/ Note (e.g. Table 1)	Type of comment ²	Comment (justification for change) by the MB	Proposed change by the MB	Secretariat observations on each comment submitted
UK 197			Ge	This document is not complete. There are no requirements for earthing the hose/nozzle assembly, whether directly or through an additional device,	Add requirements either directly or through reference to appropriate standards.	
UK 197			Ge	There is no reference either to a break-away connection for the hose, in case of the operative driving off while connected to the refueller.	Add requirements either directly or through reference to appropriate standards.	
US 197			Ge	The current draft obviously has some enhancements over the published standard; however, this draft is not complete. It is missing a figure, two tests that have been added still need work, and most importantly, it does not contain a description of a sealing surface for the H70 Nozzle. This omission can lead to potentially hazardous conditions if the nozzle and receptacle do not have mating sealing surfaces.		
JP 197			ed	Coexistence of terms exist such as "Min and min" or "Max and max".		
JP 197	1.5		ed	Referred ISO14687 has two categories as ISO14687-1 and ISO14687-2.	Change "ISO14687" to "ISO14687-2". (Spell check)	
SE 22 & 197	1.5	1 st sent.	ed	Reword the sentence to "This International Standard is applicable <u>with the use of</u> compressed hydrogen...."		
SE 22 & 197	1.5	1 st sent.	ge	ISO/TS 14687-2:2008 should be added as it is not simply an amendment.		

1 **MB** = Member body (enter the ISO 3166 two-letter country code, e.g. CN for China; comments from the ISO/CS editing unit are identified by **)

2 **Type of comment:** **ge** = general **te** = technical **ed** = editorial

NOTE Columns 1, 2, 4, 5 are compulsory.

Compilation of comments received on ISO/CD 17268 Compressed hydrogen land vehicle fueling connection devices

Date: 2009-07-16	ISO/TC 197 N416 Annex A
	Document: ISO/CD 17268 (ISO/TC 197 N414)

1	2	(3)	4	5	(6)	(7)
MB ¹	Clause No./ Subclause No./ Annex (e.g. 3.1)	Paragraph/ Figure/Table/ Note (e.g. Table 1)	Type of comment ²	Comment (justification for change) by the MB	Proposed change by the MB	Secretariat observations on each comment submitted
SE 22 & 197	2		ge	Add ISO/TS 14687-2:2008. It is not simply an amendment.		
SE 22 & 197	3.5		ed	Reword the sentence to “ dry hydrogen, <u>or</u> helium, or blends of a minimum 10 % <u>of hydrogen or helium</u> with nitrogen...”		
SE 22 & 197	3.9	NOTE	ge	Add “... or gas filling port in other documents.”		
IN 22	3.11		TE	Maximum Working Pressure is specified as 125 % of working pressure, Normally it is considered as 150 %	The maximum working pressure is 150% of the nominal working pressure	
IN 22	4.2 (2)		ED	For better editorial quality	Replace word “Gases” by “Gas”	
SE 22 & 197	4.4		ed	Change to “...under normal and reasonable conditions of...”		
SE 22 & 197	4.6		ge	The current sentence appears to be in conflict with the definition of “connector”. Propose that the sentence is reworded to “ <u>The receptacle and nozzle shall be connected or disconnected without the use of tools.</u> ”		

1 **MB** = Member body (enter the ISO 3166 two-letter country code, e.g. CN for China; comments from the ISO/CS editing unit are identified by **)

2 **Type of comment:** **ge** = general **te** = technical **ed** = editorial

NOTE Columns 1, 2, 4, 5 are compulsory.

Compilation of comments received on ISO/CD 17268 Compressed hydrogen land vehicle fueling connection devices

Date: 2009-07-16	ISO/TC 197 N416 Annex A
	Document: ISO/CD 17268 (ISO/TC 197 N414)

1	2	(3)	4	5	(6)	(7)
MB¹	Clause No./ Subclause No./ Annex (e.g. 3.1)	Paragraph/ Figure/Table/ Note (e.g. Table 1)	Type of comment²	Comment (justification for change) by the MB	Proposed change by the MB	Secretariat observations on each comment submitted
JP 197	4.7	Figure x	te	The H11 and H25 receptacles shall be mounted on the vehicle in compliance with ISO 15501-1. All other receptacles shall be mounted on the vehicle in compliance with the envelope requirements specified in <u>Figure x</u> . There is no Figure x on current CD document.	Add appropriate Figure on document.	
SE 22 & 197	4.7		ed	Where is Figure x?		
UK 197	4.7		Te	Need figure X	Add figure.	
US 197	4.7		Te	Need figure X		
JP 197	5.6	Figure x	te	The H11 and H25 receptacles shall be mounted on the vehicle in compliance with ISO 15501-1. All other receptacles shall be mounted on the vehicle in compliance with the envelope requirements specified in <u>Figure x</u> . There is no Figure x on current CD document.	Add appropriate Figure on document.	
UK 197	5.6		Te	Need figure X	Add figure.	
US 197	5.6		Te	Need figure X		

1 **MB** = Member body (enter the ISO 3166 two-letter country code, e.g. CN for China; comments from the ISO/CS editing unit are identified by **)

2 **Type of comment:** **ge** = general **te** = technical **ed** = editorial

NOTE Columns 1, 2, 4, 5 are compulsory.

Compilation of comments received on ISO/CD 17268 *Compressed hydrogen land vehicle fueling connection devices*

Date: 2009-07-16	ISO/TC 197 N416 Annex A
Document: ISO/CD 17268 (ISO/TC 197 N414)	

1	2	(3)	4	5	(6)	(7)
MB¹	Clause No./ Subclause No./ Annex (e.g. 3.1)	Paragraph/ Figure/Table/ Note (e.g. Table 1)	Type of comment²	Comment (justification for change) by the MB	Proposed change by the MB	Secretariat observations on each comment submitted
Be 22	6	Figure 5	Te	50MPa fueling is not discussed yet. At this moment sealing dimensions to H50 should not be determined.	Delete sealing dimensions to Figure 5.	Keep as place-holder for intermediate pressure fueling, but modify drawing by removing sealing dimensions, i.e. similar to H70 drawing (dimensional sketch)
FR 22 & 197	6	Page 8 Figure 4	te	Text box "Vehicle side"	Shouldn't we read 27.5 mm instead of 30 mm ?	
JP 197	6	Figure 1, 2, 3, 4	ed	Arrow of Nozzle side is wrong.	Point the top surface of stop-ring as same as Figure 6.	
JP 197	6	Figure 4	te	Is current dimension of H35HF appropriate? At Detroit meeting in January, we agreed to continue discussion how to prevent misconnection between H35HF nozzle and H70, H50 and H35 receptacles.	We are considering appropriate design.	
JP 197	6	Figure 4	ed	Text box of Vehicle side says " The stop ring shall be a shape having an overall diameter greater than 30 mm". 30mm should be typo of 27.5mm.	30 shall be changed to 27.5.	
JP 197	6	Figure 5	te	At Detroit meeting in January, we agreed to describe out shape of H50 receptacle because the detail of inside design of H50 is not defined yet.	Describe out shape only as same as H70 in Figure 6.	
JP 197	6	Figure 1, 2, 3, (4), 5, 6	te	Text box of Vehicle side says "The stop ring shall be a shape having an overall diameter greater than 30 mm". We think non-cylindrical shape should be acceptable as stop-ring, as we proposed to SAE J2600. Note: Regarding H35HF, we need discussion how to prevent misconnection between H35HF nozzle and H70, H50 and H35 receptacles.	The stop ring will be a shape that has an overall diameter of 30 mm or more, which can include other shapes(, to ensure positive nozzle stop). Note: Regarding H35HF, we need discussion how to prevent misconnection between H35HF nozzle and H70, H50 and H35 receptacles.	
JP 197	6 10.1.3	Figure 1-18	ed	"DETAIL D" and "DETAIL Y" are mixed.	Use same description for all figures.	

1 **MB** = Member body (enter the ISO 3166 two-letter country code, e.g. CN for China; comments from the ISO/CS editing unit are identified by **)

2 **Type of comment:** **ge** = general **te** = technical **ed** = editorial

NOTE Columns 1, 2, 4, 5 are compulsory.

Compilation of comments received on ISO/CD 17268 Compressed hydrogen land vehicle fueling connection devices

Date: 2009-07-16	ISO/TC 197 N416 Annex A
	Document: ISO/CD 17268 (ISO/TC 197 N414)

1	2	(3)	4	5	(6)	(7)
MB¹	Clause No./ Subclause No./ Annex (e.g. 3.1)	Paragraph/ Figure/Table/ Note (e.g. Table 1)	Type of comment²	Comment (justification for change) by the MB	Proposed change by the MB	Secretariat observations on each comment submitted
US 197	6	Figure 6	Te	Sealing surface not specified. This can lead to potentially unsafe conditions if nozzle and receptacle don't have mating sealing surfaces.		
IN 22	7.1		TE	For better safety receptacles should be submitted to 50,000 cycles in line with ECE R110	Receptacles should be designed for a fatigue life of 50000 cycles	
SE 22 & 197	7.2		te	The back diameter should be clearly indicated as such on Figs 1 to 6.		
SE 22 & 197	7.5	last sent.	te	The last sentence should be removed to a separate section.		
UK 197	7.5		Te	This requirement needs a corresponding test.	Include appropriate test.	
US 197	7.5		Te	This requirement needs a corresponding test.		
IN 22	9 (f)		GE	Ensuring clarity during operation	Add clause 9 (g) for labelling nozzles and receptacles "For hydrogen use only"	
SE 22 & 197	9		te	Change sentence as follows: "...embossed, cast, <u>low stress</u> stamped or otherwise formed...."		

1 **MB** = Member body (enter the ISO 3166 two-letter country code, e.g. CN for China; comments from the ISO/CS editing unit are identified by **)

2 **Type of comment:** **ge** = general **te** = technical **ed** = editorial

NOTE Columns 1, 2, 4, 5 are compulsory.

Compilation of comments received on ISO/CD 17268 Compressed hydrogen land vehicle fueling connection devices

Date: 2009-07-16	ISO/TC 197 N416 Annex A
	Document: ISO/CD 17268 (ISO/TC 197 N414)

1	2	(3)	4	5	(6)	(7)
MB¹	Clause No./ Subclause No./ Annex (e.g. 3.1)	Paragraph/ Figure/Table/ Note (e.g. Table 1)	Type of comment²	Comment (justification for change) by the MB	Proposed change by the MB	Secretariat observations on each comment submitted
US 197	10		tech	Separation of certain exposures of the verification test into separate sections may result in an incomplete verification of the nozzle/receptacle.	The following sections should be combined into a single test sequence to ensure that the combination of these exposures will not cause unacceptable operation or hazard to humans: 10.8 Temperature 10.9 Durability 10.14 Thermal Cycle 10.15 Precooled Hydrogen Test	
IN 22	10.1.2 (a)		TE	Ambient temperatures in tropical countries are higher	Modify clause "tests shall be conducted at 20 ± 5 °C or 27 ± 5 °C, whichever is applicable.	
IN 22	10.1.2 (c)		TE	For better clarity, specify composition of leak test gas	Specify leak test gas as 100 % inert test gas	
FR 22 & 197	10.1.3	Page 12 Figure 7	te	It seems a shoulder has been designed on the right side of the diameter 23.1 mm and there is no dimension for it.	We need it to be specified or it should be removed from the profile drawing.	
FR 22 & 197	10.1.3	Page 13 Figure 8	te	It seems a shoulder has been designed on the right side of the diameter 22.9 mm and there is no dimension for it.	We need it to be specified or it should be removed from the profile drawing.	
FR 22 & 197	10.1.3	Page 15 Figure 13	te	It seems a shoulder has been designed on the right side of the diameter 23.1 mm and there is no dimension for it.	We need it to be specified or it should be removed from the profile drawing.	

1 **MB** = Member body (enter the ISO 3166 two-letter country code, e.g. CN for China; comments from the ISO/CS editing unit are identified by **)

2 **Type of comment:** **ge** = general **te** = technical **ed** = editorial

NOTE Columns 1, 2, 4, 5 are compulsory.

Compilation of comments received on ISO/CD 17268 Compressed hydrogen land vehicle fueling connection devices

Date: 2009-07-16	ISO/TC 197 N416 Annex A
	Document: ISO/CD 17268 (ISO/TC 197 N414)

1	2	(3)	4	5	(6)	(7)
MB¹	Clause No./ Subclause No./ Annex (e.g. 3.1)	Paragraph/ Figure/Table/ Note (e.g. Table 1)	Type of comment²	Comment (justification for change) by the MB	Proposed change by the MB	Secretariat observations on each comment submitted
FR 22 & 197	10.1.3	Page 16 Figure 14	te	It seems a shoulder has been designed on the right side of the diameter 22.9 mm and there is no dimension for it.	We need it to be specified or it should be removed from the profile drawing.	
FR 22 & 197	10.1.3	Page 16 Figure 15	te	It seems a shoulder has been designed on the right side of the diameter 23.1 mm and there is no dimension for it.	We need it to be specified or it should be removed from the profile drawing.	
FR 22 & 197	10.1.3	Page 17 Figure 16	te	It seems a shoulder has been designed on the right side of the diameter 22.9 mm and there is no dimension for it.	We need it to be specified or it should be removed from the profile drawing.	
FR 22 & 197	10.1.3	Page 18 Figure 17 Page 19 Figure 18	te	The diameter reduction from 23.1 mm to 22.5 mm can generate an uncertain locking and can be dangerous.	We propose to keep the 23.1 mm diameter all over this part. We do not see any reason to have this shape only for the H70 profile.	
JP 197	10.1.3	Figure 7, 8, 9,10,11, 12, 15, 16, 17, 18	ed	We agree to fix the dimensions on stop-ring for test samples as Loose fit test fixture and Tight fit test fixture. In current draft, stop-ring diameter of 29.9, 30.1 and 33.5 mm exist. To simplify the test setup, we recommend to unify the dimension.	Change 29.9, 30.1 and 33.5 to 30 +0/-0.02.	
JP 197	10.1.3	Figure 15, 16, 17, 18, 24, 25	ed	The detail of inside design of H50 and H70 is not defined yet.	Describe outside shape only as same as H70 in Figure 6.	

1 **MB** = Member body (enter the ISO 3166 two-letter country code, e.g. CN for China; comments from the ISO/CS editing unit are identified by **)

2 **Type of comment:** **ge** = general **te** = technical **ed** = editorial

NOTE Columns 1, 2, 4, 5 are compulsory.

Compilation of comments received on ISO/CD 17268 Compressed hydrogen land vehicle fueling connection devices

Date: 2009-07-16	ISO/TC 197 N416 Annex A
	Document: ISO/CD 17268 (ISO/TC 197 N414)

1	2	(3)	4	5	(6)	(7)
MB¹	Clause No./ Subclause No./ Annex (e.g. 3.1)	Paragraph/ Figure/Table/ Note (e.g. Table 1)	Type of comment²	Comment (justification for change) by the MB	Proposed change by the MB	Secretariat observations on each comment submitted
FR 22 & 197	10.2.2 Acceptance criteria	Page 10 3rd §	te	The value 0.7 MPa seems too low. In the 5th § it is required to be able to disconnect the nozzle if the pressure is equal or lower than 0.5 MPa. The difference between 0.5 MPa and 0.7 MPa (value at which the disconnection is not allowed any more) is too low.	We propose 1.0 MPa minimum.	
FR 22 & 197	10.2.2 Acceptance criteria	Page 10 5th § and 6th §	te	It seems that there is an inconsistency between the values of 22.2 N and 90 N. It is required to have a lower force to disconnect under pressure than to disconnect without pressure.	90 N seems the right value for both.	
UK 197	10.2.2		Te	Phrases like "No hazardous condition shall result from disconnection" should be supported by some recommendation or requirement	Add detail to explain what is actually required.	
IN 22	10.4.1.1		TE	For increased safety test to be conducted at 150 % of maximum working pressure instead of nominal working pressure	Replace "nominal working pressure" by "maximum working pressure"	
FR 22 & 197	10.9.1.2	Page 26 Figure 20	te	It seems a shoulder has been designed on the right side of the diameter 23.1 mm and there is no dimension for it.	We need it to be specified or it should be removed from the profile drawing.	
SE 22 & 197	10.9.3.1	1 st sent.	te	Appropriate tolerances be given for the measurements and weighing.		
JP 197	10.9.1.3		te	At Detroit meeting in January, we agreed to continue discussion regarding number of test cycles of 100 000.	Change " 100 000 operational cycles" to " XXXX operational cycles" to make sure it is still under discussion.	

1 **MB** = Member body (enter the ISO 3166 two-letter country code, e.g. CN for China; comments from the ISO/CS editing unit are identified by **)

2 **Type of comment:** **ge** = general **te** = technical **ed** = editorial

NOTE Columns 1, 2, 4, 5 are compulsory.

Compilation of comments received on ISO/CD 17268 Compressed hydrogen land vehicle fueling connection devices

Date: 2009-07-16	ISO/TC 197 N416 Annex A
	Document: ISO/CD 17268 (ISO/TC 197 N414)

1	2	(3)	4	5	(6)	(7)
MB¹	Clause No./ Subclause No./ Annex (e.g. 3.1)	Paragraph/ Figure/Table/ Note (e.g. Table 1)	Type of comment²	Comment (justification for change) by the MB	Proposed change by the MB	Secretariat observations on each comment submitted
SE 22 & 197	10.10	NOTE	ed	Change end of sentence to "...test samples for an other <u>subsequent</u> testing."		
JP 197	10.15		te	We understand this test as abuse test to accelerate the test speed. At this moment, we have no data to define.	Add "Note" as this section is still under discussion.	
IN 22	10.15.1		TE	For better clarity, specified cooled hydrogen gas purity	Add clause "Cooled hydrogen gas as specified in ISO 14687"	
SE 22 & 197	10.15.1		te	Is 30 g/s appropriate for the H35HF design?		
US 197	10.15.1		Te	Current test calls for 30s flow, one minute off, repeat 10x, 30s flow, 15 minute off, repeat 10x.	There should also be a 5 minute flow, two minute off, 10 x cycle.	
US 197	10.15.1		Ed	Failure to disconnect sentence belongs in 10.15.2, Acceptance Criteria.		
FR 22 & 197	10.16.1	Page 32 Figure 26	te	The thickness of the shims is not specified, we do not know from which thickness it should not possible to lock the nozzle any more		
US 197	10.16.1		Te	Consider using 90° shims instead of 360° shims. Need a better definition of misconnected nozzle such as nozzle in condition that permits flow, but not locked on. Also need better definition of "Shall not flow gas" such as "no more flow than is allowed during leakage test specified in section 10.4."		
JP 197	10.17		te	There is no definition regarding tolerance.	The tolerance of nozzle and receptacle for this test shall be discussed.	

1 **MB** = Member body (enter the ISO 3166 two-letter country code, e.g. CN for China; comments from the ISO/CS editing unit are identified by **)

2 **Type of comment:** **ge** = general **te** = technical **ed** = editorial

NOTE Columns 1, 2, 4, 5 are compulsory.