



Material Provisions for HFCV

In Regulation or in (industry) Standards

6~7 November 2019 (Stuttgart)

- Industry is actively supporting the work of standardization organizations (e.g. ISO and SAE)
- This includes the work on material testing for hydrogen compatibility
- Governments and governmental organisations are joining the same discussions
- Several standards are existing and are updated frequently

Proposal

- Add wording in the text of GTR 13:

“Manufacturer shall ensure during selection of materials in contact with hydrogen, that these materials are compatible with hydrogen and that a safe operation of the vehicle during lifetime is given. National and international standards (e.g. ISO or SAE) shall be used in the selection process of the material (see Annex XXX).

Justification

- Material tests are well defined in national / international standards
- Update of material tests for GTR will take unnecessary long time
- Inspectors during type approval and during re-testing of components have to trust on manufacturers input (e.g certificate showing compliance with ISO/SAE). He is not capable to conduct the tests with components and has not the knowledge to “extrapolate” from specimen test to component test.