

ISO/TR 11954:2024-01 (E)

Fuel cell road vehicles - Performance measurement - Vehicles fuelled with compressed hydrogen

Contents		Page
Foreword.....		iv
1	Scope.....	1
2	Normative references.....	1
3	Terms and definitions.....	1
4	Parameters, units and accuracy of measurements.....	3
5	Test conditions.....	3
5.1	Vehicle conditions.....	3
5.2	Atmospheric conditions.....	4
5.2.1	Ambient temperature and atmospheric pressure.....	4
5.2.2	Air density.....	4
5.2.3	Wind speed.....	4
5.2.4	Relative humidity.....	4
5.3	Track conditions.....	4
5.3.1	General conditions.....	4
5.3.2	Straight track.....	4
5.3.3	Loop track.....	5
5.3.4	Single direction test.....	5
6	Preconditioning of the vehicle.....	5
6.1	Hydrogen refuelling.....	5
6.2	RESS state of charge preconditioning of externally chargeable FCHEV.....	5
6.3	Warming up.....	6
6.4	Selection of driving mode.....	6
7	Test sequence.....	6
7.1	Test sequence for non-externally chargeable FCHEV.....	6
7.2	Test sequence for externally chargeable FCHEV.....	6
8	Test procedure.....	7
8.1	Maximum speed.....	7
8.1.1	Standard test procedure.....	7
8.1.2	Single direction test procedure.....	7
8.2	Maximum thirty minutes speed.....	8
8.3	Acceleration ability (v_1 to v_2).....	8
8.3.1	Acceleration ability 0 km/h to 50 km/h.....	8
8.3.2	Acceleration ability 50 km/h to 80 km/h.....	9
8.4	Speed uphill.....	9
8.5	Hill starting ability.....	9
8.5.1	Principle.....	9
8.5.2	Procedure.....	9
8.5.3	Evaluation of α_0	10
Annex A (informative)	Test results of performance measurements.....	11
Annex B (informative)	Quantity of electricity measurement of the RESS.....	13
Bibliography		15