

Zhejiang Fenergy Technology Co.,Ltd.

Hydrogen fuel cell engine test service project



Brief introduction of hydrogen fuel cell engine test items

1. The test content serves:

Proton exchange membrane fuel cell engine for vehicle

2. Scope:

Fuel cell engine starting characteristics, steady-state characteristics, dynamic response characteristics, air tightness detection, insulation resistance detection and other tests.

3. Instrument air source:

The purity of DC auxiliary power supply, electronic load, control power supply and hydrogen high-pressure gas source meets the requirements of use.

Test item

Hydrogen fuel cell engine test project				
Serial number	Test item		Executive standard	Remarks
1	Starting characteristic experiment	Cold start characteristic experiment	GB/T24554-2009 7.3	
2		Hot start test	GB/T24554-2009 7.3	
3	Rated power test		GB/T24554-2009 7.4	
4	Peak power test		GB/T24554-2009 7.5	
5	Dynamic response characteristic test	Load dynamic response test	GB/T24554-2009 7.6	
6		Unloading dynamic response test	GB/T24554-2009 7.6	
7	Steady-state characteristic test		GB/T24554-2009 7.7	
8	Emergency stop function test		GB/T24554-2009 7.8	
9	Air tightness test		GB/T24554-2009 7.9	
10	Insulation resistance test		GB/T24554-2009 7.10	
11	Quality test		GB/T24554-2009 7.11	

Instrument accuracy		
Name	Satisfy accuracy	Remarks
Voltage sensor	≤0.5%FS	
Current sensor	≤0.5%FS	
Thermometer	±1℃	
Hygrometer	±3%	
Hydrogen flowmeter	≤1%	According to the relative error calculation
Coolant flowmeter	≤1%FS	
Weighing scale	≤0.5%FS	