Fuel Cell Power Systems

J H I A commenced certification of polymer electrolyte fuel cell power systems on September 10,2005.

Feature of the certification enterprise of JHIA

①The inspection standards has the Japan industrial standards (JIS) draft and IEC standards draft.

② Factory investigation has adopted the European CENELEC system.

③ Use our knowledge and experiences about oil burning appliance technology which the past half century .

We sincerely believe that we can offer you the high quality tests and certification by these.

Certification label (JHIA and JET commonness)

Notes 1 Notes 2 Notes 3

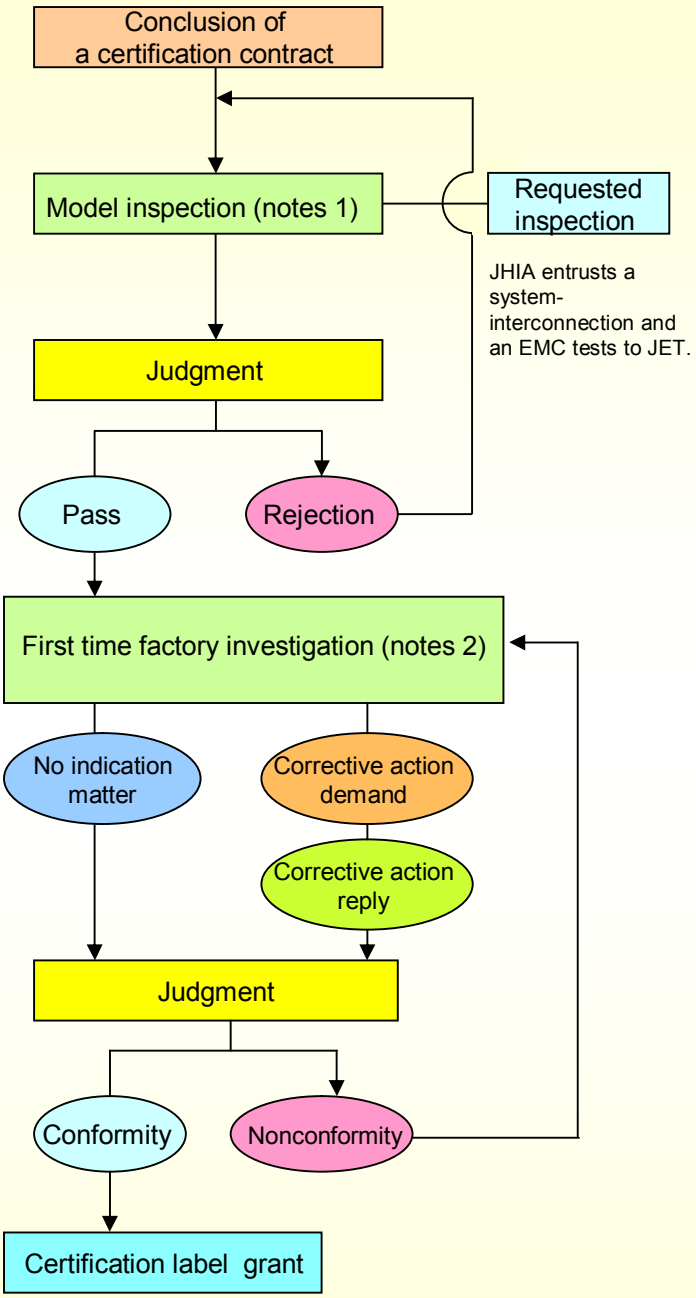
[JHIA] in a figure mean about certification body , and it mean [JET] when JET certificated.
[2005/09] in a figure mean certification years.

Notes 1 :When the power source of warm water tank takes from the distribution board , and the voltage of auxiliary and sensor of warm water tank is less than DC30.

Notes 2 :When the power source of warm water tank takes from the Fuel Cell , and the voltage auxiliary and sensor of warm water tank is less than DC30.

Notes 3 :When the power source of warm water tank takes from the distribution board , and the power source of auxiliary and sensor of warm water tank is less than DC30.

Flow to certification acquisition

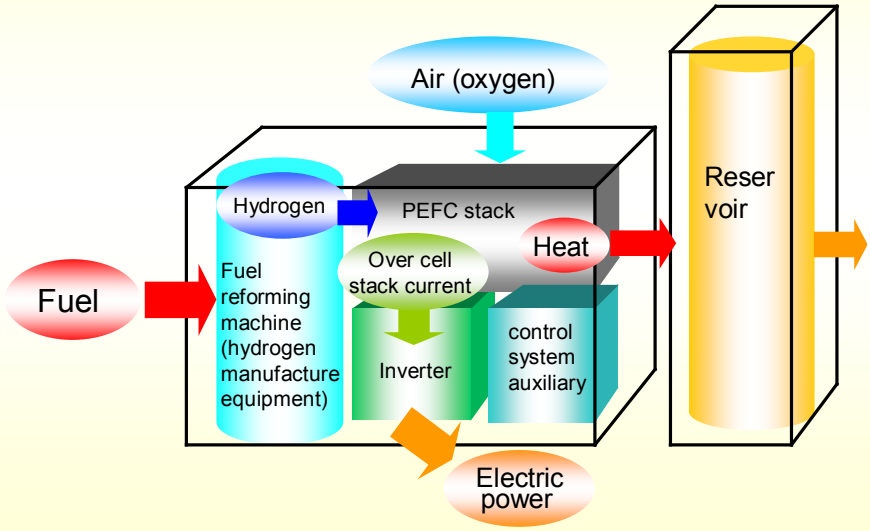


Notes 1 : We check whether the performance of a product is acceptable an inspection standard.

Notes 2: We Investigate the quality management systems of factory and check the stability of quality and inspection system.

Structure of a Fuel Cell

It is a system which makes hydrogen from raw materials such as kerosene, with a "fuel reforming machine", and supplies electricity and heat.



Since It is a cogeneration system which generates electricity and heat simultaneously, utilities such as conventional electricity costs and fuel costs etc are largely reduced.

Convenience

A fuel Cell supplies electricity and hot water to a home simultaneously.
the generated electric power can use for lighting at a home,
or the power source of home electronics,
and hot water can use for cooking, hot-water supply,
floor heating, etc.

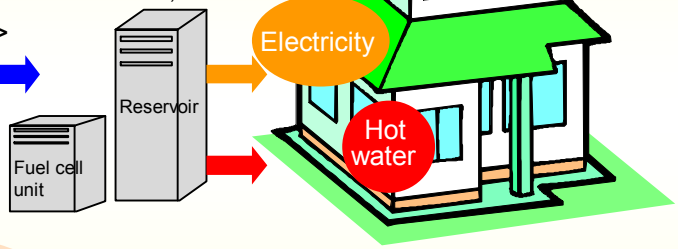
Fuel Cell System
(the amount of required hydrogen: about 70m3/week)

<Comparison of fuel required for one week at a home>

Hydrogen (150 atmospheres): About 10 (70m3) / week

Kerosene (20L can): About 1can (23L) /week

LP gas (50kg type container): about 1/3 (LPG17kg) /week



Hydrogen in hydrocarbon such as kerosene can use with a fuel cell as energy.
For this reason, oil system fuel is excellent as a source of hydrogen in the field of storage and transportation.

Trial-calculation conditions:
Consider power generation efficiency of a fuel cell is 35%,and operating hour is 7:00 to 24:00.