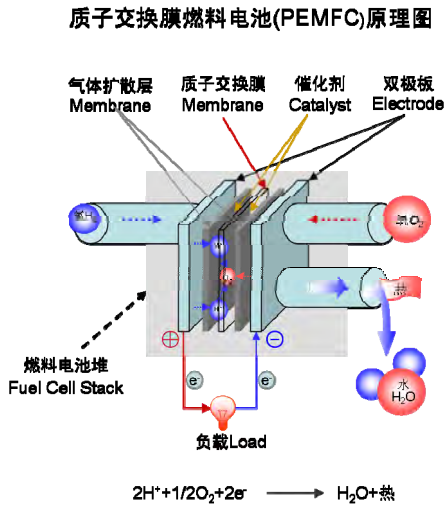


Reactions PEM Fuel Cell

质子交换膜燃料电池原理



进入燃料电池的氢分子在阳极催化剂作用下分解成氢离子，释放出电子，氢离子穿过质子交换膜到达阴极，电子通过外电路输出电能；进入燃料电池的氧分子在阴极催化剂作用下，与氢离子和通过外电路到达的电子反应生成水和热。

PEM Fuel cells are generally classified according to the Operating temperature
质子交换膜燃料电池根据操作温度不同通常被划分为

Low Temperature PEM Fuel Cell (LT PEMFC)
低温质子交换膜燃料电池
(Operating Temperature < 80°C)

High Temperature PEM Fuel Cell (HT PEMFC)
高温质子交换膜燃料电池
(120°C < Operating Temperature < 200°C)

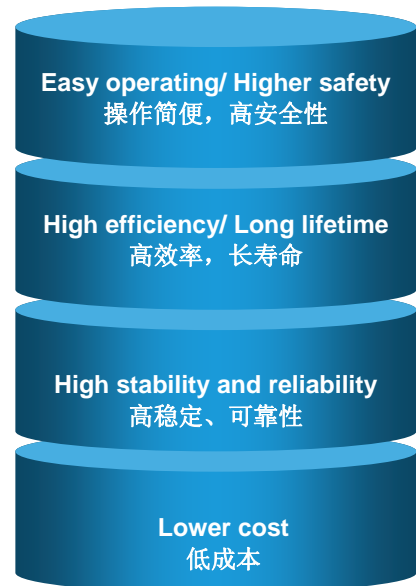
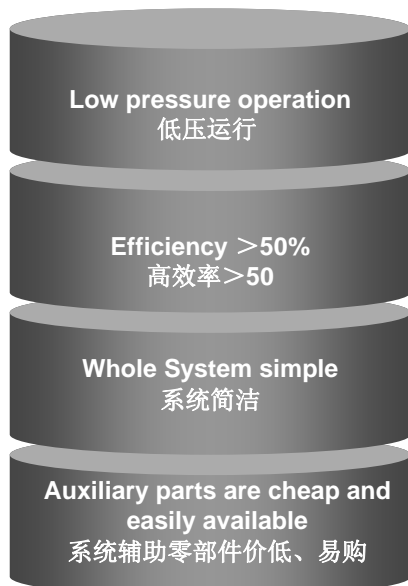
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LT PEM Fuel Cell Technology

神力科技低温质子交换膜燃料电池技术



Technology Advantages
技术优势

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High Temperature PEM Fuel Cell

高温质子交换膜燃料电池

特点Characteristic :

- ❖ 燃料电池运行温度120°C~200°C
Operating temperature 120 °C ~ 200 °C
- ❖ 使用寿命长，可以达到20000小时
Long lifetime >20,000 hours
- ❖ 对燃料氢气适应性好。适合使用甲醇、天然气等重整氢气
Has good H₂ adaptability. Fit for H₂ reformed from CNG, methanol.
- ❖ 催化剂中贵金属铂使用量低，抗CO中毒能力强
Low Pt used in catalysts. Good performance against CO poison.
- ❖ 不需要增湿，不会堵水，系统简洁
No Humidification, no water plugging, simple system.
- ❖ 价格具有竞争力
Low Cost

<http://www.sl-power.com/>



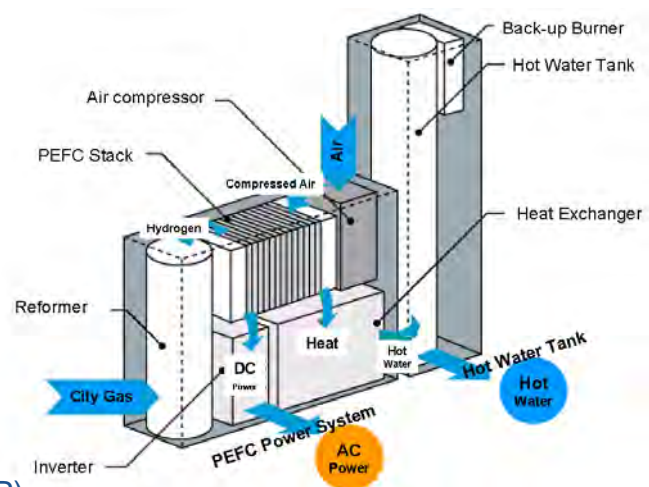
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High Temperature PEM Fuel Cell

高温质子交换膜燃料电池

Application 应用:

- Fixed or portable power system
固定或移动式发电站
- Backup power
备用电源
- Alternate peak power station
备用峰值电站
- Combined heat and power system (CHP)
热电联供系统



Combined heat and power system(CHP)

热电联供系统

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