

氢能相关材料

Materials for Hydrogen Gas Application

用有特色的金属材料为氢能社会的实现做贡献

Our unique metal materials contribute to realize a hydrogen-based society.



概要

结合制氢、储氢、氢能应用的各种情况
提供适合的材料。

Proterial proposes a suitable material according to the operating environment of hydrogen (e.g., production, storage and utilization).

特点

▼ 我司的材料相比一般不锈钢具有以下特长

Our materials are superior to common stainless steels as follows:

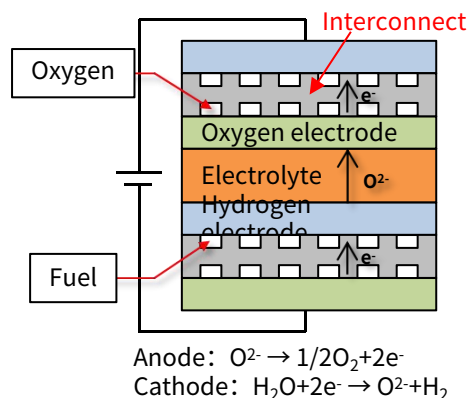
- ZMG®232G10: 空气，水蒸气中的高耐氧化性，耐剥离性
Surface oxidation layer grows slow in air and steam.
- SUH660: 适用于高压气体保安法中规定高压氢气环境
It can be used for high-pressure hydrogen.
- ASL®817: 保有高硬度，严苛润滑环境下也有高耐磨性
Its high hardness contributes to wear resistance under poor lubrication.

应用例 固体氧化物型水电解装置

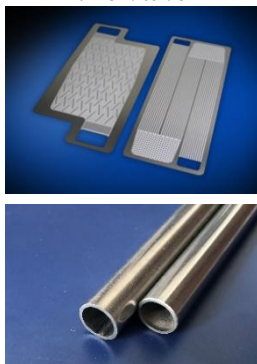
Application : solid oxide electrolysis cell

■ SOEC基本构造

Schematic structure of SOEC



[ZMG®232G10]
Upper : interconnect
Lower : tube



用途

固体氧化物型燃料电池／水电解装置

Solid oxide fuel cell/electrolysis cell

氢压缩机

Hydrogen compressor

氢发动机

Hydrogen engine

应用例 氢发动机零件

Application : parts for hydrogen engine

■ 高精度异形细线



■ 活塞环



■ 发动机进排气阀门

■ 耐高温氧化性的比较

Oxidation resistance at high temperature

