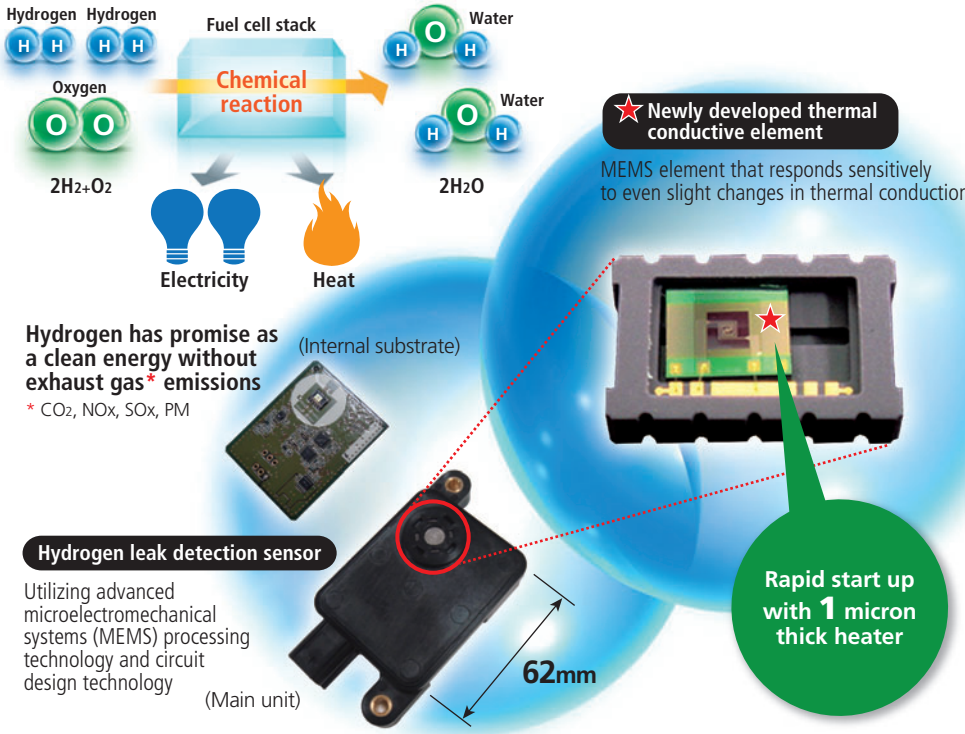
Feature

SHINKA 2

SHINKA (Renovating) for the Advent of the Hydrogen Society

Hydrogen Leak Detection Sensor Developed to Ensure Safety when Using Hydrogen*

* Hydrogen is expected to be used for fuel cell vehicles (cars and forklifts), hydrogen-filling stations, residential fuel cells and other applications.



Voice of our Developer

Daisuke Ichikawa
New Business Strategy Dept.,
New Business Advancement Group

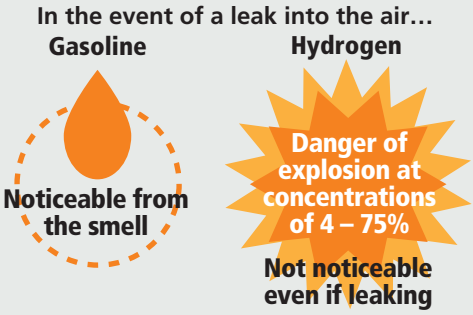
Toward development of non-degrading sensor to maintain FCV safety

Rapid and accurate detection of a hydrogen leak is one of the critical factors for the life of the driver in a fuel cell vehicle (FCV) that runs on hydrogen. Therefore, it is necessary to develop a sensor that is non-degrading at the same time as being highly precise.

NGK SPARK PLUG's hydrogen leak detection sensor is still under development, but we take pride in the facts that it uses a method of detection that is different from those of our competitors and that the durability of the sensor is superior to those of our competitors. First of all, we are aiming to develop a sensor that will be fitted to FCVs for mass production and gain the No. 1 share of the market in this area.

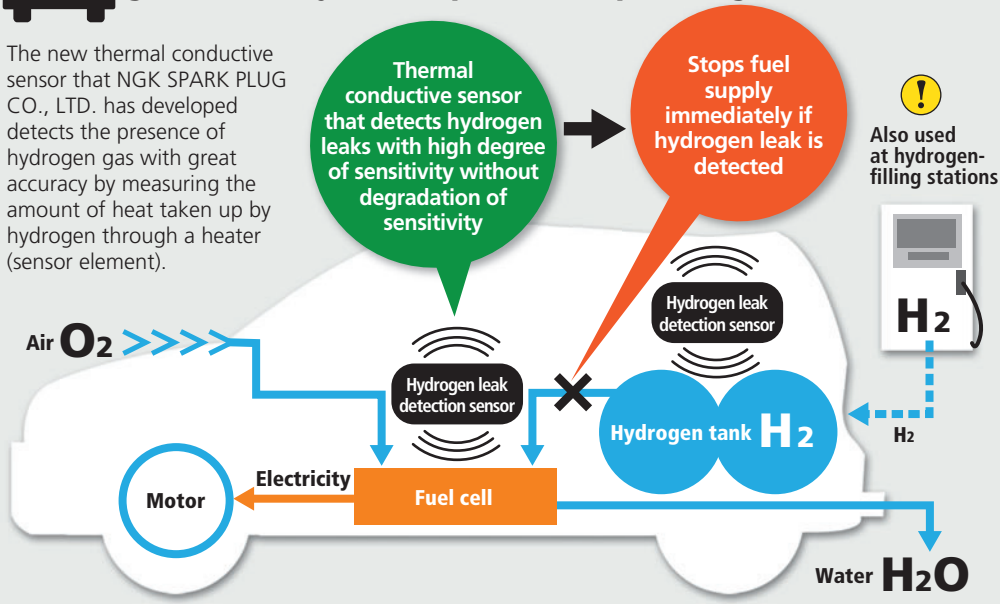
Ensuring Safety During Use

Hydrogen is colorless, transparent and odorless, so a driver would not be able to notice it if it leaked into the air. A highly accurate sensor that can rapidly detect even the slightest leak is essential for safe operation of FCVs.



High Sensitivity and Rapid Start-up through New Method

The new thermal conductive sensor that NGK SPARK PLUG CO., LTD. has developed detects the presence of hydrogen gas with great accuracy by measuring the amount of heat taken up by hydrogen through a heater (sensor element).



Taking Part in Development Project for Advanced Electric Vehicles

NGK SPARK PLUG has also widened its approach to the field of electric vehicles (EVs). The Company is gathering and building up technical data leading into research and development on cutting edge EVs through its participation in EV projects at SIM-Drive and FOMM.

The SIM-CEL developed by SIM-Drive

Compact EV under development by FOMM

WEB

http://www.ngkntk.co.jp/english/csr/feature02.html