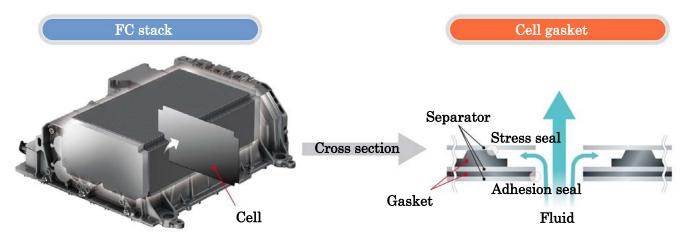
December 16, 2014

## Sumitomo Riko develops a new cell gasket -Mounted on the "MIRAI" fuel cell vehicle of Toyota Motor Corporation-

Sumitomo Riko Co., Ltd. (Head office: Komaki City, Aichi Prefecture, President: Yoshiaki Nishimura) developed a "cell gasket," a new rubber seal component used for fuel cell (hereinafter referred to as "FC") stacks mounted on fuel cell vehicles (hereinafter referred to as "FCV"). The product is used in the "MIRAI" FCV, which Toyota Motor Corporation released on December 15 as the ultimate eco-car that uses hydrogen as an energy source and emits only water during driving. The gasket will contribute to the spread and improvement of the "MIRAI."

The newly developed cell gasket is a seal component that retains the flow of hydrogen and oxygen in the fuel cell and improves the discharge of generated water. With the development of the cell that uses this new gasket, high-quality performance and reduction in size and weight of FC stacks were achieved. Making full use of its own compounding technologies, Sumitomo Riko combined highly-functional rubber that has achieved long-term sealing in a wide-ranging temperature from low to high with high-precision processing technology the company has created through the development of products such as automotive anti-vibration rubbers. As a result, Sumitomo Riko has succeeded in developing an optimal seal product that ensures the long-term reliability of FC.



Sumitomo Riko started developing products for FC in the first half of 2000s. In 2008, the company started joint development of the "seal component" with Toyota Motor Corporation, which is the origin of the new "cell gasket." The gasket is made of general-purpose rubber but has self-adhesiveness. Using them enabled integrated processing of various power generation components in the final process of making fuel cells, which supports the production of the cell that allow stable power generation. The FC stack that consists of 370 pieces of this cell serves as the power source of the "MIRAI."

Sumitomo Riko is committed to further developing new products that meet customer demands, solve social problems, and contribute new values to people's lives, making effort for the realization of people-and eco-friendly motorized societies.

## <Reference information>

■ Products of Sumitomo Riko mounted on the "MIRAI"

Anti-vibration rubber (Minimizes vibrations from road surfaces and enhances in-vehicle comfort.)

(1) Motor mount

This rubber component is attached to the housing part of a motor. By supporting the motor, it enhances riding quality during driving and dampens vibrations of the motor.

(2) Stack mount

This rubber component is provided at a joint part between the FC stack case and the vehicle body, and helps to reduce not only the vibrations that propagate to the FC stack but also the vibrations of the vehicle itself.

Hose (Supplies the hydrogen and oxygen required for power generation to the FC stack.)

(3) Hydrogen hose

This hose supplies hydrogen from the hydrogen tank to the FC stack.

(4) Air hose

This hose supplies compressed air to the FC stack. The attachment of the sound insulating urethane cover to the hose suppresses intake noise and makes air supply quieter.

Urethane parts(Parts made of Sumitomo Riko's original urethane foam material enhance the safety and comfort of vehicles.)

(5) Hydrogen tank pad

Made of a special impact absorbing material, this pad protects the hydrogen tank against external impacts.

(6) Sound insulating cover

The cover suppresses sound from the auxiliary equipment of the FC stack.



- (1) Motor mount
- (2) Stack mount
- (3) Hydrogen hose
- (4) Air hose
- (5) Hydrogen tank pad
- (6) Sound insulating cover



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