

May 17, 2016

Tanaka Precious Metals
Tanaka Holdings Co., Ltd.

Tanaka's Platinum Electrode Catalysts for Fuel Cells to be Used in Honda's All-new Clarity Fuel Cell Vehicle

Tanaka Holdings Co., Ltd. (Head office: Chiyoda-ku, Tokyo; Representative Director & CEO: Akira Tanae) announced today that platinum electrode catalysts for fuel cells manufactured by Tanaka Kikinzoku Kogyo K.K. (Head office: Chiyoda-ku, Tokyo; Representative Director & CEO: Akira Tanae), which operates the Tanaka Precious Metals manufacturing business, is being used by Honda Motor Co., Ltd (Head office: Minato-ku, Tokyo; President, CEO & Representative Director: Takahiro Hachigo) in its all-new Clarity fuel cell vehicle, the Clarity Fuel Cell which went on sale in March.

■ Growing market and demand for fuel cells

In recent years, renewable energy is steadily gaining attention. Fuel cells that generate electrical energy using hydrogen are gaining widespread use in a variety of areas such as fuel cell vehicles and energy farms. Tanaka Kikinzoku Kogyo has spent many years developing electrode catalysts, an important component affecting the electrical generation capability of fuel cell stacks*¹. Compared to residential-use fuel cells, there is high fluctuation in the load*² of fuel cell stacks used in fuel cell vehicles. This led Honda Motor to decide to adopt this new electrode catalyst, which is of even higher capability and durability compared to Tanaka's past products. Honda will use this material in its compact fuel cell stack for the Clarity fuel cell vehicle.

■ Initiatives for a hydrogen-based society

Tanaka Kikinzoku Kogyo develops precious metal materials used in fuel cells and related technologies required in a hydrogen-based society, such as polymer electrolyte fuel cells (PEFC), palladium alloy hydrogen permeable film, and reforming catalysts.



CLARITY FUEL CELL

2016.03.10

Clarity fuel cell vehicle (courtesy of Honda Motor)

Fuel cell electrode catalysts manufactured by
Tanaka Kikinzoku Kogyo

■ History of Tanaka Kikinzoku Kogyo's development of fuel cell electrode catalysts

Beginning in 1985, for the past 31 years, Tanaka Kikinzoku has utilized its precious metals technology acquired over 130 years since its establishment in 1885 to develop fuel cell electrode catalysts. With demand for residential-use fuel cells and the launch of fuel cell vehicles in recent years, Tanaka established its FC Catalyst Development Center within Kanagawa Prefecture in 2013 to establish a stable supply system. With the development center as a model factory, Tanaka looks forward to meeting the expected increase in future demand.

*1 A fuel cell stack is an electric generator that generates electricity by using the chemical reaction of hydrogen with oxygen found in air.

*2 Load fluctuation refers to changes in the fuel cell's output voltage.

■Tanaka Holdings Co., Ltd. (Holding company of Tanaka Precious Metals)

Headquarters: 22F, Tokyo Building, 2-7-3 Marunouchi, Chiyoda-ku, Tokyo

Representative: Akira Tanae, Representative Director & CEO

Founded: 1885

Incorporated: 1918

Capital: 500 million yen

Employees in consolidated group: 3,511 (FY2014)

Net sales of consolidated group: 856.4 billion yen (FY2014)

Main businesses of the group:

Strategic and efficient group management and management guidance to group companies as the holding company at the center of the Tanaka Precious Metals.

Website: <http://www.tanaka.co.jp/english> (Tanaka Precious Metals),

<http://pro.tanaka.co.jp/en> (Industrial products)

■Tanaka Kikinzoku Kogyo K.K.

Headquarters: 22F, Tokyo Building, 2-7-3 Marunouchi, Chiyoda-ku, Tokyo

Representative: Akira Tanae, Representative Director & CEO

Founded: 1885

Incorporated: 1918

Capital: 500 million yen

Employees: 1,992 (as of October 1, 2015)

Sales: 872,677 million yen (FY2014)

Main businesses:

Manufacture, sales, import and export of precious metals (platinum, gold, silver, and others) and various types of industrial precious metals products.

Website: <http://pro.tanaka.co.jp/en>

<About the Tanaka Precious Metals>

Established in 1885, the Tanaka Precious Metals has built a diversified range of business activities focused on the use of precious metals. On April 1, 2010, the group was reorganized with Tanaka Holdings Co., Ltd. as the holding company (parent company) of the Tanaka Precious Metals. In addition to strengthening corporate governance, the company aims to improve overall service to customers by ensuring efficient management and dynamic execution of operations. Tanaka Precious Metals is committed, as a specialist corporate entity, to providing a diverse range of products through cooperation among group companies.

Tanaka Precious Metals is in the top class in Japan in terms of the volume of precious metal handled, and for many years the group has developed and stably supplied industrial precious metals, in addition to providing accessories and savings commodities utilizing precious metals. As precious metal professionals, the group will continue to contribute to enriching people's lives in the future.

The five core companies in the Tanaka Precious Metals are as follows.

- Tanaka Holdings Co., Ltd. (pure holding company)
- Tanaka Kikinzoku Kogyo K.K.
- Tanaka Denshi Kogyo K.K.
- Electroplating Engineers of Japan, Limited
- Tanaka Kikinzoku Jewelry K.K.