

July 10, 2018

TANAKA Precious Metals
TANAKA Holdings Co., Ltd.

TANAKA Expands FC Catalyst Production Capacity

This expansion has seven times the current production capacity.

This enables TANAKA to meet rising future global demand for commercial fuel cell vehicles and industrial equipment.

Center will provide fuel cell electrode catalyst materials enabling a hydrogen-based society

TANAKA Holdings Co., Ltd. (Head office: Chiyoda-ku, Tokyo; Representative Director and CEO: Akira Tanae) announced that TANAKA Kikinzoku Kogyo K.K. (Head office: Chiyoda-ku, Tokyo; Representative Director and CEO: Akira Tanae), which operates the TANAKA Precious Metals manufacturing business, established a new Fuel Cell Catalyst Development Center in Kanagawa Prefecture to develop and manufacture electrode catalysts used in fuel cells. TANAKA Kikinzoku Kogyo already boasts a world-leading share of the fuel cell catalyst market, and with the expansion of the center, production capacity will increase seven-fold.



The new fuel cell catalyst materials center

The new building is located adjacent to the existing FC Catalyst Development Center at TANAKA Kikinzoku Kogyo's Shonan Plant. This new building has approximately 3,000 square meters. This development and production site expansion has been combined with the construction of a new shipping and warehouse facility. TANAKA's added production capacity will increase by seven times the current production capacity. As a result, TANAKA will be able to provide stable supplies of products in response to demand for precious metal electrode catalysts which is rising in recent years to facilitate the development of a hydrogen-based society as well as expansion of fuel cell markets. The new buildings are scheduled for completion on July 18, 2018, and full-scale operations will commence in January 2019.

China has recently announced its support of developing hydrogen energy and fuel cell vehicles as strategic industries. With the announcement by the city of Shanghai of a subsidy policy plan for purchasing fuel cell vehicles and the establishment of R&D facilities. The global move away from diesel vehicles is accelerating in Europe, and there are developments in new transportation areas including fuel cell trains, marine, and unmanned vehicles that run on hydrogen.. As a result, responses to the growing worldwide demand for fuel cell electrode catalysts are needed.

TANAKA will achieve stable supplies of fuel cell electrode catalysts while focusing on research and development. As a leading company for fuel precious metal catalysts over the past five decades, TANAKA will contribute to the widespread adoption of fuel cells and the development of a hydrogen-based society.

■ Overview of the Fuel Cell Electrode Catalyst Plant

- Location: On the grounds of the TANAKA Kikinzoku Kogyo Shonan Plant in Kanagawa(Prefecture)
- Floor area: New buildings—approximately 3,000 square meters
The total floor area of the FC Catalyst Development Center is approximately 4,000 square meters
- Business activities: Research, development and manufacture of electrode catalysts for polymer electrolyte membrane fuel cells
- Reference information: Construction completion ceremony to be held on July 18, 2018
Full-scale operations scheduled to begin in January 2019
Investment amount: Approximately 4.0 billion yen

■ TANAKA's Fuel Cell Electrode Catalysts

The FC Catalyst Development Center at the TANAKA Kikinzoku Kogyo Shonan Plant currently develops and manufactures electrode catalysts for polymer electrolyte membrane fuel cells (PEFC). PEFC are used in fuel cell vehicles (FCV), ENE-FARM household fuel cells, and other applications, and their use is expected to expand in the future to commercial vehicles such as FC buses and industrial machinery including FC forklifts. PEFC are compact and lightweight and exhibit high output, and are a new, earth-friendly energy technology that employs a chemical reaction between hydrogen and oxygen. TANAKA is consolidating the precious metal catalyst technologies and electrochemical technologies that it has accumulated over many years to develop highly active platinum catalysts for PEFC cathodes (air electrodes) and platinum alloy catalysts with superior carbon monoxide (CO) poisoning tolerance characteristics for anodes (fuel electrodes).



Electrode catalyst for PEFC

■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: 5,034 (FY2017)

Net sales of consolidated group: 976,613 million yen (FY2017)

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 Holdings adopted a holding company structure on April 1, 2010.

■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: 2,246 (as of March 31, 2018)

Sales: 827,040.201 million yen (FY2017)

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>

Since its foundation in 1885, the TANAKA Precious Metals group has built a diversified range of business activities focused on precious metals. TANAKA is a leader in Japan regarding the volumes of precious metals handled. Over the course of many years, TANAKA Precious Metals has not only manufactured and sold precious metal products for industry but also provided precious metals in such forms as jewelry and resources. As precious metals specialists, all Group companies within and outside Japan work together with unified cooperation between manufacturing, sales, and technological aspects to offer products and services. Besides, to make further progress in globalization, TANAKA Kikinzoku Kogyo welcomed Metalor Technologies International SA as a member of the Group in 2016.

As precious metal professionals, TANAKA Precious Metals will continue to contribute to the development of an enriching and prosperous society.

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.