

Tantalum and Niobium Business



Key Strategies

- Improving productivity and quality for greater competitiveness in existing businesses
- Generation of items and acceleration of commercialization in new businesses for the expansion of our business foundations

Business Overview

TANIOBIS GmbH (hereinafter "TANIOBIS"), our Germany-based Group company, is one of the world's leading manufacturers of tantalum and niobium materials, with manufacturing and sales locations all around the globe. Primarily driven by TANIOBIS, we contribute to evolution of the IoT/AI society through stable provision of such products as metal powders used in capacitors and semiconductor materials, high-purity oxides for SAW devices and optical lenses, chlorides for semiconductors, and advanced powder materials.

Review of Fiscal 2019

In our existing businesses, sales of some products were sluggish compared to the previous year primarily due to inventory adjustments by customers. However, during this period, we progressed several activities to strengthen our business foundations and competitiveness by proactively taking actions such as considering and implementing productivity improvement measures, and advancing quality improvements based on customer needs. In new business development, we are also working to expand our business foundations by promoting activities for product development and synergizing through stronger cooperation between TANIOBIS and JX, especially via Isohara Works. Through these activities, we are meeting the various demands of several customers and creating steady results ahead of market launch. Furthermore, we have strengthened our business management system by merging what is now TANIOBIS with JX Metals Deutschland GmbH, its former management company, to streamline its organization and accelerate decision-making.

Outlook for Fiscal 2020

Though there is growing uncertainty regarding the global economy due to impact from such factors as U.S.-China trade frictions and the spread of COVID-19, demand is expected to grow in the field of electronic parts, where tantalum and niobium are used. This growth of demand is to happen due to the spread of technologies such as fifth-generation communication networks (5G) and advanced driver assistance systems (ADAS).

Under these circumstances, we are actively working to improve competitiveness of existing businesses and to develop new businesses through such activities as sharing our business expertise with TANIOBIS and conducting joint marketing in Europe. Particularly in new businesses, in order to rapidly build future revenue pillars, we will seek to build a framework for market entry without delay, by proactively leveraging Group-held technologies and market information, shifting resources from existing to new businesses, and encouraging collaboration with external partners such as universities and research institutions.

TOPICS

"H. C. Starck Tantalum & Niobium GmbH" Becomes "TANIOBIS GmbH"

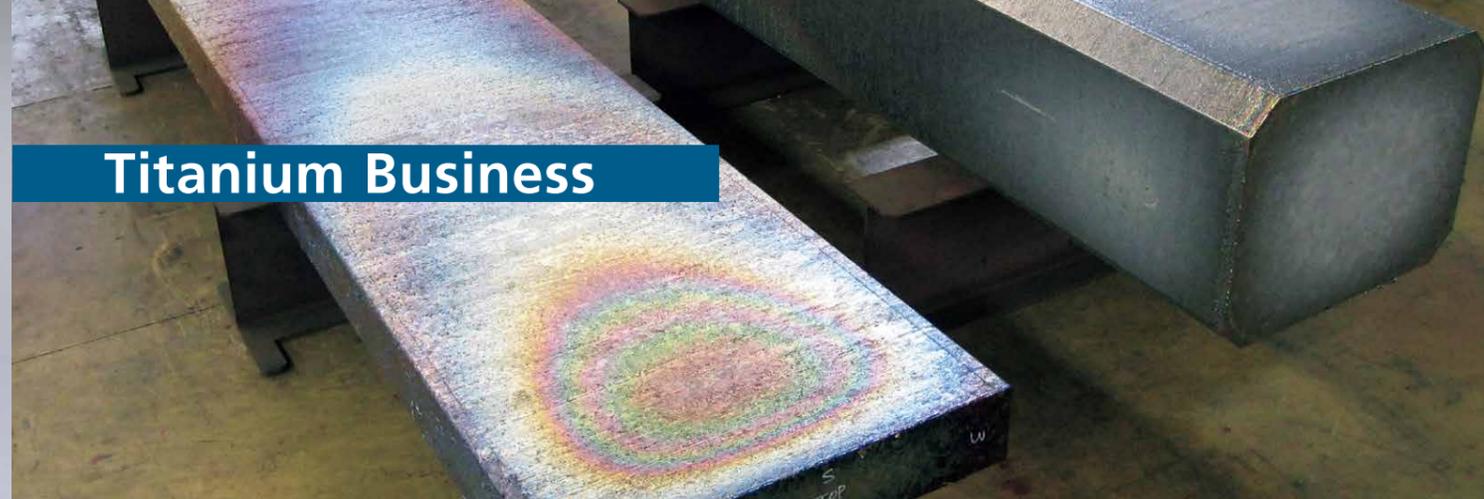
On July 1, 2020, TANIOBIS's company name was changed from H.C. Starck Tantalum & Niobium GmbH to TANIOBIS GmbH. The name "TANIOBIS" combined the names of tantalum and niobium, the two core elements of its business. Appended to the end of this fusion is "IS," short for "Innovative Solutions," signifying our desire to play a central role in realizing future innovation.

Under this new brand, TANIOBIS will further accelerate the proposal of innovative solutions by providing tantalum and niobium-focused, advanced power materials, which are indispensable for the realization of IoT and AI societies.

The new TANIOBIS logo



Titanium Business



Key Strategies

- Strengthening revenue base by focusing investment in growth fields
- Rapidly generating revenue from the Saudi Arabia joint venture firm (ATTM)
- Generation and promotion of new businesses

Business Overview

Titanium, a light, strong metal resistant to corrosion, has wide-ranging uses, from aircraft to desalination plants, electric power plants, and other applications. Group company Toho Titanium Co., Ltd. is engaged in the smelting of titanium, and leverages related materials and technologies to manufacture such products as catalysts (for propylene polymerization) and chemicals (e.g. materials for electrodes and dielectrics in multilayer ceramic capacitors).

Review of Fiscal 2019

Our titanium business enjoyed strong demand from key overseas customers, with overall sales trending well despite slowdowns in demand for general industry applications.

In regard to demand for products in our chemicals business, there was a slowdown especially for electronic component materials (e.g. ultra-fine nickel) due to factors such as sluggish smartphone sales. However, in the catalyst business, sales remained strong for catalysts for propylene polymerization.

Outlook for Fiscal 2020

In our titanium business, despite unprecedented plunges in demand for titanium used in aircraft with the COVID-19-driven sharp drop in air passengers, we will continue to secure sales volume through strengthening alliances with our key customers and make efforts to reduce production costs, including leveraging AI and IoT. In the catalyst business, we will improve existing products and develop new ones that meet customer needs. In the chemicals business, full-scale recovery of demand for fifth-generation communications (5G) is expected to occur in the latter half of the fiscal year. In order to meet that demand, we are currently constructing a plant for ultra-fine nickel, which is to begin operations in April 2021. Going forward in the catalyst and chemicals businesses, we will pursue further business expansion and seek growth that outperforms the market.

TOPICS

Shipping Titanium Sponge to Japan A Joint Titanium Sponge Manufacturing Venture in the Kingdom of Saudi Arabia

Our new titanium sponge plant built at Yanbu Industrial City in the Kingdom of Saudi Arabia launched operations in September 2019, with a capacity of 15,600 tons of sponge production per year. This plant is modeled on Toho Titanium's Wakamatsu Plant. It produces titanium sponge using titanium tetrachloride supplied from an adjoining titanium oxide plant. For the time being, its produced sponge is shipped to Toho Titanium's Yahata Plant, where it is melted down and sold as titanium ingots. Going forward, we will continue to provide stable quality and supply, aiming to make this a factory with outstanding cost competitiveness worldwide.



Company Name:	Metal Industries Cluster and Toho Titanium Metal Company Limited
Head Office:	Yanbu, Saudi Arabia
Business Lines:	Manufacture and sale of titanium sponge
Capital:	450 million Saudi riyal (equivalent to 120 million US dollars)
Established:	February 29, 2016
Fiscal Closing Date:	December 31
Equity Shares:	Toho Titanium - 35%, Advanced Metal Industries Cluster Company Limited - 65%