

Functional Materials Business

Key Strategies

- Expand applications of the treated rolled copper foil and advanced copper alloy products, and improve profitability
- Strengthen production capacity to expand business

Business Overview

Employing advanced metal fabrication technology honed and perfected over years of business, the Company has become a global supplier of treated rolled copper foil, our mainstream product used in flexible printed circuit boards, as well as of precision rolled alloy products including titanium copper, Corson alloy, and phosphor bronze - all used in connectors and other parts. We are also engaged in precious metal plating and stamping, as well as other processes, on a global scale.

Review of Fiscal 2019

With the advancement of the smart society, we have worked to bolster products such as our treated rolled copper foils and advanced copper alloys, products with superior attributes and quality that achieve high flexibility, thermal resistance, as well as both strength and conductivity. These products are designed to target the various devices, communications infrastructure, and power supply markets that support evolution and efficiency in home, automotive, and industry use cases. In fiscal 2019, sales declined due to the U.S.-China trade conflict and a plateauing of the smartphone market. However, we forecasted expanding demand for our products as a result of factors such as the spread of fifth-generation communication networks (5G) and the advance of IoT/AI society in the medium to long-term. Therefore, we strengthened our business foundations and expanded our production structures, including bolstering Group manufacturing facilities.

Outlook for Fiscal 2020

Demand is expected to decline in markets such as those for smartphones and devices used in automobiles due to the spread of COVID-19. However, we forecast greater year-on-year sales of our mainstay products as a result of factors like expanding telecommuting and other Internet-related demand. In addition, although there are concerns present over such issues as intensifying trade friction between the United States and China, uncertainty about the global economy due to the spread of COVID-19, and delays in the full-scale permeation of 5G, we expect an acceleration in the advancement of data and smart societies in the medium to long-term. As such, our outlook sees increasing demand for our products, primarily centered on treated rolled copper foils, titanium copper, Corson alloy, and phosphor bronze.

With regard to the installation of facilities with boosted manufacturing capacity in fiscal 2019, these have already launched full-scale operations to meet recent increases in demand. We will continue our efforts to further strengthen our production systems.

TOPICS

Installation of New Facilities to Meet Growing Demand for Advanced Functional Materials

With the advancement of data and smart societies, there will be a greater spread of smartphones, tablets, and other mobile devices, with the subsequent explosive growth in data usage resulting in development of communications infrastructure; these and other factors are expected to drive demand for our advanced functional materials. In order to respond to such growing demand, we have installed new facilities for our treated and rolled copper foil and advanced copper alloys. These facilities have been implemented in all processes, ranging from surface roughening treatment lines to melting and casting to rolling mills, annealing furnaces, and more.

We will continue to flexibly increase our capacity, meet market expectations, and contribute to the achievement of the SDGs advocated by the United Nations by supplying advanced functional materials, which are indispensable to the realization and development of the data society.



Manufacturing equipment for treated rolled copper foils and advanced copper alloy (Kurami Works)

Thin Film Materials Business

Key Strategies

- Establish a dynamic supply system to meet demand
- Promote use of digital technologies for greater efficiency in manufacturing processes

Business Overview

Employing world-class nonferrous metal manufacturing technologies, we are a supplier of a wide variety of sputtering targets, compound semiconductor materials, high-purity metals, and surface treatment. These and many other materials and services, provided on a global scale, find use cases in end products such as advanced devices, leading-edge IT equipment, medical instruments, and electric vehicles.

Review of Fiscal 2019

In recent years, as society has incorporated IoT and AI to greater degrees, demands have grown for devices utilizing semiconductors to be faster and consume less power. Amid this situation, demand remained sluggish in fiscal 2019 as markets corrected from rapid growth through fiscal 2018 and as trade frictions between the United States and China hindered markets. Despite this, we saw medium to long-term demand on the rise driven by factors such as investments in fifth-generation communication networks (5G) and growth in datacenter-related markets as a result of future evolution toward IoT and cloud technologies. To meet these demands and continue to provide a stable supply of high-quality products, we made investments at Isohara Works, a core location, investing to develop technology for advanced materials used in advanced fields, as well as to expand production of the same. In this way, we have advanced the construction of a system that will aid us in realizing future sustainable growth.

Outlook for Fiscal 2020

In fiscal 2020, there is uncertainty about the economic environment as a result of such impacts as the U.S.-China decoupling and Japan-South Korea relations. However, despite concerns about a slowdown in the electronic device market due to the spread of COVID-19, there is expected to be a firm uptrend centered on the semiconductor sector because of greater telecommuting and demand from stay-at-home workers. Further, in the medium to long-term, growing needs can be expected for advanced materials as a result of 5G, cloud and edge computing, the shift toward electric and automated technology in mobility, and the transition to the new normal. Therefore, we will strengthen the development of various advanced materials required by our customers, anticipating a myriad of changes in markets and preparing for necessary capacity expansions with a view to further demand growth going forward.

TOPICS

Expanding production capacity focused on targets for copper and copper alloys

Sputtering targets used for semiconductors are a mainstay product for the Thin Film Materials Business. Demand is expanding for these advanced materials, indispensable for improving performance in leading-edge electronic devices, and we believe this trend will only gain momentum with the future evolution toward IoT and AI. In order to respond to this growing demand, we have implemented equipment to increase production capacity by approximately 30% compared to fiscal 2017, centered on our processes for targets used with copper and copper alloys.

We will continue to flexibly increase our capacity, meet market expectations, and contribute to the achievement of the SDGs advocated by the United Nations by supplying advanced functional materials, themselves indispensable to the realization and development of the data society.



Melting furnaces, equipment used for semiconductor-use sputtering targets (Isohara Works)