Information and Communication Materials Segment

Functional Materials Business

Employing advanced metal fabrication technology developed over many years of business, JX Metals has become a global supplier of treated rolled copper foils used in flexible printed circuit boards, as well as of precision Cu alloy products, including titanium copper, Corson alloy, and phosphor bronze, which are used in connectors, semiconductor lead frames, and other components.

Key Strategies

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

Review of FY2022

Sales volumes of our main products in the first half of fiscal 2022 continued to be strong due to demand created by people telecommuting and their other online activities during the COVID-19 pandemic. In fact, sales volumes reached a half-year record high during the period. In the second half of fiscal 2022, however, sales volumes were significantly lower compared to the same period of the previous year. This reduction was due to the economic slowdown caused by restrictions on economic activity in China, as well as other factors, and the resulting adjustments made to inventory levels in supply chains.

Although these effects are expected to continue in the next fiscal year, in the medium- to long-term, as the data society advances, we anticipate further expansion in the markets for data centers, telecommunications infrastructure, power devices and for various electronic devices, such as smartphones and tablets. In addition, we envisage demand for high-performance metals to further increase with the electrification and automation of vehicles. In response to future growth in demand, we will achieve further improvements in efficiency and productivity, and by bolstering Group manufacturing facilities, will increase manufacturing capacity at each of the Group's sites thus expanding our production structures and strengthening our business foundations.

Outlook for FY2023

We expect that the economic slowdown in China and other overseas countries will continue in fiscal 2023, as will adjustments to inventory levels in the supply chain, with it taking some time for demand to recover. However, over the medium- to long-term, we anticipate demand for the high-performance metals used in IT-related equipment will continue to grow.

Fiscal 2023 will be important for us as we will gain a foothold in this year from which we can strengthen our overall structure so as to expand sales when things pick up in the future. We will make capital investments in rolling mills at the Hitachi New Plant (tentative name) and Hitachinaka New Plant (tentative name), while at the same time increasing production capacity at existing facilities by improving yields and productivity. In addition, we will pursue alliances with other companies, such as outsourcing manufacturing and forming joint ventures to ensure our production system is flexible, and we shall also move forward with our Business Continuity Plan (BCP) and ensure we have risk diversification.

TOPICS

Construction of R&D Tower at Kurami Works

We have constructed a new building for R&D at Kurami Works, our main business base. The goal here is to enhance the way we conduct R&D in response to the further development of the IoT and AI society. The facility was brought online in stages as equipment was installed, and operations started in March 2023.

Kurami Works, one of the main bases of our Focus Businesses, develops, produces, and supplies high-value-added products such as treated rolled copper foil, used in flexible circuit boards, and high-performance copper alloys, which are used in various advanced devices. Such alloys include titanium copper and Corson alloys.

The strength of Kurami Works has always been its highly customer focused, fast-track development capabilities. This allows customer needs to be swiftly identified and products quickly developed and launched that meet these needs ahead of our competitors. In addition to further accelerating our efforts to improve our existing products and develop new alloys and alloy foils, we will also work to improve how we find new applications and develop new materials that have a high degree of affinity with our proprietary technologies. We will also further enhance our core technologies, which include melting, rolling, and heat treating, and this will lead to more efficient material development, productivity improvements, and better designed plant and facilities.

R&D Tower Kurami Works
(Kanagawa Prefecture)

Information and Communication Materials Segment

Titanium Business

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).

Key Strategies

- Optimize titanium price standards
- Expand production capacity to meet increased demand
- Generate and pursue new businesses

Review of FY2022

Sales of titanium were significantly higher than the previous year due to a recovery in passenger demand for aircraft applications, replacement demand for Russian-made mill products, and steady sales of high-purity titanium for general industrial and semiconductor applications. Profits increased compared to the previous year despite higher costs due to soaring prices of imported raw materials, electricity, and supplementary materials. This improvement was due to price adjustments by some customers, an increase in shipment volume resulting from inventory shipments, and an increase in export revenues due to the weaker yen. One-time positive factors such as the payout and reversal of inventories manufactured before the cost increase also had a positive impact. Sales volume in the catalyst business decreased from the previous year due to softening demand for polyolefin catalysts in Asia, mainly resulting from the economic slowdown in China. Sales volume in the chemical business decreased from the previous year due to lower demand for multilayer ceramic capacitors (MLCCs), which are the main application for ultra-fine nickel powder, our mainstay product. This lower demand is a result of the economic stagnation caused by the rising interest rates in the U.S. and the lockdowns in China.

Outlook for FY2023

We expect titanium sales to remain firm due to a recovery in demand for titanium in aircraft applications and continued demand to replace Russian-made wrought products. On the other hand, we expect sales in the catalyst and the chemical businesses to remain soft for the time being, as we anticipate that it will take more time to see a full-fledged economic recovery in China and other countries. We expect profits to be significantly pressured in the titanium business, despite price corrections. Impacts include the disappearance of one-time positive factors that manifested themselves in the previous year, such as the reversal of inventories with low manufacturing costs, as well as the full-scale disbursement of products with high manufacturing costs from the second half of fiscal 2022.

TOPICS

Boosting Production Capacity Through the Construction of a New Catalyst Plant

THC catalyst (Toho High Efficiency Catalyst) is the mainstay product of the catalyst business of Toho Titanium Co., Ltd. This catalyst is a unique high-performance catalyst used in the production of polypropylene and is a magnesium-titanium type called a Ziegler-Natta catalyst. Polypropylene has a wide range of applications, including automotive interiors and exteriors, home appliances, packaging materials, and food containers. Toho Titanium Co., Ltd. develops, manufactures, and sells environmentally friendly catalysts to respond the urgent need to address environmental issues, such as stricter regulations on chemical substances.

New catalyst production facility at the Chigasaki Plant
(Kanagawa Prefecture)