Business Segments

The KITZ Group operates Valve Manufacturing Business that involves the manufacturing and sale of joints, purifiers, and industrial filters with a focus on valves as a type of fluid control device; Brass Bar Manufacturing Business that involves the manufacturing and sale of brass bars used as faucet fittings, gas equipment, and materials for home appliance components; and other businesses including the operation of hotels.

Moving forward, the KITZ Group will continue to pursue further growth as an all-round fluid control device manufacturer with a focus on valves.

Strengths

Providing a Wide Range of Products as an All-Round Valve Manufacturer

With a large number of valve manufacturers specializing in limited markets and fields and narrowing down the manufacturing and sale of valves to particular materials and shapes, the KITZ Group maintains a lineup of valves featuring an array of shapes in various materials including bronze, brass, stainless steel, cast iron, and cast steel. As an all-round valve manufacturer, we offer products that span numerous fields covering every area from our daily lives to industry.

KITZ Brand as a Mark of High Quality

The KITZ Group maintains casting equipment designed for the materials we use, we have established the position of KITZ as a brand that stands for reliability.

High Market Share—Supply of Products

In the domestic market, we have established a strong sales network that can quickly respond to customer feedback through a network of distributors that covers all of Japan. We thus maintain a particularly high market share in bronze, brass, and stainless steel valves.

Strengths

Development of New Materials based on Alloy Technologies Cultivated over Many Years

Today, valves are connected with diverse pipes in a wide range of fields from those close to our daily life, such as water and sewage, hot-water supply, gas, and air conditioning, to the production processes in industrial fields, such as oil, chemical and pharmaceutical products and food. Valves play an extremely important role. Although we are rarely aware of their existence in our daily life, valves strongly support our life behind the scenes.

Strengths

Operating One of the Largest Hotels in the Kamisuwa Onsen Hot Springs District

Our business began with the manufacturing of brass bars, which is a main material of valves. Today, we respond to market needs by actively developing and selling new materials that are friendly toward people and the environment, including dezincified corrosion-resistant brass bars and lead-free brass bars.
Business Summary and Strategy—Valve Manufacturing Business

Message from Unit General Manager, Flow Control Business Unit

We will accelerate initiatives targeting growth markets and aim to transform our business portfolio.

Yukinari Koide
Executive Officer, General Manager, Flow Control Business Unit

Business Results in the Fiscal Year Under Review (FY2022)

In FY2022, we saw a recovery in economic activity with global progress on the COVID-19 pandemic response. However, due to China’s zero-COVID policy, the Russian invasion of Ukraine, and other factors, difficult conditions continued, including

- Supply chain disruptions, soaring energy resources and raw material prices, and the depreciation of the yen. Under these circumstances, we managed to achieve net sales that exceeded our plan in Valve Manufacturing Business, on the back of favorable conditions for semiconductor manufacturing equipment continued in Japan and overseas, price revisions in response to sharply rising raw material prices, increased sales in the Americas and ASEAN regions, and the impact of foreign exchange rates.
- On the profit front, the effects of the price revisions offset soaring raw material prices. Favorable conditions for semiconductor manufacturing equipment and increased sales from domestic and overseas markets due to the economic recovery also led to increased profit.
- As a result, net sales in Valve Manufacturing Business segment rose by ¥18,434 million year on year to ¥125,189 million. Operating income also increased by ¥2,892 million year on year to ¥14,980 million. This performance represents record highs for both net sales and operating income.

Toward Achieving the Long-term Management Vision

The Long-term Management Vision states a policy of aiming for expanded sales and profit by pursuing core businesses in greater depth and investing resources in growth markets. The first Medium-term Management Plan categorizes the businesses in which the KITZ Group excels as core businesses, namely Building & Facilities, Petrochemicals, Water Treatment, and Machinery & Equipment. We will further enhance the infrastructure of these businesses and lay solid foundations while investing resources in growth markets toward achieving “digitalization” and “decarbonization,” two keywords to solve social issues. Specifically, we have categorized Semiconductor Equipment, Semiconductor Materials (Filters), Fine Chemicals and Hydrogen & Clean Energy as target markets, while the Building System Department, Industrial Department, and Fine Chemical Department have executed business strategies for each target market. Additionally, in January 2023, we established the Hydrogen Division and Environmental Solutions Division under the direct control of executive officers. We are preparing to expand our Hydrogen & Clean Energy business in line with the future expansion of the demand, while in Water Treatment, we will leverage the KITZ Group’s water-related technologies, products, and services to provide customers with solutions under our slogan, “Design Future with Water.” We will accelerate initiatives aimed at each growth market while specifying and managing resource allocations in an effort to transform our business portfolio.

Initiatives in the Field of Hydrogen

KITZ began selling valves for hydrogen stations that supply hydrogen gas as fuel for fuel cell vehicles and other uses in July 2012, and in April 2020, entered the packaged unit-type hydrogen station business. In recognition of the development of technologies to reduce the costs of hydrogen stations as part of the ultrahigh pressure hydrogen infrastructure wide-spread adoption and technological development project operated by NEDO\(^1\), and for the technological development of large valves for liquefied hydrogen as part of a project to develop technologies to build a hydrogen society, KITZ was selected by METI\(^2\) as a “Zero-Emission Challenge Company.”

In addition, Kawasaki Heavy Industries, Ltd. proposed and was selected for its hydrogen-powered aircraft core technology development project as a “next-generation aircraft development project” as part of NEDO’s Green Innovation Fund, and in November 2021, KITZ was selected by Kawasaki Heavy Industries as a project participant and subcontracted again for the development of valve technologies under hydrogen aircraft engine combustor and system technology development and liquefied hydrogen fuel storage tank development. We will pursue efforts in the field of hydrogen, one of our growth markets, including our aim of contributing to the realization of next-generation aircraft through the development of these technologies.

*1 NEDO: New Energy and Industrial Technology Development Organization
*2 METI: Ministry of Economy, Trade and Industry

Launch of a Monitoring Service

Domestically, there are many plants that were constructed during Japan’s high economic growth periods and are still operating today. Due to their many years of operation, there is a heightened risk of trouble and accidents from deteriorating facilities, which increases the importance of regular inspections, upkeep, and other maintenance tasks for securing safe operations. However, in the field of maintenance work, there are new needs to deal with the aging of experienced engineers and technicians, the decline in the working population, and the spread of infectious disease. As a solution, it is necessary to prevent equipment failures in a way that does not rely on human intervention. Using technologies based on unique sensing algorithms, AI and IoT, KITZ has launched KISMOs (KITZ SMART MONITORING SYSTEM), a monitoring service that detects signs of abnormalities in valves for batch production processes in plants and factories. This will provide a system for providing total support to customers from the selection of valves to planned maintenance. Going forward, KITZ will fully take on the challenge of solutions-oriented businesses.
To meet the world’s water infrastructure demands

Supporting the Stable Supply of Water
Water is the source of life and essential for sustaining all lives on the earth, flora and fauna alike. The KITZ Group helps to make people’s daily lives more comfortable by supporting the stable supply of clean and safe water through its safety-conscious products and services.

Evolution of Water Treatment Technology
The KITZ Group is steadily evolving technologies that meet the world’s water infrastructure demands, including water purification technologies that use membranes to clean water, desalination technologies to purify and desalinate water that is not suitable for consumption, such as seawater, and technologies catering to the need for pure water and ultrapure water against the backdrop of an expanding semiconductor market.

Working Toward Solving Water-Related Issues
We work actively on the development of environmentally friendly technologies, such as surface treatment technology to prevent the elution of nickel and lead from valves, and lead-free copper alloy materials, and meet the international standards for water quality. Moreover, our lineup includes equipment that breaks down organic substances dissolved into water by way of ozone, UV light, or photocatalysis, purification devices designed to handle every kind of water source and household water purifiers.

The world faces serious issues related to water resources and shortages. The KITZ Group is marshalling its combined strengths to ensure that all people have access to clean and safe water and is seeking new solutions for various water-related problems by harnessing the Group’s combined capabilities, utilizing every group member’s experience, know-how, technologies, products and services.

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Providing Valuable Energy Resources That Keep Industry Running in an Endless Stream

Ensuring the Stable Supply of Energy
The KITZ Group provides a wide scope of products that play a key role in providing essential energy resources that keep industry running to oil refineries, petrochemical plants, chemical plants and innumerable other industrial processes through oil and gas pipelines, loading/off-loading terminals and other modes of transportation.

Controlling the Flow of Fluids in Extreme Harsh Environments
At energy plants, valves must be able to withstand severe conditions like extremely high temperatures and pressure with no possibility of failure. Before introducing any new product, the KITZ Group repeats stringent laboratory tests, analyses and evaluations based on actual on-site service environments. Only those products that have passed such verification procedures are added to our product lineup.

For a Clean Energy Society
With the decarbonization of energy picking up speed in the race to carbon neutrality, there is increased interest in liquefied natural gas (LNG), which produces fewer CO2 emissions during combustion than coal or oil and it can help curb global warming, as well as hydrogen, regarded as the mainstay of next-generation energy. Particularly with regard to hydrogen, we have begun to develop large-sized valves for the high-volume transportation of liquid hydrogen and aim to have the KITZ Group’s valves supplied throughout the supply chain for hydrogen.

We are focused on developing eco-friendly products to deliver clean, renewable energy to people all over the world with the aim of contributing to the realization of a decarbonized society.

Metal seated ball valves
Offer high durability and are also capable of handling high temperature and corrosive fluids.

Stainless steel valves
Suitable for use under high temperature, high pressure conditions in various types of plants.

Automated valves
Automated operation valves equipped with actuators.

Oil refineries and petrochemical plants

Crude oil and natural gas excavation locations

Crude oil

Liquefied natural gas

Three-piece trunnion mounted ball valves
From the oil refining to petrochemical industries, industrial floating and trunion mounted ball valves are used in a wide range of chemistry, fine chemicals, and energy-related fields.

Carbon steel valves
Widely used in chemical plants and petrochemical industry due to their superior corrosion resistance.

Actuated compact ball valves
Cater to automation needs for small diameter piping on industrial production process lines.

Metal seated ball valves

Stainless steel valves

Automated valves

Oil refineries and petrochemical plants

LNG terminal and transportation facilities

Thermal power plants

Semiconductor manufacturing facilities

High-pressure ball valves for hydrogen stations
Ultrahigh-pressure ball valves with excellent seal performance and durability, developed for use in hydrogen refueling stations.

Valves for high-purity gas service
Clean stainless steel diaphragm valves or bellows seal valves for semiconductor manufacturing.

Fully-welded type pipeline ball valves
Safety design ball valves guarantee leak-free control of fluid flow in pipelines.

Clean stainless steel diaphragm valves or bellows seal valves for semiconductor manufacturing.

Ultrahigh-pressure ball valves with excellent seal performance and durability, developed for use in hydrogen refueling stations.

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Clean stainless steel diaphragm valves or bellows seal valves for semiconductor manufacturing.
Research and Development System Creating High Added Value

In order to meet the diverse needs of the times, we take immense pride in producing fluid control devices delivering safety, durability and reliability.

R&D Concept
The KITZ Group’s engineering section is actively and boldly engaged in research and development to realize KITZ’ Statement of Corporate Mission: “We strive to build a robust global environment and sustainable future by supporting societal infrastructure through our advancements in fluid control technologies and materials.”

Core technologies
We integrate process technologies in the field of sealing, material, and process engineering that serves as the core of our R&D operations.

Providing solutions
We focus on resolving customer problems and provide products and services that please our customers.

Speed and global network
We develop new products rapidly by utilizing the worldwide group network to respond to the diverse needs of customers.

To Provide Next-generation Solutions
As part of KITZ’s 70th anniversary project, the KITZ Group Innovation Center was constructed on the grounds of the China Plant.

On the second floor, which has an office area for development and design sections, there is ample meeting space. Thanks to the adoption of activity-based working (ABW)*, the space encourages the free and flexible exchange of ideas and knowledge.

In addition, on the third floor, we have set up an “innovation studio” for putting original design ideas that create new value into practice. This will be the starting point for the speedy provision of innovative products and services that will satisfy customers.

*ABW: A working style where people choose their work location based on the nature of the work at the time

Valve Research and Development Process

1. Structural analysis
   The optimal structure of the product is designed by using simulated fluid analysis, stress, or other structural analysis.

2. 3D prototype verification
   Prototypes can be verified at an early stage using 3D printer modeling. Customers can check those prototypes by touch.

3. Casting analysis
   Design for an optimal mold for casting is planned using solidification analysis.

4. Mold design/production
   The CAM* data used to design the molds is transferred to processing equipment, and molds are produced internally.

5. Reliability test
   Stress and analysis are carried out under every condition of use.

6. Cryogenic test
   Liquid natural gas (LNG) is a low-temperature fluid. We conduct tests to reproduce the low temperature conditions.

7. Fire test
   We verify whether valve functions can be maintained, even if a fire occurs and the valve seal materials are burned out completely.

8. Blow-off test
   Significant force is applied for high temperature and high-pressure fluid flow control when valves are opened and closed. We verify the durability to ensure that valves can operate properly even under the conditions of application limits.

9. Emission test
   The company exclusively retains the only methane gas testing facility based on the API standard in Japan and performs external leak tests with actual fluid.

Earning the Trust of Users Globally with World-Class Valve Technologies
The Product Development Department at KITZ is engaged in research and development to provide value to customers in a wide range of fields, including building utilites, petrochemicals, clean energy, water treatment, and semiconductors.

To maximize the synergy of the Group, engineers from Japan, Europe, the Americas, ASEAN, and China collaborate to promote product development and design, utilizing networks such as groupware, and have established a technology structure for design at the optimum sites worldwide. We also develop products with materials and specifications that are compatible with the markets and regulations in each country, and strive to improve efficiency through the active introduction of DX, such as promoting product development according to market needs through centrally managing product drawings, design drawings and component tables through the use of PLM*.

In response to the diverse needs of today’s world, each and every engineer, by raising the level of his or her skills and continuing to take up the daily challenge of value creation, is creating fluid control devices that are outstandingly safe, durable and reliable.

* PLM: Product Lifecycle Management

Sealing Technology and Materials Development
Supporting Lifelines in a Wide Range of Fields
KITZ Corporation started operations from manufacturing general-purpose valves. Over the years, KITZ has continually gone a step ahead of the needs of emerging markets and developed high value-added products, advancing from manually operated shut-off valves to automated control valves, and from single valves to complex modular products.

What makes it possible is sealing technology and materials development. Sealing technology has been developed in a wide range of fields from low pressure to ultra-high pressure, from extremely low temperature to high temperature, with up to more than 90,000 products created.

The Company has also, based on its know-how cultivated over the long period of its history, developed optimum metal materials and introduced new products through high-level casting technology. These technologies are still evolving.

Sealing technologies, the core of valves

Valve Testing

- Operating torque
- Seat seal
- Shaft seal
- Blow-off test
- Cryogenic test
- Fire test
- Low emission test

Produced in various fields
- Automation and labor savings in plant and factory operations
- Earning the Trust of Users Globally with World-Class Valve Technologies
- Sealing Technology and Materials Development
- Supporting Lifelines in a Wide Range of Fields
Production Systems That Assure High-Quality Products

The KITZ Group’s manufacturing is based on the concept of delivering products when necessary and in the quantities required with better quality.

Integrated Production System That Provides Quality Control Starting from Castings

Based on integrated production, the KITZ Group positions castings (forge and foundry materials) that are valve materials as the core technology and produces them internally from castings. We have established an integrated production system in which our Group has its own casting facilities for the main valve materials such as bronze, casting iron, ductile cast iron, stainless steel, and casting steel, thus putting in place a quality assurance system starting from materials. We also provide a wide variety of products in small quantities.

What supports manufacturing operations based on the market-oriented concept is the production method according to the KITZ Innovative and Challenging System (KICS). KICS provides a mechanism of sending only good products to the subsequent process by producing each product one by one in a sequence of processes at the exact timing with which it can be sold. It also achieves the elimination of stagnation and waste in a series of processes from order receipt to production and delivery. Moreover, we strive to further reduce delivery times and reinforce production lines continuously by thoroughly implementing standard work and improving processes.

3D scanners for casting mold production have been introduced at the Nagasaka Plant. The casting molds used in production sites are the result of engineers’ ingenuity and expertise over many years. By utilizing this know-how as data with the use of 3D scanners, we can standardize and improve our casting technology in-house, shorten lead times from casting mold production to product completion, and improve service for customers.

Toward an Eco-friendly Manufacturing Workplace for Creating Added Value

KITZ is investing proactively in R&D for new production technologies to achieve sustainable, eco-friendly production processes. We have expanded efforts to reuse the sand used in the casting process, recycle water resources used in valve inspections, and research eco-friendly paints. To provide customers and society with new added value as quickly as possible, in 2022 a research laboratory was newly established in the KITZ Group Innovation Center on the premises of the China Plant, accelerating initiatives for research into these technologies.

Stainless Steel Valve Manufacturing Process

Stainless Steel Valve Manufacturing Process

![Stainless Steel Valve Manufacturing Process](image)

1. Melting
2. Ladling
3. Pouring
4. Cooling
5. Cutting
6. Heat treatment
7. Acid pickling
8. Inspection
9. Machining
10. Assembly
11. Pressure tests
12. Shipment

Melting: Hot materials are melted in high-frequency electric furnaces.
Ladling: Molded metal is ladled for pouring.
Pouring: Molten metal is poured into a casting mold. The molded metal flows into the cavity between the upper mold, the lower mold and the core.
Cooling: Casting surface is cooled by pouring.
Cutting: Various parts and components are assembled to complete valves.
Heat treatment: After pouring, steel is heated up to 1,100°C. This process forms a uniform metallic structure and makes mechanical properties such as tensile strength and elongation higher and ensures corrosion resistance.
Acid pickling: Pickling: Pickling is performed in acid solution to remove impurities such as inorganic oxide scales on the casting surface caused by heat treatment and shot blasting. At the same time, a protective film is formed on the casting surface, enhancing corrosion resistance.
Inspection: Valves are pressurized with air and/or water and operated to verify that they satisfy the quality requirement.
Machining: Castings are cut, drilled and processed with machines.
Assembly: Various parts and components are assembled to complete valves.
Pressure tests: Valves are pressurized with air and/or water and operated to verify that they satisfy the quality requirement.
Extensive and Strong Sales Network

Since our foundation, the KITZ Group has established a strong sales network covering all of Japan. Today, we are working on the development of a global sales network in order to meet customers’ requests with regard to quality, price, delivery, and service.

Full Distribution System

We have developed a sales structure to respond to customer requests immediately through a strong distributors’ network covering all of Japan. These distributors and KITZ are connected via dedicated lines and the Internet. As a result, information on market demand is fed back directly to the production site, and this also achieves marked improvements in business efficiency and the acceleration of business. We have also adopted a pull production system, a system for setting a standard volume of distributor inventory for each product and replenishing the quantity shipped on a daily basis to maintain the inventory at a certain level. With this, distributors do not need to monitor the inventory volume of products for which standard inventory is set and can meet needs for rapid delivery.

KITZ’s Strength in Domestic Sales

KITZ provides a variety of products, from goods familiar in our daily lives to the production processes encompassing industrial fields, through its powerful and wide-ranging sales network.

Customers in each market decide which valve manufacturer they will use. To respond to customer needs with a diverse range of solutions, KITZ listens carefully to usage conditions and the issues customers face to select the most suitable valves and quickly responds with prices and delivery times.

After delivery, we maintain close contact with customers through meticulous support services including technical assistance, parts supply, and on-site inspection and repair.

We build win-win relationships with customers by securing repeat orders from customers and by accepting maintenance requests for existing valve installations. KITZ Engineering Service Co., Ltd. (KESCO) handles after-sales service. Through coordination between service centers and affiliate companies, we provide smooth and varied maintenance services across Japan.

In February 2019, KESCO acquired ISO 9001 Certification in the scope of the valve maintenance service. In addition, to perform proper maintenance on valves from other manufacturers, we have obtained certifications and qualifications in the valve maintenance from valve manufacturers, including those based overseas.

KESCO is committed to the development of human resources. We have built a system based on on-the-job training where veteran and junior employees form teams so junior employees can gain skills while performing actual maintenance work. KITZ also has extensive support systems in place for employees to obtain qualifications. Acquiring qualifications in the various areas needed for maintenance, such as crane slinging, forklift operation, gas welding, and construction management, is promoted as a part of employee training.

Sales Structure Responsive to the Market Environment

For global markets, we have been strengthening our sales and service systems based on the environment in each market. We have established regional headquarters that provide the functions of sales, marketing, engineering, stock, maintenance, and service for each area, and conduct business close to the region and provide products and services to satisfy local customers’ needs.

In addition to the representative offices in India and UAE, we have established sales bases in China, Hong Kong, Korea, Singapore, Thailand, Malaysia, Vietnam, the United States, Germany, Spain, and Brazil and have developed global sales networks. In order to quickly respond to individual requests from customers, we have developed the KITZ Official Modification Shop network for the modification and repair of valves.

A “CHRYSANTHEMUM-HANDLE®” is a symbol of KITZ, the brand of valve reliability.

Created in cooperation with Mr. Sori Yanagi (1915-2011), a prominent Japanese industrial designer. Pursuing the essence of holding from the perspective of ergonomics. Because the shape of the finger-holds embodies plumpness that is reminiscent of large chrysanthemum petals, it is nicknamed the “chrysanthemum handle.” It was employed for the design of the handle for bronze valves in September 1980 and has gradually been applied to other products.

KITZ—A Reliable Brand

The KITZ Group provides a full lineup of products, and our quality is highly regarded by customers in Japan and overseas. Our 12 brands have a presence in virtually all markets and fields centered on the KITZ brand.
Manufacture and Sales of Brass Bars

The KITZ Group operates Brass Bar Manufacturing Business, manufacturing and selling brass bars and other fabricated brass products (cut and forged brass products). Brass bars are widely utilized for machines, construction materials, and other applications.

What is Brass?
Brass is an alloy of copper (Cu) and zinc (Zn). Modifying the percentages of copper and zinc contained in the alloy and adding various other metallic elements makes it possible to produce numerous superb characteristics, such as electrical and thermal conductivity, corrosion resistance, plastic workability, and machinability.

Brass Bar Manufacturing Business
KITZ Metal Works Corporation, which handles the KITZ Group’s copper products business, develops and supplies the materials for brass valves, and also manufactures and sells high-quality brass bars and fabricated items, which are used widely as materials for faucet metal fittings, and components in gas supply equipment, home appliances and auto parts. Hokuto Giken Kogyo Corporation manufactures and sells cut parts and brazed workpieces.

Development of Environmentally Friendly New Materials
In recent years, stricter regulations concerning substances that impact the environment have been introduced around the world. In Europe, in particular, lead regulations have become increasingly strict, and the demand for lead-free brass bars is expected to expand in the future.

In addition to the KEEPALOY series of bismuth-based lead-free brass bars it has already been selling, KITZ Metal Works Corporation has also released KEEPALOY II, a series with high recyclability. In 2019, the company entered into a licensing agreement with Mitsubishi Shindoh Co., Ltd. (currently Mitsubishi Materials Corporation) for the ECO BRASS® series of silicon-based lead-free brass bars. ECO BRASS® is a global material registered under JIS, EN, and ASTM and demonstrates high corrosion resistance and strength properties.

Initiatives as a Company Promoting the SDGs
KITZ Metal Works Corporation is registered as a company promoting the SDGs in Nagano Prefecture and pursues a number of initiatives to achieve the SDGs. As one of these efforts, since April 2022 we have adopted CO2-free electric power utilizing environmental value derived from hydroelectric and solar power generation (non-feed-in-tariff/non-fossil-fuel certified), and expect to reduce CO2 emissions by roughly 85% compared with before introduction.

In addition, a feature of the brass products manufactured by KITZ Metal Works Corporation is the ease of recycling. By promoting even greater recycling, the company will strive to reduce its environmental impact.

Brass Bar Manufacturing Process

1. Continuous casting
   - The molten alloy is cast into large ingots (called "slabs" or "cakes") using either a water-cooled horizontal continuous casting machine or a vertical semi-continuous casting machine.

2. Continuous picking
   - Oxides that have become attached to the surface of the alloy during the extrusion processes are removed by picking.

3. Cold drawing
   - The rods and/or coils are passed through the die of a drawing machine to finish them into brass bars with accurate shapes and dimensions.

4. Heating and extrusion
   - The billets are heated to the prescribed temperature, and extruded into rods or coils using an extruder.

5. Annealing at the prescribed temperature in a furnace.

6. Continuous picking
   - Oxides that have become attached to the surface of the alloy during the extrusion processes are removed by picking.

7. Annealing at the prescribed temperature in a furnace.

8. Continuous casting
   - The molten alloy is cast into large ingots (called "slabs" or "cakes") using either a water-cooled horizontal continuous casting machine or a vertical semi-continuous casting machine.

Hotel Beniya also operates the Suwako Service Area on the Chuo Expressway (outbound) and the Tobu-yunomaru Service Area on the Joshin-etsu Expressway (inbound), serving food incorporating local specialty produce and selling local goods and souvenirs.
We will aim to improve the return on invested capital in the medium to long term by adopting ROIC management.

Kenichi Besho
Executive Officer and Division Manager, Corporate Finance Division

Initiatives in the Fiscal Year Under Review (FY2022)
In the fiscal year under review, the outlook was uncertain due to inflation driven by sharply rising material prices caused by geopolitical risks in China and Russia, among other issues. However, we managed to increase net sales and profits year on year, in part due to price revisions and the impact of foreign exchange rates.

Under these circumstances, despite an increase in notes and accounts receivable and inventories due to soaring material prices along with higher investment expenditures, we managed to secure free cash flow of ¥11 billion on the back of increased profits. While we issued Sustainability-Linked Bonds, a first for KITZ, to fund bond redemption in anticipation of rising interest rate risks, interest-bearing debt declined by ¥1.3 billion year on year due to loan repayments and bond redemptions. However, partly due to investment expenditures, net interest-bearing debt increased ¥2.2 billion year on year.

Material prices along with higher investment expenditures, geopolitical risks in China and Russia, among other issues.

Medium-term Financial Strategy and Capital Policy
In the fiscal year under review, the first year of the first Medium-term Management Plan, we placed a focus on improving return on invested capital over the medium to long term. To realize ROIC management internally to improve the external target ROE and developed an ROIC Tree that links those elements with KPIs in the field. From FY2023 we will implement KPI management and further advance ROIC management.

On the profit/loss front, we will strive to improve profitability by visualizing the product portfolio, considering rearrangements, and reviewing unprofitable products. On the asset front, we will make efforts to improve the CCC*1 by reducing inventories and taking other measures while continuing with asset compression efforts, including surplus funds. In addition, to ensure future growth and earnings potential, we will set strategic investment allocations with a focus on growth fields and new fields such as semiconductors, fine chemicals and hydrogen. We will continue with proactive investment in work to achieve the target ROE of at least 10% as declared in the Long-term Management Vision. Further, to enable contributions to sustainability management, we will also aim to enhance social value by achieving the CO2 reduction targets stated as an SPT*2 for the Sustainability-Linked Bonds issued in the fiscal year under review.

KITZ places an emphasis on improving capital efficiency and shareholder return. At the same time, to respond to changes in the management environment and risks while securing funds for strategic investments, we have set the financial and capital strategy of maintaining an appropriate capital structure that takes into account the ability to procure funds in addition to return on invested capital. More specifically, we will target an equity ratio in the neighborhood of 55-60%, enabling us to improve measures of capital efficiency such as ROE while responding to business risks.

In addition, to enable the implementation of flexible financing including strategic investments and bond redemptions, we have endeavored to maintain an A rating for our corporate bonds with the aim of maintaining good relationships with banks while also ensuring sufficient borrowing capacity for the issuance of publicly offered bonds. We have obtained an A+/rating from Rating and Investment Information, Inc. (R&I), registered a total of ¥20 billion in new corporate bond issuance capacity and also obtained an A rating from Japan Credit Rating Agency, Ltd. (JCR).

While the majority of the operating cash flow generated over the three years of the first Medium-term Management Plan will be mostly allocated to the investment budget, a positive free cash flow will be maintained over the three years on a cumulative basis. Additionally, while we aim to improve funding efficiency by reducing cash on hand, we will continue to maintain risk response capabilities with a short-term special credit line of ¥13.5 billion from major banks, thus ensuring liquidity on hand.

*1 CCC: Cash Conversion Cycle
*2 SPT: Sustainability Performance Target

Shareholder Returns
Returning profits to shareholders is an important management issue, and KITZ has set around 35% of net income attributable to owners of the parent as a preferred consolidated payout ratio level. Dividends in the year under review were a record high of ¥3 per share, resulting in a consolidated payout ratio of 34.6%. We will also consider share buybacks as appropriate, taking into account financial stability, liquidity on hand and the state of investment funding. Also note that a dividend of ¥3 per share is planned for FY2023, and we will pay dividends considering continuity and stability.

Financial Strategy
Message from the CFO

The First Medium-term Management Plan Financial Strategy and Capital Policy
To enhance the corporate value, we have set “improving return on invested capital over the medium to long term” as the core management objective, and are managing ROE externally and ROIC internally as the main KPIs.

On the other hand, we will execute strategic investments and raise the necessary funds for future growth and ROE improvement.

We also aim to enhance our social value by promoting sustainability management through the issuance of Sustainability-Linked Bonds.

Medium-term Financial Strategy and Capital Policy

ROE target
FY2024: at least 9%
FY2030: at least 10%

Medium-term Management Plan Financial Strategy and Capital Policy

Introduction of ROIC management:
(1) Profitable improvement
(2) ROE tree deployment and PDCA management
(3) CCC improvement and asset compression

Proactive strategic investment: Ensuring growth and profitability for the future
Preservation of optimal capital structure and ensuring borrowing capacity: Flexible financing and risk response capability

Accumulated Operating Cash Flow ¥38.0 billion yen (FY2022-2024)

Target of optimal capital structure

Risks and capital structure
Risk exposure capacity: Equity Ratio Target 15% to 20% (Consistent line of short-term loans from banks: Current ratio: 15.5 billion yen)

Shareholder Returns

For the fiscal year ended December 2020, which was an irregular period due to the change in the fiscal year-end, the financial results are for a nine-month period.

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