

# Iron and Steel Segment

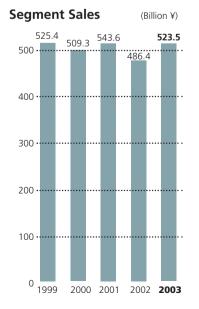
Due to lower capital expenditure and public-sector investment, domestic demand for steel products continued to be slack except for certain fields, such as automobile manufacturing. In contrast, Japan's exports were robust, reflecting a rapid recovery in demand from China and other Asian countries. Strong overseas demand helped boost export prices, while an improvement in domestic market conditions enabled inventories to return to appropriate levels.

On this background, Kobe Steel's vigorous marketing efforts led to a rise in shipments both in Japan and overseas. With the start of the wholesale electricity supply business, Iron and Steel segment sales increased 7.6%, to ¥523.5 billion, and operating income surged 332.6%, to ¥48.8 billion.

## **New Products**

Kobe Steel has been engaged in developing products that actively support customers' needs and also benefit the global environment. Examples of products that have gained considerable attention over the past year include Hizumiless, a residual stress controlled TMCP plate, ultra high strength steel sheet for automobile applications, and other steels that help realize lighter and stronger products. With respect to steel powder, we have recently commercialized Ecomel, which is used to remediate soil contaminated with organic pollutants. Kobehonetsu, a heatreleasing steel sheet has found application in electric components.

The principal capital investments at Kakogawa Works in fiscal 2002 were upgrading the cold strip mill for improved concatenated operation and renovating the No. 3 continuous caster to increase the quality of high strength steel.





Kobe Steel is a leader in research and development on high strength steel sheet featuring superb strength and machinability.







The second of two power plants is currently undedrgoing trials in anticipation of commercial start-up in April 2004.

Nadahama Garden Baden (right), a spa facility that utilizes thermal energy generated from No.1 Power Plant, opened in April 2002.

# **Domestic Mergers and Alliances**

We are merging businesses and forming alliances to increase our operational efficiency and competitive position in the Japanese market.

In October 2002, we combined two companies—Shinko Kakogawa Koun Co., Ltd., and Kobelco Logistics, Ltd.—to provide more comprehensive distribution services at our steelworks.

In November 2002, we bolstered an existing alliance with Nippon Steel Corporation, arranged a new alliance with Sumitomo Metal Industries, Ltd., and agreed to take cross-shareholdings with both of these companies. As a result, we issued new shares for third-party allocation to the two companies in January 2003. In order to enhance our respective competitiveness, we are studying collaborative measures with Nippon Steel and Sumitomo Metals.

May 2002 found us in alliance with JFE Steel Corporation to cooperate in the R&D of welding consumables, production and procurement. Out of our discussions, we plan to establish a joint venture called KOBE-JFE Welding Co., Ltd. in October this year to produce solid welding wires in Japan.

# **Expanding Overseas Collaboration**

Our alliances with overseas steelmakers are enabling us to make available the same high-quality steel products to Japanese automobile manufacturers in Europe and North America that we provide domestically. In April 2002, we formed a cooperation pact with the Europe-based Lucchini Group for specialty steel wire rod and bar used in automobiles.

With Austria's voestalpine Stahl GmbH, we started on a joint study of auto body structures, high strength steel, and personnel exchanges. Furthermore, U.S.-based PRO-TEC Coating Company is helping us steadily expand our market share in automotive steel sheet. This joint venture with United States Steel Corporation is highly regarded in the automobile industry for its hot-dip galvanized steel sheet and high strength steel sheet.

We have taken steps to improve our supply of steel powder in North America. Subsidiary Kobelco Metal Powder of America, Inc. increased its manufacturing capacity and began producing SEGLESS<sup>TM</sup> graphite segregation-free steel powder last year.

In welding materials, affiliate Kobe Welding of Korea Co., Ltd., responded to surging demand for flux-cored welding wire by increasing its monthly manufacturing capacity from 900 metric tons to 1,200 metric tons. In light of projections of a rapid rise in Chinese demand for welding consumables, we established a joint venture, Kobe Welding of Tangshan Co., Ltd., in Tangshan, Hebei Province, which is scheduled to begin manufacturing welding wire later in 2003.

# **IPP Business**

In our wholesale power supply business, the No.1 Power Plant of our Shinko Kobe Power Station has achieved its performance targets.

achieved its performance targets.

The No. 2 Power Plant has commenced testing from July 2003 with commercial operation to begin in April 2004. At that time, the power station will have the capacity to supply 1.4 million kilowatts of electricity, greatly increasing Kobe City's ability to meet its own power needs. As the power station is located in the city, careful consideration has been given to environmental protection and the facility's stable operation is expected to contribute to the local community and regional development.

## **Outlook**

In fiscal 2003, we are striving to increase the prices of our steel products and further expand sales of products in which we excel — specialty steel, high strength steel plate for shipbuilding, high strength steel she et for automobiles, surface-treated steel sheet for appliances, and welding consumables. We are also moving forward with restructuring and cost-cutting measures, pursuing efficient R&D programs, and strengthening and expanding our overseas business.



The SE Series of solid welding wires have no copper coating, making them environmentally friendly.

Developed in 2001, the heat-dissipating steel sheet Kobehonetsu is well regarded for its innovatioeness. Kobehonetsu has won various awards including the 2002 Nikkei Superior Product and Service Award and the Jury's Special Award in the Japan Industrial Technology Grand Prix. (left)

Kobehonetsu has seven times the heat dissipating capability of conventional electrogalvanized steel sheet. (right)



# Aluminum and Copper Segment

Demand for aluminum can stock—a principal product—was virtually unchanged from the previous fiscal year. Downward pressure on demand owing to a rise in the use of small PET bottles was offset by increased growth of two popular beverages—canned happoshu or low-malt beer and canned chu-hi, or shochu liquor mixed with fruit juice. The use of aluminum bottle cans also went up.

Growth in can stock, a recovery in the IT market, and the increasing use of aluminum in automobiles supported a year-on-year rise in shipments of rolled aluminum products.

Demand for aluminum cast and forged products was also up, reflecting a progressive increase in the adoption of aluminum forgings for use in automotive suspension systems as well as higher demand for aluminum vacuum chambers used in LCD manufacturing equipment.

For rolled copper products, shipments of copper strip increased considerably due to higher demand for semiconductor leadframes and continued firm demand for automotive connectors and terminals. However, the market for copper tubing declined, reflecting a drop in domestic demand as domestic air conditioner manufacturers increased their overseas production.

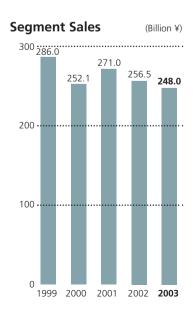
Although product sales increased, the Company's withdrawal from aluminum projects overseas led to a 3% decrease in segment sales, to ¥248.0 billion. However, the rise in product sales and thorough cost-cutting measures enabled a 55% surge in operating income, to ¥12.4 billion.

# **Product Development**

Kobe Steel is stepping up its R&D activities in the growth fields of automobiles, IT, and semiconductors.

Products developed for the automotive industry include aluminum sheet with outstanding formability and strength for use in body panels, highly shock-absorbent extruded aluminum products for bumpers, and aluminum forgings for suspension systems. We are effectively leveraging our expertise in welding, surface treatment, and structural analysis for parts design and are using a 1,000-ton press for trial production so that we can propose suitable processing technologies to customers.

In the fields of IT and semiconductors, we have steadily generated useful results in research on high-strength, high-conductivity copper alloys for lead frames; high-durability aluminum vacuum chambers used in LCD production equipment; and





We supply can stock for aluminum bottles, which are growing in popularity. Easy to use, these containers are convenient and recyclable.



Aluminum forgings in suspension systems contribute to lighter cars. Demand for these and other aluminum products are expected to grow.



We have developed high strength, high conductivity copper alloys for terminals, connectors, and semiconductor leadframes.

materials for electrodes used in vacuum chambers. We are also aggressively focusing R&D on environmental solutions and have achieved success in reducing waste emissions from manufacturing processes as well as in recycling resources in waste products.

Over the past few years, we have restrained capital investment in light of sluggish market growth. However, we are increasing our production capacity for products used in the auto and semiconductor markets, which are expected to grow over the medium term.

# **Overseas Activities**

In our copper tube business in North America, we dissolved a joint venture with the previous partners and rebuilt the business by creating a new joint venture with Wieland-Werke AG, a leading German manufacturer of rolled copper products. We also sold our equity stake in three aluminum development projects—the Boyne smelter and the Worsley alumina refinery, both in Australia, and the Alouette smelter project in Canada. In turn, we are focusing our resources on our core aluminum rolling businesses.

# **Aluminum for Autos and Cans**

Because of environmental regulations and their own desires to help protect the environment, automobile manufacturers are striving to increase their use of aluminum components. In particular, the number of vehicles incorporating our aluminum forgings for suspension systems has already risen considerably, and automobile manufacturers are now beginning to use greater amounts of

our aluminum sheet for body panels. In response to the increasing production by Japanese transplants in the United States, our alliance with Alcoa enables Alcoa to supply aluminum sheet for auto body panels that correspond to the same specifications used in Japan.

On a separate project with two other Japanese companies, we decided to establish a joint venture called Kobe Aluminum Automotive Products LLC, which is scheduled to begin manufacturing aluminum forgings for suspension systems in June 2005.

Our aluminum can stock business, a major product, has benefited from the steady rise in the use of aluminum bottles. In only three years since the launch of this new container, we have gained a 25% share of the can stock for the aluminum soft-drink can market.

Aluminum bottles are environmentfriendly as they are easily recycled and demand is expected to continue increasing.

# **Outlook**

Demand for aluminum and copper products in fiscal 2003 is expected to improve owing to a recovery in semiconductors during the latter half of the year as well as a further increase in the use of aluminum in automobiles. Over the medium term, we anticipate growing demand for our aluminum and copper products, particularly sheet, extruded, and forged aluminum materials used in automobiles as well as for such products for the IT and semiconductor industries as copper strip for leadframes, aluminum vacuum chambers used in LCD manufacturing equipment, and aluminum blanks for hard disk drives.

In the future, we will continue employing our technological capabilities to create new markets and make greater use of our competitiveness to consolidate our position as a leading company in the aluminum and copper fields.



Aluminum vacuum chamber for LCD manufacturing equipment



We have developed numerous aluminum alloys, such as high-strength, highly formable alloys for automobile body panels. Kobe Steel is well known in the automobile industry, both in Japan and abroad, for its innovative, quality products.



# Machinery Segment

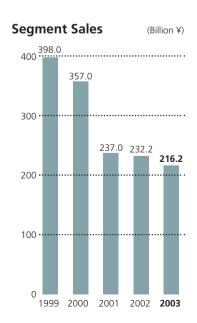
Kobe Steel's Infrastructure and Plant Engineering
Company recorded a large drop in domestic orders
during fiscal 2002 due to a plunge in orders for
municipal solid waste treatment plants. Overseas
revenue was up slightly, owing to the start of a
construction order for an iron ore pelletizing plant as
well as strong exports of equipment for the energy field.

In our Machinery Company, we benefited from a rise in capital investments by leading tire manufacturers, which boosted orders for tire curing presses and rubber mixing machinery, particularly in Japan and China. In our compressor business, we obtained a considerable number of orders from the oil refining and petrochemical industries for high-pressure screw compressors used in electric power generation and gas recovery operations. Launched in June 2002, the Kobelion line of standard air compressors offers greatly improved energy efficiency and environment-friendly features that have earned it a high evaluation from users and attracted a steadily growing number of orders.

Due to the large drop in orders for municipal solid waste treatment plants, segment sales decreased 6.9% to ¥216.2 billion. However, our cost-cutting efforts enabled a 13.8% rise in operating income, to ¥4.2 billion.

## **Environmental Solutions**

Previously providing only facilities and equipment, Kobe Steel has been steadily broadening the scope of its environmental business in view of new, growing needs, such as those for private finance initiative projects and other private-sector schemes for the maintenance and administration of public facilities. To quickly respond to rapid changes in the environmental business, we have decided that it was essential to consolidate the Kobe Steel Group's marketing, technology, and business promotion capabilities. Accordingly, Kobe Steel and subsidiary Shinko Pantec Co., Ltd., have agreed to combine Kobe Steel's environmental business unit with Shinko Pantec on October 1, 2003. The combined business will be renamed Kobelco Eco-Solutions Co., Ltd.





The ITmk3° Process produces high quality iron nuggets, while emitting 20% less carbon dioxide than blast furnace operations. The photo shows the bench-scale plant at the Kakogawa Works.



As a result, Kobelco Eco-Solutions will be able to step up development of advanced wastewater treatment and sludge reduction technologies. In the solid waste treatment business, Kobelco Eco-Solutions plans to expand into new business areas including PCB and dioxin treatment, soil decontamination, and PVC recycling. These initiatives are expected to enable Kobelco Eco-Solutions to grow considerably.

# **Engineering Opportunities**

In the energy field, we have focused our lineup on LNG open rack vaporizers and reactors. Currently, we are aggressively expanding our activities to include associated equipment, such as heat transfer tubes for the vaporizers.

We are actively promoting direct reduced iron processes. In addition to the highly successful MIDREX® Direct Reduction Process, we are marketing the FASTMET® Direct Reduction Process. We are also proceeding with the ITmk3® Process, which makes high-purity iron nuggets in a demonstration plant. We hope to commercialize this next-generation ironmaking technology in

the future.

In the machinery business, Kobe Steel and Kawasaki Heavy Industries, Ltd., established a 50/50 joint venture, Earth Technica Co., Ltd., as a means of merging the two companies' crushing equipment business. The crusher marketing and design functions of the parent companies have already been transferred to the joint venture, which began operating in July 2003. Plans call for manufacturing to be transferred in the future, giving the joint venture a full range of integrated capabilities covering manufacturing and marketing operations. We intend to unify the product lines, optimize the distribution of manufacturing tasks among facilities, and take other steps to enhance the joint venture's efficiency and profitability while creating a business capable of sustained growth.

# Outlook

Kobe Steel expects steady demand for equipment in the energy field. In our nonstandard compressor business, we will continue emphasizing the oil, gas, and new energy fields. In our standard compressor business, we are seeking to increase the market diffusion of new energy-saving products and obtain more orders in China. In industrial machinery, we have entered new process fields through the launch of such products as the LCM-EX polypropylene plastic mixer. We are also endeavoring to expand the overseas marketing of isostatic pressing systems and physical vapor deposition systems.

At the same time, the Company is investing its energies in expanding its business by creating new product menus, developing new types of machinery, and entering new markets.

Through business and technology, the Company is actively contributing to lessening the burden on the environment and creating a recycling society.



This solid waste treatment plant in Kakogawa in western Japan helps lessen the burden on the environment. We also supply wastewater treatment plants and are broadening our environmental menu.



# Construction Machinery Segment

Diverse trends were seen in the world's major construction equipment markets during fiscal 2002. Having grown rapidly owing to demand from infrastructure projects, the Chinese market attracted increasing attention. In contrast, growth in the United States and Europe clearly decelerated along with weakening economic conditions, while recovery in the ASEAN market remained unclear. In Japan, drops in public works projects, housing starts, and private-sector capital investment protracted a downtrend in demand for construction equipment.

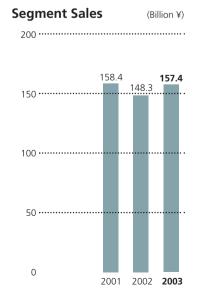
Amid this operating environment, the Construction Machinery segment, centered on subsidiary Kobelco Construction Machinery Co., Ltd., actively worked to increase its revenues in the rapidly growing Chinese market. Based on a global alliance with CNH Global N.V. of the Fiat Group, Kobelco expanded the use of its technologies in the European and North American markets. To enhance profitability in Japan, Kobelco took steps to strengthen the financial performance of its domestic marketing companies and affiliated equipment rental companies. As a result, segment sales rose 6.1%, to ¥157.4 billion, while operating income increased 119%, to ¥4.1 billion.

# **Expanding Global Operations**

Kobelco Construction Machinery has been expanding its overseas business in excavators through a venture in China.

Kobelco also has grown its joint ventures in Europe and North America in collaboration with CNH. Kobelco is focusing on business development in China and other countries in the Asia-Pacific region, for which it is responsible under the alliance with CNH.

Amid market conditions considerably more positive than originally projected, Kobelco's joint venture in China laid the basis for future sales growth by strengthening its marketing and service network. A rise in local production and the start of exports increased the number of machines sold.





The first Fiat-Kobelco excavator E215 rolls off the production line at Fiat Kobelco Construction Machinery S.p.A, Italy, a joint venture with CNH Global. A series of excavators features the diversified expertise of Kobelco Construction Machinery.

In joint-venture operations with CNH in Europe and North America, Kobelco worked to accelerate technology applications in locally manufactured products. For the excavator business, Kobelco and CNH established an Italy-based joint manufacturing and marketing venture, Fiat Kobelco Construction Machinery S.p.A, in July 2002.

The new company began production of crawler excavators using Kobelco technology in January 2003.

The increase in sales and profits reflects the increase in OEM products to CNH, the popularity of new products sold through Kobelco's marketing routes, and local component production by joint ventures with CNH.

Aiming to increase market share for crawler excavators in the Asia-Pacific region, Kobelco worked to strengthen its distribution network through the formation of marketing companies in

Malaysia and Indonesia and the creation of an operating base in Vietnam, which is projected to grow considerably. In Australia, which enjoyed continued economic expansion, we were able to record a substantial increase in sales through our local marketing network.

We also succeeded in increasing our overseas sales of cranes. Active marketing led to a rise in orders and shipments of large cranes to China.

In Japan, besides marketing our existing line of new construction equipment, we have expanded the scope of our profit sources by expanding the "stock business" of used equipment, parts, and maintenance services, which are increasing in demand. At the same time, we have augmented new product lines, primarily related to the environmental protection and recycling fields.

### Outlook

We are bolstering our operations in growing overseas markets through developing and marketing distinctive new products, expanding the scale and profitability of our overseas joint venture operations, building networks in growing markets, and focusing our menu on the stock business.



The SK135SR is one in a series of excavators with zero tail swing. We pioneered this space-saving feature now found in both mini excavators and excavators.



Ultra long attachments can demolish over 50 m tall buildings, the highest in its class. This SK 1600D reduces noise and vibration at the work site.

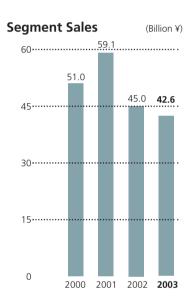


MOBELCO crawler cranes can handle just about any lifting job, ranging from 35 to 800 tons. Our highly versatile 35 to 100 ton class cranes are ideal for lifting materials on construction sites and for general civil engineering work.

# Real Estate Segment

Conditions in Japan's real estate market remained severe in fiscal 2002. Despite low interest rates and the extension of tax breaks for new home purchases, new housing construction decreased 2.4%, the third consecutive year of decline.

Amid these conditions, the Kobe Steel Group strived to increase sales by offering high quality properties. However, segment sales decreased 5.5%, to ¥42.6 billion yen.



Reflecting changes in the nature of real estate development properties sold, operating income dropped 45.6%, to ¥4.3 billion.

We began marketing the Maya Seaside Place East in Kobe, Jikurefu Namba Higashiyama in Osaka, and Luxembourg House and Kagurazaka Park House in Tokyo. We also started selling the O's Garden condominiums in the Okubo area of Akashi, Hyogo Prefecture.

In leasing operations, we began leasing land in Amagasaki Amenity Core (Amagasaki, Hyogo Prefecture) to large specialty retailers. In Hachinohe, Aomori Prefecture, we began managing a shopping mall and hot spring facility. Tenant recruitment was also begun for Noble Court Hiragawacho, a project under construction in Tokyo.

In building management operations, we obtained an order for a gymnasium in Kakogawa, Hyogo Prefecture under a project finance initiative. Further, we started management of the Disaster Reduction and Human Renovation Institution in Kobe.

We also made steady progress on the construction of the new Kobe

Technical High School and other projects.

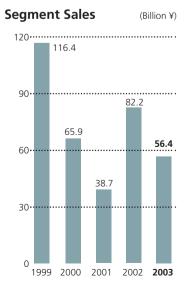
### **Outlook**

Due to the unclear economic outlook, Kobe Steel does not expect a sharp upswing in real estate purchases. As competition will toughen due to the large supply of condominium units, the business environment will continue to be difficult. In fiscal 2003, handovers are to take place for the Maya Seaside Place East in Kobe and the O's Garden condominium development in Okubo, both in western Japan. As a result, segment sales are anticipated to increase slightly.



The O's Garden condominium development in the quiet residential area of Okubo in Akashi, Hyogo Prefecture

# Other Businesses Segment



This segment encompasses such fields as electronics-related equipment, information and communications systems, information services, and special alloys and other new materials, as well as the operations of 33 subsidiaries and eight affiliates operating in such fields as materials inspection services, LPG vessel fabrication, travel services, and superconducting wires and magnets.

In fiscal 2002, an equity transfer transformed an IT systems subsidiary into an affiliate outside the scope of our consolidated accounts. As a result, sales decreased 31.4%, to ¥56.4 billion.

However, operating income surged 568.1%, to ¥5.7 million, due to the strong performance of a semiconductor testing subsidiary.