



## Annual Report 2003

For the Year Ended March 31, 2003



Ishikawajima-Harima Heavy Industries Co., Ltd. (IHI), provides technology-oriented products and services to the industrial, private and public sectors.

IHI researches, consults, engineers, manufactures and supplies an array of machinery, equipment, plants, structures, ships and offshore facilities.

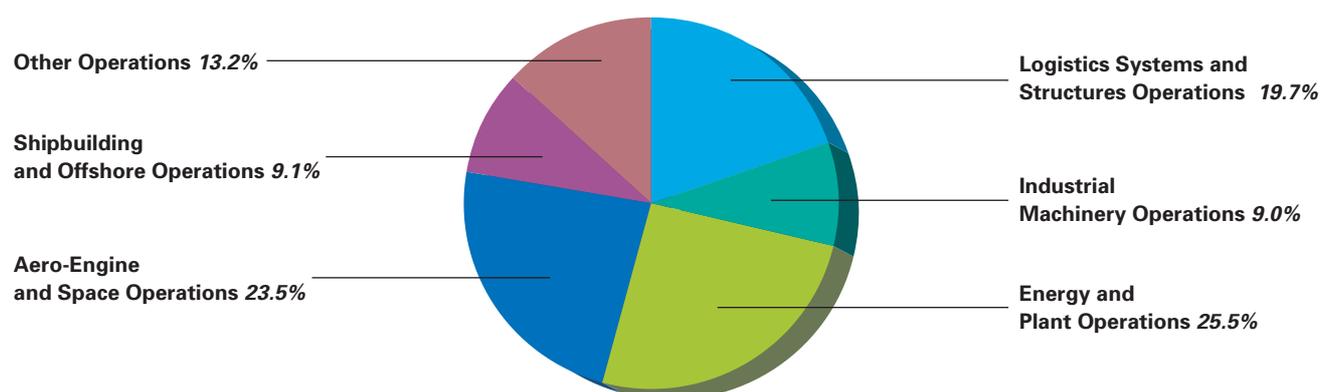
The Company is at the forefront of manufacturing, energy, marine transportation, distribution, mechatronics, aerospace and environmental technologies.

IHI operates 13 domestic works and maintains a domestic network of 10 branches and 25 sales offices.

The IHI Group includes 103 companies in Japan and 47 subsidiaries and joint ventures overseas.

In various fields, IHI Group companies strive to contribute to the advancement of society through the development and provision of meaningful products and services that meet the safety requirements and satisfaction of customers and users.

## Net Sales by Segment



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### Cautionary Statements with Respect to Forward-Looking Statements

Statements made in this annual report with respect to IHI's current plans, estimates, strategies and beliefs and other statements that are not historical facts are forward-looking statements about the future performance of IHI. These statements are based on management's assumptions and beliefs in light of the information currently available to it and therefore readers should not place undue reliance on them. IHI cautions that a number of important factors, such as general economic conditions and exchange rates, could cause actual results to differ materially from those discussed in the forward-looking statements.

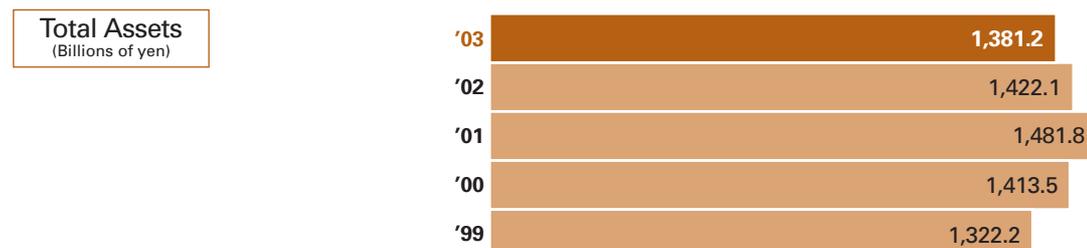
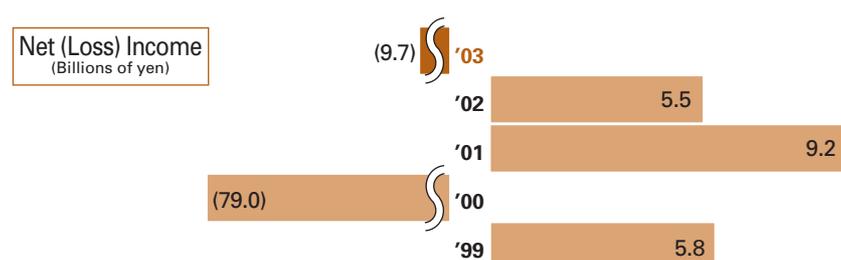
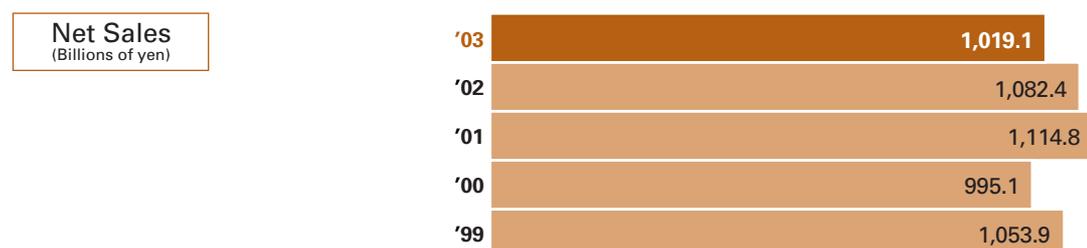
# Financial Highlights

Years ended March 31, 2003, 2002 and 2001  
Ishikawajima-Harima Heavy Industries Co., Ltd., and Consolidated Subsidiaries

	Millions of yen			Thousands of U.S. dollars
	2003	2002	2001	2003
Net sales	¥1,019,061	¥1,082,402	¥1,114,817	\$ 8,478,045
Operating income	24,640	27,233	39,947	204,992
Net (loss) income	(9,672)	5,539	9,205	(80,466)
Total assets	1,381,240	1,422,110	1,481,841	11,491,181
Total shareholders' equity	171,323	187,589	201,349	1,425,316

Per common share:	Yen			U.S. dollars
Net (loss) income	¥ (7.57)	¥ 4.27	¥ 7.09	\$ (0.063)
Cash dividends	1.50	3.00	3.00	0.012

Note: For convenience only, U.S. dollar amounts in this report have been converted from yen at the rate of ¥120.20=US\$1, the approximate rate of exchange prevailing on March 31, 2003.



## Operating Results and Financial Position

In fiscal 2003, ended March 31, 2003, the Japanese economy remained in a slump despite a glimmer of hope at the start of the term under review for an export-led recovery to the United States and Asia. Growth in exports soon tapered off, however, and trends toward economic deflation gained momentum with weak domestic demand in consumer spending and private-sector capital investment. The global economy was stalled by a slide in share prices around the world, which was triggered by scandals in corporate accounting practices in the United States, rising tensions ahead of the Iraq war, and growing concerns for the future of the economy.

With these conditions afflicting the global business environment, IHI undertook efforts to enhance earnings power through cost reductions and to streamline its businesses. Although orders declined in Aero-Engine and Space Operations as well as in Shipbuilding and Offshore Operations during the fiscal year under review, orders increased in each land-based business division, resulting in an overall year-on-year increase to ¥960.3 billion. Undermined by declines in Industrial Machinery Operations as well as in Energy and Plant Operations, net sales decreased 5.9% to ¥1,019.0 billion from the previous fiscal year. As a result, orders on hand were ¥1,369.0 billion at the end of the fiscal year under review, a

4.6% decline from a year earlier.

IHI made concerted efforts to improve profitability through the implementation of measures in its Management Policy 2002. The severe operating environment, however, hampered these efforts to assure profits in each business. As a consequence, operating income dropped 9.5% to ¥24.6 billion. The Company posted a net loss of ¥9.6 billion due to losses on valuation of investment securities.

Distribution of interim dividends for the first half of the fiscal year under review was postponed as in the previous period a year ago, since initially targeted profits could not be met and a sense of uncertainty grew over the future course of the operating environment. Year-end cash dividends were ¥1.5 per share, a reduction of ¥1.5 per share compared with a year earlier.

## Consolidated Performance of Each Segment

Business segment results for the fiscal year ended March 31, 2003, are highlighted in the Review of Operations.

## Financial Position

Net cash used in operating activities was ¥6.1 billion, net cash used in investing activities totaled ¥46.8 billion, and net cash provided by financing activities was ¥22.9 billion. In aggregate, cash and cash equivalents,

end of year, totaled ¥83.8 billion. A breakdown of cash flows is in the Consolidated Statements of Cash Flows.

### **Outlook for Fiscal Year Ending March 31, 2004**

Growth in the global economy looks increasingly likely to level off as petroleum prices rise and the aftereffects of the Iraq war dampen consumer and corporate sentiment toward spending. In the Japanese economy as well, uncertainty for the future is dulling consumer spending and capital investment by corporations, leaving a negative outlook for a recovery in domestic demand. Lackluster economic conditions are projected to continue in Japan, as there are no expectations for growth in exports and mounting concerns for a deceleration in the world economy.

Based on this outlook, IHI's estimates for the fiscal year ending March 31, 2004, are net sales of ¥1,030.0 billion, operating income of ¥29.0 billion and net income of ¥4.0 billion. The Company is targeting non-consolidated net sales of ¥630.0 billion, operating income of ¥21.0 billion and net income of ¥2.0 billion.

Despite the tough operating environment, IHI is making every effort to steadily accelerate the implementation of the measures outlined in its Management Policy 2002, which was announced in May 2002. Through these efforts, we are striving to meet



the expectations of our shareholders. We ask for your continued understanding and support in these endeavors.

June 27, 2003

A handwritten signature in black ink that reads "Mototsugu Ito".

Mototsugu Ito  
*President and Chief Executive Officer*

**Q What are the fundamental management policies of the IHI Group?**

**A** Based on the management philosophy of “Using technology for the benefit of society,” IHI and Group companies have contributed to the creation of wealth in society through the provision of various products and services that support social infrastructure. These products and services include industrial machinery, transportation equipment, bridges, materials handling machinery and physical distribution systems, iron and steel-making machinery, power plants, cement plants, environmental preservation equipment, ships, aero-engines, and aerospace development equipment.

Prioritizing the improvement of customer satisfaction in our corporate activities, we are making concerted efforts to build relationships of trust with our customers in areas that afford direct contact. At the same time, we are working on the advancement of technologies and product quality to fulfill the genuine needs of customers.



Management at IHI emphasizes the stable distribution of dividends, and determines cash dividends by taking into consideration the level of retained earnings necessary to strengthen the business foundation and to ensure the future stability of dividends.

**Q Which management benchmarks does IHI use for its targets?**

**A** Our Management Policy 2002, announced in May 2002, is based on the core policies of: (1) raising corporate value with earnings-dominated management, (2) overhauling the operational structure centered on consolidated management, (3) bolstering efforts in promising new businesses by shifting management resources away from mature fields, and (4) instituting a management approach that strives for satisfaction among customers, shareholders and employees. Consolidated targets under this policy for the fiscal year ending March 31, 2005, call for orders of ¥1,220.0 billion and net sales of ¥1,200.0 billion.

Due to the rapidly changing operating environment, we have reset our target for return on invested capital (ROIC) to 4.7%, and aim to reduce interest-bearing debt to ¥450.0 billion.

**Q Are the measures outlined in Management Policy 2002 proceeding as planned? Also, could you explain IHI's medium-term management strategy and any issues faced by the Company?**

**A** Amid a challenging operating environment, IHI continues to push strongly forward with various measures to secure earnings, improve cash flow and expand orders, in accordance with Management Policy 2002. To secure

earnings, an especially urgent issue, the Company is supporting ongoing efforts to reduce procurement costs and fixed costs. To fulfill its aim of improving cash flow, IHI is making every effort to improve its financial position and to slash interest-bearing debt by strengthening capital management and increasing credit liquidity. To expand orders, the Company created the export sales divisions for land-based machinery and plant operations, and worked to expand sales of large-scale export projects while aiming to bolster risk management. In addition, the Company focused efforts on expanding proposal-based marketing for systems, the solutions business, and spare parts and maintenance operations.

In regard to rebuilding the business structure, we will respond with the proper measures to ensure the survival of businesses, including tie-ups with other companies. We will also periodically review plans to rebuild unprofitable and low-profit operations that we identified in August, September and October of last year.

On April 1, 2003, IHI integrated aerospace development operations, excluding business related to turbo pumps for the H-II A rocket and business related to the GX rocket, with subsidiary IHI Aerospace Co., Ltd. through a straightforward spin-off. For the IHI Group to carry on the power system operations of Niigata Engineering Co., Ltd., which is currently restructuring under corporate bankruptcy law proceedings, the Company established Niigata Power Systems Co., Ltd. in February 2003 through joint financing with the Development Bank of Japan. IHI will develop power systems through Niigata Power Systems Co., Ltd. as a strategic subsidiary in the on-site power supply business. In addition, through its subsidiaries, IHI will take over Niigata Engineering's pharmaceutical and industrial plant business, as well as the traffic systems and vehicles,

new transit systems, and snow removal equipment operations of that company.

IHI expects the operations of the companies to provide complementary synergistic effects in order to expand its range of services and business scale. IHI aims to increase corporate value through ongoing efforts to build effective alliances with other companies.

### **Q How is the Toyosu Area Redevelopment Project progressing?**



**A** The Tokyo metropolitan government revealed in October 2001 its policies to redevelop the Toyosu district, which is situated just over two kilometers from Tokyo's business and entertainment centers. One month later, IHI formulated its policies to redevelop IHI-owned land in Toyosu. The Company sold a part of its land holdings in Toyosu to the Urban Development Corporation in December 2001, and to the Shibaura Institute of Technology in February 2002. In March 2002, IHI completed the move of its Tokyo Shipyard (shipbuilding) and Tokyo Technical Center (technological research laboratory) to the Yokohama District, and then began to prepare the area for redevelopment. In June 2002, the Toyosu District Redevelopment Plan was decided as the urban plan for the area. By 2006, when a part of the new development is to be opened, usage of the

area is expected to be gaining momentum from the Toyosu extension of the New Transit Line Yurikamome, which connects central Tokyo to the bay area, in addition to IHI's office building and the Shibaura Institute of Technology's new campus.

**Q The establishment and reinforcement of corporate governance structures has become a management trend in Japan recently. Could you explain IHI's basic philosophy on corporate governance and shed some light on measures underway?**

**A** IHI defines corporate governance as a system that helps to ensure the maximization of corporate value and to raise management efficiency through the most effective deployment of the Company's capabilities.

To establish and reinforce excellent corporate governance, IHI aims to modernize its compliance structure in recognition of the need for a business execution oversight system, and to ensure that laws are strictly observed and the appropriate procedures are taken in the internal corporate decision-making process.

IHI conducted a study on the best management practices to establish a corporate governance structure befitting a global corporation and a system able to flexibly respond to sudden changes in the operating environment. On March 19, 2003, the Board of Directors determined measures for management reorganization, based on a restructuring of the Board of Directors and the introduction of an executive officer system, that strictly adhere to a system based on the current Japanese Commercial Code. This reorganization entered the implementation stage by the Board of Directors following the conclusion of the Ordinary General Meeting of Shareholders held on June 27, 2003.

**Q What is the purpose of the recent reorganization to the management decision-making process?**

**A** Our recent reorganization aims to strengthen both governance and management functions in the management system, and to clarify divisions along the lines of management monitoring/supervision, auditing and business execution.

Through this reorganization, we believe that our management structure will be greatly strengthened. We also aim to make our management organization and decision-making process, including the role of the Board of Directors, more strategic, autonomous and transparent.

**Notes:**

1. The amounts shown in this annual report have been rounded down to the nearest base unit.
2. The amounts for orders and orders on hand do not include intersegment transactions and transfers. These are included in net sales and operating income, however, and eliminations are ¥95.6 billion in net sales and ¥0.4 billion in operating income. These figures exclude consumption tax.



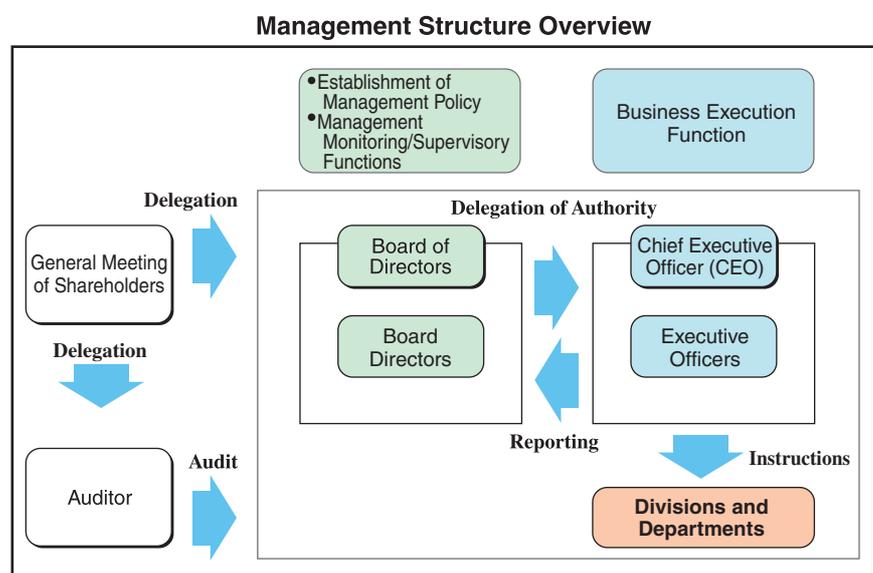
## Outline of Management Reorganization

### Restructuring of the Board of Directors

- 1) The business execution function of the Board of Directors will be separated from monitoring/supervisory functions. The Board, thus restructured, will be responsible for establishing management policy, administrating business portfolios and supervising business execution as a legally empowered institution in charge of corporate governance. Its mission will be to improve the Company's corporate value.
- 2) The number of members on the Board of Directors stipulated in the Articles of Incorporation will be reduced from the present "not more than 30" to "not more than 15." This change aims to bring the number of Board members to an optimal level and thereby ensure more active participation by each member of the Board.
- 3) The authority to carry out business execution will be delegated to the executive officers to a large extent, to ensure an effective decision-making process and to clarify responsibility for business execution.

### Introduction of Executive Officer Positions

- 1) Executive officer positions, senior management positions held by officers solely responsible for the execution of business decisions, will be introduced in order to augment managerial functions and thereby maximize corporate value. Executive officers shall be selected by the Board, with tenure of two years.
- 2) The number of executive officers shall not exceed 25, including those who concurrently hold director positions. If necessary, directors can also be nominated and serve as executive officers.
- 3) Executive officers shall be classified into chief executive officer (CEO), senior executive officer, managing executive officer and executive officer.
- 4) Classification of executive officers, and major responsibilities of each class of executive officers, shall be determined and approved by the Board of Directors.
- 5) Major roles and responsibilities of executive officers are as follows:
  - a. Executive officers shall follow the decisions made by the Board, and do their best to faithfully and sincerely execute business decisions based on strong awareness of their responsibilities as senior members of the management team.
  - b. Executive officers shall have authorities and responsibilities related to their executive functions set forth separately for each classification.
- 6) The Management Committee shall be established in order to support the CEO in his/her decision-making and execution. The members of the Management Committee shall be nominated by the CEO.



## Outline of New Compliance Structure

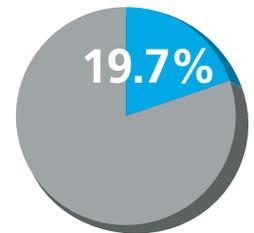
- 1) The "Ishikawajima-Harima Heavy Industries Basic Business Principles," prepared and adopted in January 1998, will be fully reviewed and updated, taking customers' trust and satisfaction into consideration.
- 2) A director in charge of compliance will be nominated, who will be responsible for all compliance-related activities across the Company.
- 3) A Companywide Compliance Committee will be organized with primary responsibilities for the establishment of a Companywide action plan.
- 4) Effective April 1, 2003, the newly created Compliance Group began operating in the Administration Division to coordinate day-to-day compliance-related activities. An internal call center dealing with compliance matters, named Compliance Hotline, was also created in June, in order to ensure effectiveness of the compliance system.

## Logistics Systems and Structures Operations

The Japanese market continued to present challenging operating conditions, owing to a delayed recovery in private-sector capital investment and a downtrend in public-sector investment. The export market was no better, with postponements in large-scale bridge construction projects due to the Iraq war.

Under these circumstances, IHI's intense efforts to win orders resulted in a 2.7% increase in orders for the segment to ¥172.5 billion compared with the previous fiscal year. Sales of Logistics Systems and Structures Operations rose 3.8% to ¥216.8 billion. As a result, orders on hand as of March 31, 2003, totaled ¥220.1 billion, a decline of 7.9% from a year earlier. Operating income was ¥3.9 billion.

PERCENTAGE OF  
TOTAL NET SALES



### Groundbreaking Ceremony for Binh Bridge—One of Vietnam's Longest Cable-Stayed Bridges

A joint venture of IHI, Shimizu Corporation and Sumitomo Construction Co., Ltd. (now Sumitomo Mitsui Construction Co., Ltd.) was awarded a contract in July 2002 to construct one of Vietnam's longest continuous concrete steel-composite-girder cable-stayed bridges, in Haiphong City. On September 1 of the same year, a groundbreaking ceremony was held with great fanfare, with the Vietnamese Transportation and Construction ministers, the Japanese ambassador to Vietnam, principal officers of the Japan Bank for International Cooperation, and IHI President Ito in attendance. The Hai Phong People's Committee is an investor in the Binh Bridge, which will be completed in March 2005 with a span of 1,280 meters and a width of 22.5 meters. The bridge is the first project to apply funds from a ¥600 billion special yen credit granted in December 1998.



Conceptual image of Binh Bridge

### Orders Received from East Asia for Four Continuous Ship Unloaders

In December 2002, IHI received an order for a continuous ship unloader (average capacity of 1,250 tons per hour) from the Formosa Plastic Group—Taiwan's largest petrochemical group—for the Hou Shi Power Plant of their subsidiary, Hua Yang Electric Co., Ltd. (Fujian, China). The machine is scheduled to begin operations in early 2004. In 2002, IHI received orders for two continuous ship unloaders for the Castle Peak Power Station of CLP Power Hong Kong, Ltd., and one continuous ship unloader for the Taichung Steam Power Station of Taiwan Power Company. The latest order marks the fourth continuous ship unloader for East Asia. IHI has received orders for 51 units of continuous ship unloaders in total from customers in Japan and overseas, and boasts the world's largest market share in bucket-type continuous ship unloaders. Pushing forward with efforts to expand sales overseas, IHI aims to aggressively promote marketing activities mainly in Asia, where the Company expects the strongest growth in demand for continuous ship unloaders.



Continuous ship unloaders like the one delivered to East Asia

### Establishment of Niigata Transys Co., Ltd.

In a joint-financing agreement with the Development Bank of Japan, IHI established a new company Niigata Transys Co., Ltd. on February 3, 2003, to continue the traffic systems and vehicles, new transit systems, and snow removal equipment operations of Niigata Engineering Co., Ltd. As a result, the IHI Group will benefit from the strong brand image, technological capabilities and personnel of Niigata Engineering.

In the future, IHI will make every effort to develop more accessible and convenient transportation with the aim of contributing to a better lifestyle.



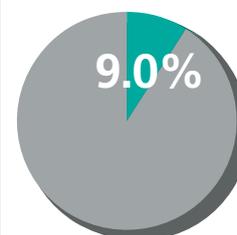
New transit system of Niigata Transys

# Industrial Machinery Operations

Industrial Machinery Operations faced a dire operating environment characterized by a slump in capital investment in both Japan and overseas.

Despite these conditions, orders advanced 23.6% to ¥99.1 billion thanks to the Company's strenuous efforts to acquire orders. However, segment sales decreased 18.4% to ¥105.5 billion compared with the previous fiscal year. As a result, orders on hand were largely unchanged year-on-year at ¥80.8 billion. The segment posted an operating loss of ¥1.2 billion.

PERCENTAGE OF  
TOTAL NET SALES



## IHI Receives Order for Aluminum Cold Rolling Mill and Aluminum Foil Rolling Mill from Guangxi Nannan Aluminum Foil Co., Ltd. (China)

In August 2002, IHI received an order for an aluminum cold rolling mill and an aluminum foil rolling mill from Guangxi Nannan Aluminum Foil Co., Ltd. (China). The facilities are scheduled to begin operations in June 2004. IHI is well regarded by its customers in this field, and has delivered a total of 29 aluminum cold rolling mills and 23 aluminum foil rolling mills domestically and abroad. The Company will continue to promote sales expansion of aluminum rolling mills in Japan and overseas. In particular, IHI is concentrating marketing efforts on expanding sales of aluminum rolling mills to the Chinese market, where demand is expected to grow sharply in the future.



*Aluminum cold rolling mill like the one ordered by a Chinese company*

## Completion and Start of Plant Operations at IHI Turbo (Thailand) Co., Ltd.

In October 2002, IHI completed and started operations of a new plant in southeastern Thailand at IHI Turbo (Thailand) Co., Ltd., a joint venture with Toyota Motor Corporation, for the production of automotive turbochargers.

The new plant is the Company's fourth overseas production base, with others in the United States, Italy and China. Thailand is the largest automobile-producing nation in Southeast Asia. Demand for automotive turbochargers is also high, as there is substantial demand for commercial vehicles with diesel engines in Asia as a whole. IHI aims to expand orders in Asia by locally producing automotive turbochargers.

IHI produces about one million automotive turbochargers in Japan annually and about half a million overseas. The Company plans to increase production volume to approximately 1.9 million units in Japan and overseas by 2004.



*Inside an IHI automotive turbocharger plant in Thailand*



*Automotive turbocharger model*

# Energy and Plant Operations

In Energy and Plant Operations, the Japanese market remained mired in severe conditions, as capital investment plans were postponed and reviewed due to the prolonged economic downturn. In overseas markets, overall conditions continued to be challenging, with a worldwide drop in motivation to invest due to a decline in the U.S. economy. As a result of aggressive efforts to acquire orders amid these operating conditions, orders grew 10.7% to ¥209.5 billion. Segment sales decreased 14.9% to ¥273.6 billion. Consequently, orders on hand fell 12.5% to ¥394.8 billion as of the end of the fiscal year under review. Operating income was ¥2.2 billion.

PERCENTAGE OF  
TOTAL NET SALES

25.5%

## Hekinan Power Plant No. 5 Unit Begins Operations

The coal-fired Hekinan Thermal Power Plant No. 5 unit (output 1,000 MW) of Chubu Electric Power Co., Inc. began commercial operations on November 6, 2002. IHI was in charge of construction for three boilers for units No. 3 (output 700 MW), No. 4 and No. 5 (output 1,000 MW each) at the Hekinan Thermal Power Plant. With the firing of the No. 5 unit, total output at the Hekinan Thermal Power Plant increased to 4,100 MW, making the facility the largest coal-fired thermal power plant in Japan and one of the largest of its kind in the world.



*Hekinan Thermal Power Plant of Chubu Electric*

## Completion of Large-Capacity Wind-Turbine Power Generation Facilities

IHI completed 10 wind-turbine generators for the Minami Osumi Wind Farm in Kagoshima Prefecture on an order received from Minami-Kyushu Wind Power Corporation. With a rated output of 1.3 MW per generator, the facility produces a total of 13 MW. IHI has received an order for the second phase of the project (10 generators at 1.3 MW each), and is engaging in construction toward completion in March 2004. IHI has also completed a large wind-turbine power generation facility with a rated output of 1.9 MW, which was constructed for Ryuyo Marine Park on the coast of Shizuoka Prefecture in central Japan. The facility received aid from the New Energy and Industrial Technology Development Organization (NEDO) for the project.



*Wind-turbine generators for Minami Osumi Wind Farm*

## Order Received for Algeria's First Large-Scale Desalination/Power Generation Plant

In cooperation with ITOCHU Corporation, IHI received a comprehensive order spanning from engineering and construction to trial operation of a large-scale desalination/power generation plant—Algeria's first private-sector project—from Kahrama SpA, an Independent Water and Power Producer (IWPP). Completion is scheduled for the end of September 2005. The project is Algeria's first large-scale desalination/power generation facility, which will be operated in the Arzew industrial zone by Kahrama, a joint venture capitalized by Black & Veatch (South Africa) and Algerian Energy Company. Facilities to be constructed comprise a natural-gas-fired power plant with an output of 320 MW, and thermal energy produced by the power generator will be used in facilities to turn seawater into fresh water (daily production of about 88,000 m<sup>3</sup>).



*Conceptual image of large-scale desalination/power generation facility for Algeria*

## Establishment of Niigata Power Systems Co., Ltd.

IHI established a new company Niigata Power Systems Co., Ltd. on February 3, 2003, to take over and carry on the power systems business of Niigata Engineering Co., Ltd. With this initiative, IHI has positioned the manufacture and sale of a variety of diesel and gas engines, and gas turbines for marine, land and transportation use, as the key components in its efforts to develop and expand the diesel power generation and energy businesses.



*Gas engine of Niigata Power Systems*

# Aero-Engine and Space Operations

In Aero-Engine and Space Operations, aero-engines continued to face harsh conditions in the defense sector due to budget cutbacks by the Japanese government, and demand was weak in the civil sector, owing to a decline in the volume of passenger traffic resulting from the slowdown in the global economy and the Iraq war.

Under these circumstances, IHI won orders from the Japan Defense Agency (JDA) for F110 and F100 engine components, and orders for V2500 and CF34 engine modules in the civil sector. Total orders including space-related equipment for the segment decreased 10.2% to ¥219.3 billion. Sales edged up to ¥243.8 billion. As a result, total orders on hand decreased 3.2% to ¥381.0 billion. Operating income was ¥10.1 billion.

PERCENTAGE OF  
TOTAL NET SALES

23.5%

## Growth in Jet Engine Operations

IHI has started a maintenance business for the CF34 series jet engine to complement its ongoing maintenance operations for the V2500 and CF6 series engines for civil aircraft.

IHI is an official maintenance company for the CF34 series jet engine marketed by General Electric Company (GE) of the United States, and has signed a contract with GE for the full-fledged technical support and spare-parts supply of the engines. The contract allows IHI to maintain and repair GE's CF34-8 engines, with IHI participating with a 27% share in the engineering, development and production of the engine; as well as of the CF34-3 engine, which has been commercially available since 1992. The CF34 series engine is widely deployed in aircraft with 100 or less seats, which serve the growing market for regional travel. IHI will market its maintenance and repair services to airlines around the world, especially in Asia.

IHI is participating in a five-nation collaborative development project for the V2500 jet engine, which is managed by International Aero Engines AG (IAE). In July 2002, IHI's Mizuho Aero-Engine Plant shipped its 2,000th fan module for the V2500 engine, which is a best-selling engine for civil aircraft (mainly the Airbus A320 series) owned by more than 80 airline companies around the world. Since commercial operations began in 1989, IAE has received a total of 4,600 orders with options. IHI, in turn, has received a similar volume of orders for its components supplied to the V2500 engine, through Japanese Aero Engines Corporation (JAEC), which represents the consortium of Japanese companies to the IAE. The Company will continue to manufacture engine modules while making every effort to further improve quality.

## Launch of Power Generation Business

IHI, in cooperation with JGC Corporation and Mitsui & Co., Ltd., established the GTF Institute to study electric power generation and next-generation fuels. A gas turbine power generation facility with an output of 45 MW was completed in March 2003 in Ibaraki Prefecture. Commercial operations began in April 2003 with the supply of electricity to retail customers.

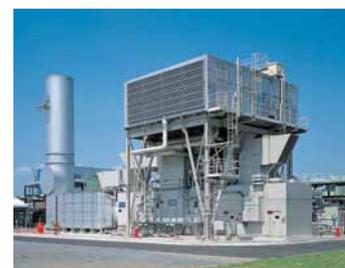
The power plant consists of an aircraft engine derivative gas turbine, and is able to quickly and flexibly adapt to changes in electricity demand. The GTF Institute also conducts research into the combustion of such liquid fuels as gas to liquid (GTL), a low-pollution liquid fuel made from natural gas, and biomass slurry extracted from industrial waste.



CF34 series jet engine



V2500 series jet engine



LM6000 gas turbine power generation facility

# Shipbuilding and Offshore Operations

In Shipbuilding and Offshore Operations, related markets saw a large volume of orders placed for small and medium-sized bulk carriers against a backdrop of yen depreciation and weak market prices in the first half of the fiscal year ended March 31, 2003. In the second half of the fiscal year under review, the market began to pick up for large-scale tankers and container ships amid signs of a recovery in ship prices spurred by an increase in freight charges, reflecting robust marine transportation activity.

During the fiscal year under review, IHI received orders for 21 new ships (a total of 2,350,000 deadweight tons), comprising three large-scale tankers, seven bulk carriers, four container ships and seven other vessels. Together with other businesses, such as ship repair, total orders for the segment came to ¥118.0 billion, a decrease of 5.3% from the previous fiscal year. Sales increased 4.6% to ¥113.3 billion with the completion of 10 ships (a total of 980,000 deadweight tons), including two large-scale tankers, five bulk carriers and three other vessels. As a result, orders on hand increased 6.1% to ¥259.3 billion, reflecting 36 new shipbuilding orders (a total of 4,370,000 deadweight tons). Operating income was ¥4.7 billion.

PERCENTAGE OF  
TOTAL NET SALES

9.1%

## World's First LPG Floating Production Storage and Offloading Vessel

In May 2002, IHI signed a contract for the construction of an LPG Floating Production Storage and Offloading (LPG FPSO) vessel for Single Buoy Mooring Inc. of Monaco.

The LPG FPSO vessel is the world's first for liquefied gas. It has LPG storage tanks with a capacity of 135,000 m<sup>3</sup>, as well as LPG production plants including gas separators, gas refrigerators and boil-off gas re-liquefaction units on its upper deck. The LPG storage tanks feature a Self-Supporting, Prismatic-Shape, IMO Type-B (SPB) tank system, which IHI developed for storing such liquefied gas as LPG and LNG under extremely low temperatures.

The LPG FPSO vessel is now under construction at the Kure Shipyard, operated by IHI Marine United Inc., an affiliate of IHI, and will be completed at the end of July 2004. After delivery at the shipyard, the LPG FPSO vessel will be operated by a consortium of international petroleum companies, led by ChevronTexaco, for the Sanha Condensate Project in Angola, Africa.



Conceptual image of LPG FPSO vessel

## Launching Ceremony for Destroyer at Yokohama Shipyard

In August 2002, a launching and naming ceremony was held for a destroyer at the Yokohama Shipyard. The destroyer is the 100th vessel ordered by the Japan Defense Agency (JDA) and was named the *Makinami*. The general-purpose destroyer is the main force of the Japan Maritime Self-Defense Forces (JMSDF) and is the third vessel of the *Takanami* series (4,400 displacement tons), which began in 1998.

The Yokohama Shipyard began full-scale shipbuilding operations in April 2001 after inheriting the functions of the Tokyo Shipyard, which had traditionally built many state-of-the-art ships such as destroyers. The *Makinami* is the first destroyer to be completed by the Yokohama Shipyard. The Yokohama Shipyard belongs to IHI Marine United Inc., which was spun off and established in October 2002, and serves as a base for the construction and repair of JMSDF vessels as well as the production of high-value-added ships, such as container vessels and large-scale ferries.



Launching ceremony for destroyer Makinami

## Other Operations

In Other Operations, demand for agricultural and construction machinery was sluggish overall due to deflationary economic conditions.

Despite this operating environment, orders climbed 4.0% to ¥141.6 billion due to aggressive efforts to acquire orders. Segment sales were ¥161.4 billion, mostly unchanged from the previous fiscal year. As a result, orders on hand increased 26.3% to ¥32.8 billion. Operating income was ¥5.2 billion.

PERCENTAGE OF  
TOTAL NET SALES

13.2%

### Completion of Japan's First Electronic-Controlled Large, Low-Speed Marine Diesel Engine

Diesel United, Ltd., an affiliate of IHI, completed Japan's first large, low-speed, common-rail electronic-controlled two-stroke marine diesel engine with an output of 12,750 kW. Conventional diesel engines control fuel injection mechanically through a camshaft. The newly completed diesel engine eliminates the camshaft and instead uses the electronic-controlled common-rail method to supply fuel to all engine cylinders. Electronic control of engine parts previously done mechanically, such as with fuel injection, allows for optimal fuel consumption under various loads. Electronic control also prevents partially burned fuels from causing black exhaust emissions, making the new engine quite revolutionary in meeting market demand for environmental cleanliness.



*Electronic-controlled large, low-speed marine diesel engine*

### Ceiling-Mounted Ozone Purifying and Deodorizing System Installed at Train Station

IHI has installed the ceiling-mounted ozone purifying and deodorizing system (eZ-1S) at a train station in Tokyo. This ozone- and negative ion-based system, which dissipates the materials that give rise to bad odors, was well received during trials. A total of 144 units are currently in operation at 11 locations around Tokyo. Based on IHI's long-standing history and expertise in the manufacture of ozone purifying and deodorizing systems, the Company responded to market demand to develop a ceiling-mounted system. To date, the Company has installed a number of systems in welfare facilities for the aged, and in hospitals. In the future, we will make efforts to cultivate the commercial and office building markets.



*Ceiling-mounted ozone purifying and deodorizing system*

IHI aims to be a comprehensive manufacturer of infrastructure that supports society and communities through optimal technologies and complete services tailored to the diverse needs of society and its customers. Our basic research and development (R&D) principles are first and foremost to prioritize projects that will expand orders and increase success rates by analyzing trends in technologies and markets, benchmarking against competing technologies and products, and through simulations. In this manner we aim to optimize investment. The Company emphasizes R&D that contributes to strategic efforts in the environmental business, strengthens competitiveness in the power systems business, expands operations in the turbocharger and logistics businesses, increases and diversifies maintenance operations, and fosters the early commercialization of "green" energy technologies and LCD and semiconductor equipment.

## New Anti-Corrosion Construction Method for Marine Steel Structures

IHI and affiliate IHI Amtec Co., Ltd. have developed the IHI Electro-Coating System (IECOS), a new anti-corrosion technology for marine steel structures, and a dry construction method that makes possible the efficient application of the technology at sea. The Company aims to commercialize these technologies into comprehensive maintenance services for marine steel structures. IECOS prevents rusting by electrochemically coating the surface of marine steel structures with a compound formed from magnesium and calcium ions found in seawater, by sending electricity through seawater using an external power source. Portions of the steel structure above seawater, to which electrical current cannot be applied, are painted. The independently developed dry construction method is safe and economical, and ensures high-quality anti-corrosion performance.

Before execution of IECOS



After execution of IECOS

## Flywheel-Type WTG Power Stabilization System

In areas where power grids are fragile, wind turbine generation (WTG) power output causes fluctuations in grid voltage and frequency, which has slowed the spread of WTG. To solve this problem, IHI developed the flywheel-type WTG power stabilization system (FWPSS). When WTG output power increases, the flywheel accelerates, absorbing generated power, and when WTG output power decreases, the flywheel decelerates, releasing power stored in the flywheel, providing a stable flow of power. Field experiments on this system took place over one year at a WTG facility in Okinawa, confirming its ability to efficiently control fluctuations in WTG output. IHI also developed a system able to control voltage fluctuations in the electric power system by adding a function to the stabilization system to control both

effective power and reactive power fluctuations. The performance of the system was confirmed in a small-scale prototype, leading to its actual application.



Flywheel power storage system

## High-Performance Digital Video Recorder for Security Surveillance

The EverFine-8 MkII is a high-performance digital video recorder for security surveillance. With an innovative CODEC compression algorithm developed by IHI, video images from surveillance cameras can be efficiently recorded digitally, allowing for 4–5 months of continuous high-quality storage in the case of one frame per second recording. The EverFine-8 MkII not only enables the archiving of high-quality recorded data and maintenance-free monitoring that was impossible with analog VCRs, but also provides a variety of additional functions thanks to its digital technology. The product comes standard with various recorded data search functions that reduce checking time, a motion-detecting recording function that acts as a security sensor, and an external trigger recording function. It has also network capability, making possible remote surveillance through LANs or the Internet. IHI aims to create applications that meet a wide variety of needs through the development of innovative video compression technologies.



Digital video recorder  
EverFine-8 MkII

## Vapor Deposition Facilities for Mass-Produced Photovoltaic Cells

In Japan, a government directive calls for the introduction of 48,000 MW of photovoltaic cells by 2010. In response, IHI is working to develop deposition facilities that would make possible the mass-production and proliferation of low-cost, high-efficiency thin-film photovoltaic cells. Differing from conventional plasma-enhanced chemical vapor disposition (PECVD) equipment, the Company is developing array-antenna-type PECVD equipment that offers sufficient cost performance for mass-production of a uniquely structured thin-film photovoltaic cell. This deposition equipment should be able to provide productivity enhancements of 3–6 times that of previous equipment and be compatible with extra-large substrates measuring 1x2 meters. IHI is currently testing the equipment's performance and fine-tuning the design to lower costs.



*VHF plasma-enhanced chemical vapor deposition equipment*

## Commercialization of Laser Processing System

IHI has commercialized a laser processing system that combines an IHI-made laser diode (LD)-pumped YAG laser with feed equipment and welding tools. In fiscal 2003, IHI delivered three systems to automobile manufacturers and an in-house jet engine plant, and received several more orders. The laser welding system shown in the photo below is used for manufacturing automobile parts called tailored blanks. The system is able to process more than 100,000 parts per month. IHI provides welding technology, in addition to the latest laser oscillators and processing equipment. Also, through welding inspection equipment developed by IHI, it is possible to manage welding quality. Through a combination of hardware technologies and welding expertise, IHI aims to develop a solutions business that solves customer problems.



*Outside view of the tailored-blank welding system using LD-pumped YAG laser*

## Magnetic Support Balancing Equipment

Simulations of such flying objects as projectiles and aircraft in conventional wind tunnels have been typically unable to precisely control air-pressure conditions, owing to interference from air turbulence created by the prototype support frame. Magnetic support balancing equipment, however, eliminates both the need for support frames and interfering air turbulence, allowing for extremely precise simulations of flying objects in air tunnels, and the measurement of air drag on the prototype by measuring electrical current sent to the supporting magnets. As part of its efforts in high-value-added wind tunnel facilities, IHI is working on the development of magnetic support equipment with a high-speed rotation mechanism. IHI is the first private company to stably float a flying object rotating at 7,000 rpm that weighs approximately 700 grams with a diameter of 35 mm and length of 200 mm. In the future, IHI will test rotations of 30,000 rpm to simulate the flight of such actual projectiles as shells.



*Floating condition of flying object*



*Magnetic support balancing equipment*

## Research into High-Temperature Superconductive Flywheel Power Storage

High-temperature superconductive flywheels are part of a system that stores electricity by converting electrical energy into rotational energy. This is accomplished through the use of a flywheel that spins at high speeds, thanks to the use of high-temperature superconductive bearings that feature strong levitation force and low rotation loss. The development of rotor vibration control technology with little rotation loss was a major obstacle to making the flywheel larger and achieving higher rotational speeds. These obstacles were for the most part cleared in fiscal 2003 when IHI achieved power storage of 5.7 kWh with a flywheel measuring 1 m in diameter, rotating at a speed of 12,000 rpm. As a result, it became the world's largest carbon fiber reinforced plastic (CFRP) flywheel. In 2003, IHI plans to conduct trials on a 10 kWh flywheel using high-temperature superconductive bearings.



*CFRP flywheel rotor*



*Flywheel equipment*

Many of the heavy industrial products IHI deals in require large amounts of raw materials and energy in production. Devising methods of systematically reducing the volume of raw materials and energy used in manufacturing these products will lead directly to a decrease in costs. Moreover, because these products manufactured by IHI consume large volumes of energy even after their delivery, high energy efficiency is essential for raising the competitiveness of these products.

In the wide range of industrial fields in which it operates, IHI has focused on such areas as marginal design and energy-saving design to improve its product capabilities ever since the early days of the Company. Rationalization and the creation of energy-saving processes are becoming firmly positioned as the cornerstones of our operations, through such measures as adopting so-called Eco Design, or Design for Environment, from the upstream stages of production and carrying out quality control activities at production plants.

We must bear in mind that production activities are being carried out while using the earth's limited resources. In recent

years, however, we have witnessed heightened social appreciation of the natural environment, and have been thinking more seriously of ways to protect it. Carrying out economic activities without considering the environment is now out of the question.

In 1996, IHI integrated its Committee for Environmental Adjustments and Energy Rationalization Committee and launched the Environment Committee. At present, all IHI production facilities are operating under ISO 14001 environmental management systems and are striving to reduce the environmental impact while adopting new perspectives to firmly establish, maintain and improve environmental management systems.

Concurrently, IHI is developing and manufacturing environment-related products that include waste-treatment and recycling systems, energy-saving systems, air-pollution-prevention systems, water-pollution-prevention systems, and new energy systems. Through the sale of these products, IHI is also vigorously promoting better communications with citizens and the government.

The Company adheres to the policy outlined below in the conduct of its environmental protection activities.

## Environmental Policy

In accordance with its management philosophy, IHI emphasizes the development of technologies and human resources that can contribute to environmental protection, and to the building of a society capable of sustainable development on a global scale. As a Company, IHI recognizes its responsibility to be in harmony with the environment, and incorporates these considerations at every stage of its business operations.

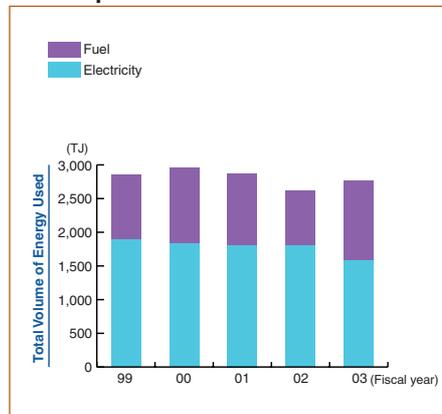
## Conduct Guidelines

To achieve the objectives of its basic environmental policy, IHI has established the following conduct guidelines, through which the Company strives continuously to improve the influence its operations have on the environment.

- (a) Comply with all relevant national and regional laws and regulations.
- (b) Offer products that contribute to the preservation of the environment on regional and global scales.
- (c) Incorporate environmental considerations into all stages of the development of new technologies and products, from R&D to design and readying a product for market.
- (d) Consistently guard against pollution, conserve energy and resources, reduce waste, strive to improve industrial processes, and give due consideration to reducing the environmental impact of our manufacturing operations.
- (e) In procurement of goods and materials, strive to obtain those that reduce environmental impact through conservation of energy and resources.
- (f) Foster concern with environmental issues and strive to raise environmental consciousness among employees.
- (g) Work for environmental protection on a regional level through participation in regional programs.
- (h) Disseminate information on environmental improvement activities both inside and outside the Company.
- (i) Clarify and pursue concrete objectives in accordance with the environmental management systems established within each division.

# IHI's Approach to Reducing Environmental Impact and Protecting the Environment through Production Activities

## Volume of Electricity and Fuel Consumption

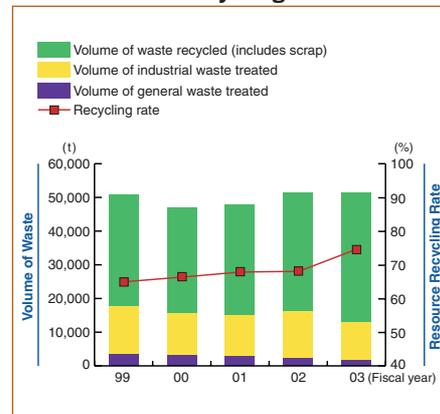


### Trends in Total Volume of Energy Used

Total energy consumption increased from the previous fiscal year in terms of electricity and fuels used, owing to the introduction of private electric generators to meet increasing demand for electricity due to the transfer of works and R&D functions to Yokohama District. Electricity consumption volume has not changed significantly over the past five years. Fuel consumption volume has increased from the operation of private electric generators.

*Note: Total energy consumption is the sum of purchased electricity (excluding private electric generation) and fuels consumed. Fuel consumption volume includes fuels for private electric generators.*

## Volume of Waste Generation, Treatment and Recycling

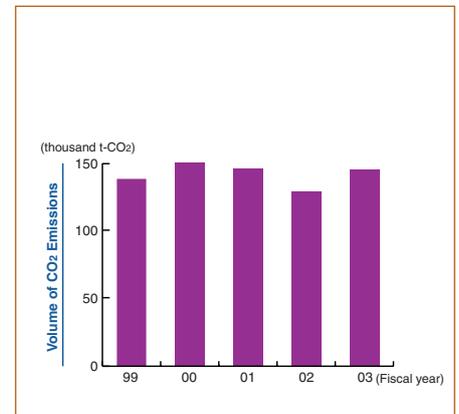


### Results in Treatment and Recycling Waste

The volume of waste generated by IHI's plants and offices in fiscal 2003 was largely unchanged from the previous fiscal year. As a result of efforts in recycling, however, the volume of general waste and industrial waste declined, and volume of recycled materials increased. Accordingly, the recycling ratio increased to 75%.

*Note: The volume of waste generated is the total volume of general waste and industrial waste. Scrap sold with a market value is also included.*

## Volume of CO2 Emissions



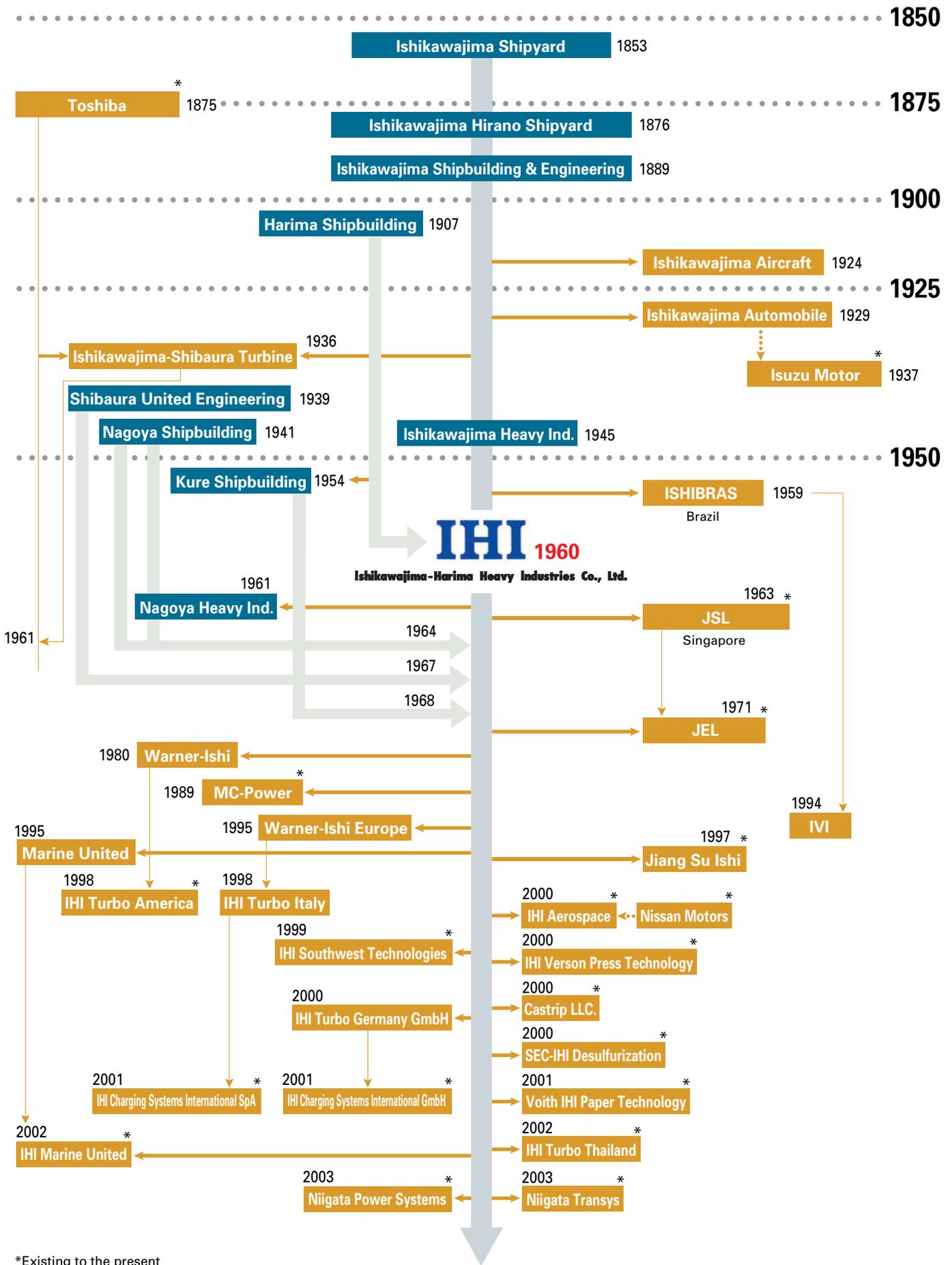
### Trends in Volume of CO2 Emissions

During fiscal 2003, CO2 emissions increased 12% compared with the previous fiscal year to approximately 145,000 tons (39,000 tons using carbon conversion), owing to the introduction of private electric generators and an increase in plant operations, despite efforts to conserve energy at plants and offices.

## Timeline of IHI's Approach to Environmental Protection

- June 1971: Organized the Central Committee for Pollution Countermeasures
- December 1971: Changed the name of this Committee to Central Committee for Environmental Adjustments
- April 1973: Established the Environmental Management Office at the Headquarters Administration Divisions
- September 1974: Agreement with labor union "Related to Environmental Protection"
- December 1974: Established the environmental management organizations at each work
- July 1978: Integrated the environmental management organizations in each district
- November 1983: Established the Energy Rationalization Committee
- September 1994: Formulated the "Approach to Environmental Protection" (Environmental Voluntary Plan)
- May 1996: Formulated the Basic Environmental Policy
- July 1996: Appointed Environmental Management Offices
- July 1996: Inaugurated the Companywide Environment Committee by integrating the Energy Rationalization Committee with the Committee for Environmental Adjustments
- July 1998: ISO 14001 certification obtained by the Yokohama District
- March 1999: ISO 14001 certification obtained by the Environmental and Plant Division, Project Center and Engineering Center
- December 1999: ISO 14001 certification obtained by the Musashi District
- May 2000: ISO 14001 certification obtained by the Aichi District
- June 2000: ISO 14001 certification obtained by the Aioi District
- June 2000: ISO 14001 certification obtained by the Kure District
- March 2001: Formulated Basic Principles for Green Purchasing
- September 2001: Issued first Environmental Report
- August 2002: Issued second Environmental Report

# History of IHI



\*Existing to the present

# Timeline of IHI

<b>1800s</b>	<p>1853 Established Ishikawajima Shipyard            76 Established Ishikawajima Hirano Shipyard            89 Founded Ishikawajima Shipyard, Ltd.            93 Changed Company name to Ishikawajima Shipbuilding &amp; Engineering Co., Ltd., Tokyo (Ishikawajima S&amp;E)</p>
<b>1900s</b>	<p>1907 Established Harima Shipbuilding &amp; Engineering Co., Ltd. (Harima S&amp;E); later merged with the Company            11 Completed business agreement with Shibaura Works (now Toshiba Corp.)            24 Established Ishikawajima Aircraft Manufacturing Co., Ltd. (which later became New Tachikawa Aircraft Co., Ltd.)            29 Established Ishikawajima Automobile Co. (later Isuzu Motors Ltd.) by spinning off the automobile manufacturing section            36 Established Ishikawajima-Shibaura Turbine Co., Ltd. (IST) as a joint venture with Toshiba in the production of land-based steam turbines            39 Founded Shibaura United Engineering Co., Ltd. (SUECO), to produce rolling mills, through a joint venture with Toshiba and United Engineering &amp; Foundry in the United States            41 Established Nagoya Shipbuilding Co., Ltd. (Nagoya Shipbuilding)            45 Changed Company name to Ishikawajima Heavy Industries Co., Ltd. (Ishikawajima Heavy Ind.)</p>
<b>1950s</b>	<p>1950 Inaugurated Toshio Doko as Company president            54 Founded Kure Shipbuilding &amp; Engineering Co., Ltd. (Kure S&amp;E); later merged with the Company            59 Established ISHIBRAS in a joint venture in Brazil</p>
<b>1960s</b>	<p>1960 Merged Ishikawajima Heavy Ind. and Harima S&amp;E; inaugurated Ishikawajima-Harima Heavy Industries Co., Ltd. (IHI)            63 Established Jurong Shipyard Ltd. (JSL) in a joint venture with the government of Singapore            64 Founded Heavy Machinery Works in Yokohama            64 Merged Nagoya Heavy Ind. and Nagoya Shipbuilding            64 Established Yokohama Shipyard for large-scale shipbuilding            67 Merged with SUECO            68 Merged with Kure S&amp;E            68 Established Yokohama Nuclear &amp; Chemical Components Works</p>
<b>1970s</b>	<p>1971 Established Jurong Engineering Private Ltd. (JEL) in Singapore in a joint venture with JSL            71 Founded IHI Engineering Australia Pty. Ltd. (IEA)            72 Established Ishikawajima Europe BV (IE) in the United Kingdom            73 Founded Chita Shipyard (now Aichi Works)            74 Established IHI Marine BV (IMBV) in the Netherlands            75 Established Felguera-IHI SA (FI) in Spain            77 Established IHI Marine Engineering Singapore Private Ltd.            77 Established IHI Inc. in the United States</p>
<b>1980s</b>	<p>1980 Established Warner-Ishi Corp. (WI) in a joint venture with Borg-Warner Automotive Inc. in the United States            82 Established IHI (HK) Limited (IHL) in Hong Kong            88 Established Diesel United, Ltd. in a joint venture with Sumitomo Heavy Industries Ltd. (SHI)            89 Participated in the capitalization of M-C Power Corp. (MCP) in the United States</p>
<b>1990s</b>	<p>1992 Established IHI Europe Ltd. (IEL) in the United Kingdom            95 Established IHI Technical Consulting Co., Ltd. (ITECH) in Taiwan            95 Founded Marine United Inc. (MU), which performs engineering for ships and naval vessels with SHI            95 Inaugurated Industrias Verolme-Ishibras S.A. (IVI) in a joint venture between ISHIBRAS and Emaq-Verolme Estaleiros            95 Founded Warner-Ishi Europe S.p.A. (WIE) in Italy            96 Founded Environment &amp; Plant operations            96 Established IHI Philippines Inc. (IPI) in the Philippines            97 Established Jiang Su Ishi Turbo Company Ltd. (JIT) in China            98 Established the Environmental Technical Center            98 Established a jet engine and gas turbine component factory in Soma            99 Established IHI Southwest Technologies, Inc. in the United States to undertake nondestructive inspections            99 Established two subsidiaries to engage in industrial waste processing business</p>
<b>2000s</b>	<p>2000 Established joint venture with The Broken Hill Proprietary Company Limited (BHP) of Australia and Nucor Corporation of the United States to license strip-casting technology            00 Purchased Nissan Motor's Aerospace and Defense Divisions and established IHI Aero Space Co., Ltd.            00 Integrated three construction companies into Ishikawajima Plant Construction Co., Ltd.            00 Established IHI Verson Press Technology LLC, in the United States            00 Established IHI Turbo Germany GmbH, in Germany            00 Established SEC-IHI De-sulfurization Process Co., Ltd. in China            01 Established joint venture Voith IHI Paper Technology Co., Ltd. in Japan            01 Established joint venture IHI Charging Systems International GmbH in Germany            01 Beijing Municipal/Ishikawajima Shield Engineering Company Limited, a joint venture for the manufacture and sale of shield tunneling machines, established in Beijing            02 IHI Turbo Thailand, a joint venture for the manufacture and sale of turbochargers, established in Thailand            02 Project formulated for redevelopment of land at site of former plant in Toyosu district of Tokyo            02 Shipbuilding &amp; Offshore Operations spun off as a separate company, IHI Marine United Inc.            03 Established Niigata Power Systems Co., Ltd. and Niigata Transys Co., Ltd. to take over and carry on a portion of the business of Niigata Engineering Co., Ltd.            03 Aerospace development operations integrated with IHI Aerospace Co., Ltd.</p>

## Logistics Systems and Structures Operations



Container cranes



Continuous unloaders



Automated warehousing systems



Parking systems



Bridges



Gates



Shield tunneling machines



Automated people movers

### Material handling systems

- Container cranes
- Unloaders
- Stackers
- Reclaimers
- Coal handling systems
- All-weather bulk material handling systems
- Electric overhead traveling cranes
- Level luffing cranes
- Jib climbing cranes

### Physical distribution and factory automation systems

- Automated warehousing systems
- Storage systems
- Conveyor transfer systems
- Sorting systems
- Equipment for physical distribution systems
- Transfer systems for clean environments

### Parking systems and products for civil use

- Parking systems
- Moving walkways

### Bridges and steel structures

- Bridges
- Pedestrian bridges
- Steel structures for rivers
- Steel structures for dams
- Hanger dock systems
- Boarding bridges
- Floating breakwaters
- Steel structures for buildings

### Tunneling machinery

- Shield tunneling machines
- Automated segment assembly systems

### Construction materials

- Tunnel wall reinforced concrete segments

### Transportation systems

- Automated mover systems
- Low-floor light-rail vehicles
- Low-floor light-rail transit systems
- Rolling stock
- Snow plow machinery

## Industrial Machinery Operations



Blast furnace plants



Vacuum heat treatment furnaces



Paper making machines



Transfer feed presses



LNG reciprocating compressors



Automotive turbochargers



Turbo compressors



Screw decanter centrifuges

### Iron and steel manufacturing equipment

- Blast furnaces
- Rolling mills
- Industrial furnaces
- Pulp and paper production plants
- Presses
- Rubber/plastic forming machines
- New material manufacturing facilities
- Vacuum heat treatment facilities
- Pumps
- Compressors
- Blowers

### Mass-produced machinery

- Turbochargers
- Separators
- Filters
- Dewatering equipment
- Compressors
- Refrigerators
- Tunnel ventilation fans
- Centrifuges
- Dish and utensil washers

## Energy and Plant Operations



Boilers for power plants



Wind power generation systems



LNG storage tanks



Ion shower doping systems



Reactor pressure vessels



Air pollution prevention systems



Pharmaceutical plants



Gas engines

## Aero-Engine and Space Operations



V2500 turbofan engines



GE90 turbofan engines



M-V rocket (©ISAS)



International space station (©NASDA)



CF34 turbofan engines



H-IIA rocket (©NASDA)



Liquid hydrogen turbopumps



Japanese experiment module (KIBO) (©NASDA)

### Energy

- Boilers for power plants
- Industrial boilers
- Fluidized-bed combustion boilers
- Waste-heat recovery boilers
- Coal gasification combined cycle power facilities
- Gas turbine power generation systems
- Diesel power generation systems
- Cogeneration systems
- Wind power generation systems
- Fuel cells
- Solar cell systems

### Components for nuclear power plants

- Components for nuclear power plants
- Radioactive waste management systems
- Primary containment vessels
- Reactor pressure vessels

### Environmental control and disaster prevention systems

- Solid waste treatment systems
- Critical water and hydrothermal reaction equipment
- Air pollution prevention systems
- Wastewater treatment systems
- Noise reduction systems
- Seismic isolation floors
- Mass damper systems
- Pollution prevention ships

### Storage systems and process plants

- Storage facilities
- Oil and gas processing plants
- Chemical plants
- Pharmaceutical plants
- Cement plants
- Ultrafine grinding mills
- Chemical plant equipment
- Cooling towers
- Desalination plants

### Semiconductor, LCD panel equipment and R&D facilities

- Semiconductor and LCD panel equipment
- Great variety of robots
- Great variety of simulators
- Control systems
- Failure diagnosis systems
- Preventative maintenance systems
- Optical and beam technology equipment
- R&D facilities
- Experiment facilities

### Power systems and others

- Diesel engines
- Gas engines
- Gas turbines
- Generating sets
- Steerable propellers

### Jet engines

- Turbofan engines
- Turboprop engines
- Turboshaft engines
- Turbojet engines
- Jet engine maintenance
- Jet engine test cells
- Jet engine parts

### Space development

- Rocket propulsion systems
- Rocket control systems
- Satellite propulsion systems
- Satellite control systems
- Equipment for utilization of space environments
- Space station-related equipment
- Ground test facilities
- Ground support facilities

## Shipbuilding and Offshore Operations

## Other Operations



Very large crude oil carriers



SPB-type LNG carriers



Diesel engines



Agricultural machines



Container ships



Bulk carriers



Refuse compactors



Mini excavators



Passenger ships



Naval vessels



Crawler cranes



Crawler carriers



Side drag suction hopper dredgers with spilt oil recovery devices



LPG floating storage offloading units



Ozone sterilizing lockers



Computer systems

### Ships (Shipbuilding)

- Oil tankers
- LNG/LPG carriers
- Container ships
- Bulk carriers
- Passenger ships and ferries
- Naval vessels
- Coast guard ships
- Research vessels
- Work vessels
- Dredgers
- Oil recovery ships

### Ship repairs

### Offshore structures

- Offshore development equipment
- LPG/LNG FPSO units
- LPG FSO units

### Diesel engines

- Diesel engines

### Construction machinery

- Hydraulic power shovels
- Truck/crawler cranes
- Crawler carriers
- Batcher plants
- Mobile concrete pumps
- Ozone sterilizers

### Agricultural machinery and others

- Agricultural machines
- Refuse compactors

### Financing and service industry

### Marine transport

### Others

## Parent Company



### Soma Aero-Engine Plant

Products & services: Parts of jet engines and gas turbines  
 Certificates: ISO 14001, Air Agency Certificate (Repair Station) (FAA) and JIS Q 9100 (including ISO 9001)



### Tanashi Aero-Engine Plant

Products & services: Parts of jet engines, gas turbines and space development equipment  
 Certificates: ISO 14001 and JIS Q 9100 (including ISO 9001)



### Mizuho Aero-Engine Plant

Products & services: Assembly and overhauling of jet engines, gas turbines and space development equipment  
 Certificates: ISO 14001, Air Agency Certificate (Repair Station) (FAA) (JAA) and JIS Q 9100 (including ISO 9001)



### Sunamachi Works

Products & services: Bridges, gates, steel structures, offshore structures and airport facilities  
 Certificate: ISO 9001



### Yokohama Nuclear & Chemical Components Works

Products & services: Reactor pressure vessels, containment vessels, heat exchangers for nuclear power plants and reactors and towers for chemical plants  
 Certificates: N, NA, NPT, NS, S, U, U2 (ASME), ISO 9001 and ISO 14001



### Yokohama Machinery Works

Products & services: Rolling mills, presses, pulp, paper and plastic machinery and rotating machinery  
 Certificates: ISO 9001 and ISO 14001



### Aichi Works

Products & services: Bridges, deck machinery, steel structures and shield tunneling machines  
 Certificates: ISO 9001, ISO 14001, AISC (Cbr, F, P1) and Deck Cranes Manufacturers (NK)



### Aioi Works

Products & services: Boilers, pressure vessels for chemical plants and prefabricated piping systems  
 Certificates: ISO 9001, ISO 14001 and S, U, U2 (ASME)



### Aioi Workshop

Products & services: Steel structures and offshore structures  
 Certificate: ISO 9001



### Aioi Casting Workshop

Products & services: Casting products for machinery  
 Certificates: Casting products manufacturer (LRS, NK, DNV, CR, GL)



### Kure Aero-Engine & Turbo Machinery Plant

Products & services: Parts of gas turbine power plants, jet engines and gas turbines  
 Certificates: ISO 14001, Air Agency Certificate (Repair Station) (FAA) and JIS Q 9100 (including ISO 9001)



### Kure-Shingu Works

Products & services: Bridges, gates, steel structures and equipment for chemical plants  
 Certificates: ISO 9001 and ISO 14001

## Affiliates



**IHI Marine United**  
Yokohama Shipyard  
Products & services: Naval vessels, cruise ships, special cargo vessels and repairing  
Certificates: ISO 9001 and ISO 14001



**IHI Marine United**  
Kure Shipyard  
Products & services: Shipbuilding, conversion and repairing  
Certificates: ISO 9001 and ISO 14001



**IHI Aerospace**  
Tomioka Plant  
Products & services: Launch vehicles, other space equipment systems and defense rocket systems  
Certificates: ISO 9001, JIS Z 9901 and ISO 14001



**Niigata Power Systems**  
Ohta Plant  
Products & services: Diesel engines, gas engines, dual-fuel engines and Z-peller propulsion systems  
Certificates: ISO 9001 and ISO 14001



**Ishikawajima Shibaura Machinery**  
Matsumoto Factory  
Products & services: Agricultural machinery and engines  
Certificates: ISO 9001 and ISO 14001



**Ishikawajima Mass-Produced Machinery**  
Tatsuno Works  
Products & services: Turbochargers, pressors and aircraft parts  
Certificates: QS 9000 and ISO 14001



**IHI Construction Machinery**  
Yokohama Plant  
Products & services: Mini excavators, hydraulic shovels, crawler cranes, batching plants and others  
Certificate: ISO 9001



**Niigata Transys**  
Niigata Transcom Plant  
Products & services: Rolling stock, automated people movers, light-rail vehicles and snow plows  
Certificate: ISO 9001



**Star Farm Machinery Mfg.**  
Chitose Works  
Products & services: Hay and grass harvesting equipment



**Ishikawajima Iwakuni Seisakusho**  
Iwakuni Works  
Products & services: Blast furnace shells and tops, vacuum furnaces, new material producing furnaces and electric arc furnaces  
Certificate: ISO 9001



**Ishikawajima Industrial Machinery**  
Motomiya Works  
Products & services: Stock preparation machinery and systems  
Certificate: ISO 9001



**PT Cilegon Fabricators (INDONESIA)**  
Products & services: Boilers, steel structures, container cranes and systems and pressure vessels  
Certificates: ISO 9001 and S, U, PP (ASME)



**IHI Turbo America (U.S.A.)**  
Products & services: Automotive turbochargers  
Certificates: ISO 9001 and QS 9000



**IHI Turbo Thailand (THAILAND)**  
Products & services: Automotive turbochargers



**IHI Charging Systems International (ITALY)**  
Products & services: Small-size turbochargers for passenger cars and light commercial vehicles  
Certificates: ISO 9001, AUSO, QS 9000 and VDA 6.1



**Jiang Su Ishi Turbo (CHINA)**  
Products & services: Automotive turbochargers  
Certificate: ISO 9002

## Offices

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## Main Overseas Subsidiaries

### LONDON

**IHI Europe Ltd.**  
Floor 9A, No. 1 Minster Court,  
Mincing Lane, London EC3R 7YA, U.K.  
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### LONDON

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Mincing Lane, London EC3R 7YA, U.K.  
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FAX: +44-20-7626-0078

### ROTTERDAM

**IHI Marine B.V.**  
Glashaven 24, 3011 XJ Rotterdam,  
THE NETHERLANDS  
TEL: +31-10-411-6406  
FAX: +31-10-411-6412

### HEIDELBERG

**IHI Charging Systems International GmbH**  
Haberstrasse 24, 69126 Heidelberg, GERMANY  
TEL: +49-6221-3096-110  
FAX: +49-6221-3096-111

### HEIDELBERG

**IHI Press Technology GmbH**  
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### LOMBARDONE

**IHI Charging Systems International SpA**  
Via Regina 25, 23870 Cernusco Lombardone (LC),  
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FAX: +39-039-9284-675

### SINGAPORE

**IHI Marine Engineering (Singapore) Pte. Ltd.**  
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**IHI Philippines, Inc.**  
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### TAIPEI

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### CHONBURI

**IHI Turbo (Thailand) Co., Ltd.**  
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FAX: +1-212-599-8111

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FAX: +1-212-599-8111

### NEW YORK

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FAX: +1-212-599-8111

### DETROIT

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755 West Big Beaver Road, Top of Troy,  
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FAX: +1-248-244-9062

### SHELBYVILLE

**IHI Turbo America Co.**  
Route 16 West, R. R. 3, Box 36, Shelbyville,  
IL 62565-0580, U.S.A.  
TEL: +1-217-774-9571  
FAX: +1-217-774-3834

### SAN ANTONIO

**IHI Southwest Technologies Inc.**  
6220 Culebra Road, Suite 177,  
San Antonio, TX, 78238-5166, U.S.A.  
TEL: +1-210-256-4100  
FAX: +1-210-521-2311

### RIO DE JANEIRO

**Ishikawajima-Harima Sul-America Ltda.**  
Av. Presidente Antonio Carlos, 607 Sobreloja-Centro-  
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TEL: +55-21-2533-6671  
FAX: +55-21-2533-6193



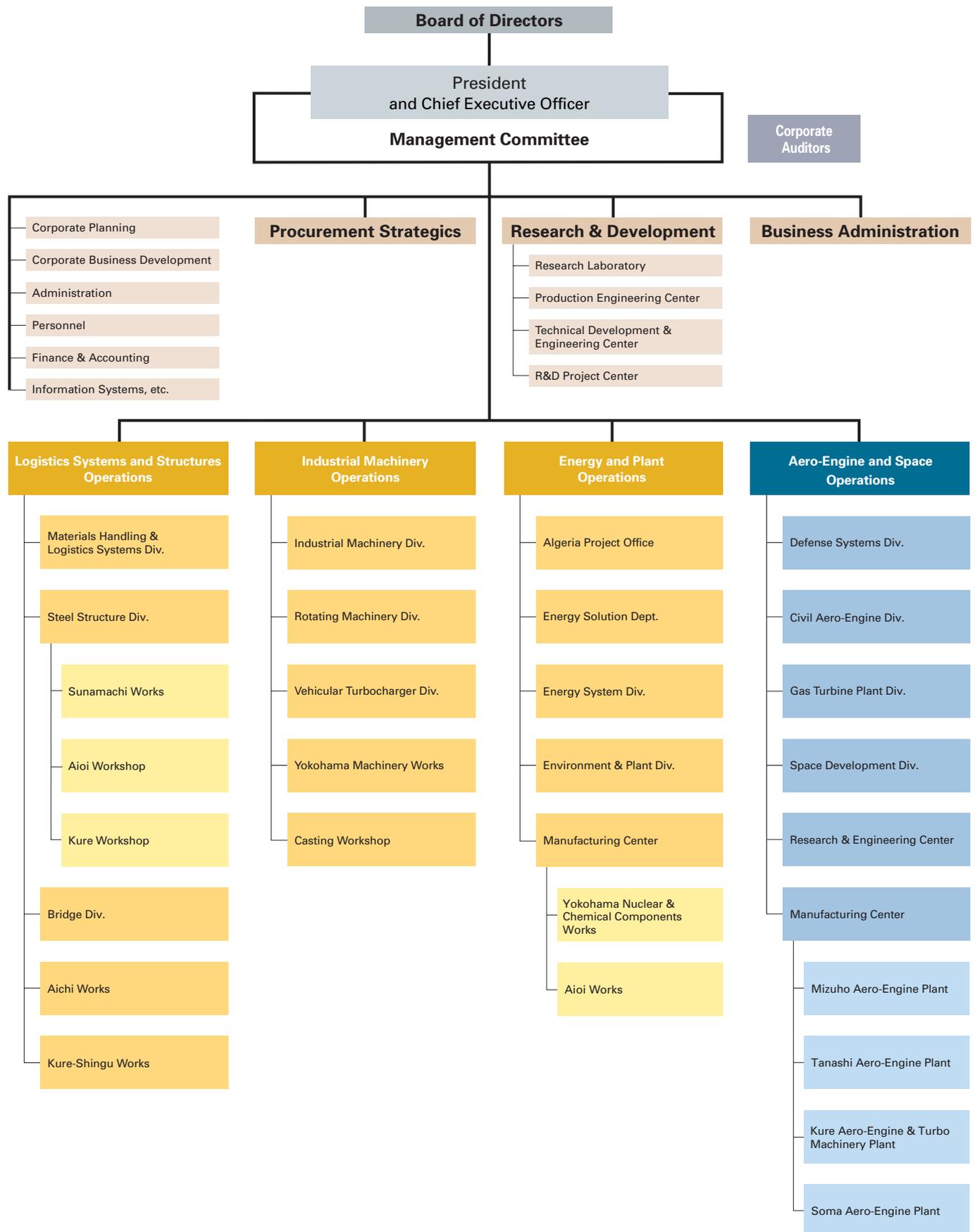
Notes: Unmarked companies are consolidated subsidiaries

☆: Non-consolidated subsidiary

★: Affiliated company (Underlined companies are accounted for by the equity method)

# Organization

(As of July 1, 2003)



# Corporate Officers

(As of June 27, 2003)

## President



Mototsugu Ito  
(Chief Executive Officer)

## Executive Vice Presidents



Dogi So  
(Senior Executive Officer)



Jyunichi Hamanaka

## Board Directors



Nobuhiro Shimizu  
(Managing Executive Officer)



Kazuo Kanaya  
(Managing Executive Officer)



Hiroshi Katayama  
(Managing Executive Officer)



Yoshikazu Kobayashi  
(Managing Executive Officer)



Isao Nakao  
(Managing Executive Officer)



Yasuo Shinohara  
(Managing Executive Officer)



Teiichi Tamaki  
(Managing Executive Officer)



Yasuhiro Inagawa  
(Managing Executive Officer)



Fumio Sato

## Corporate Auditors

Koichi Ichida

Katsuji Minato

Koichiro Ejiri

Sugichiro Watari

Takeo Inokuchi

## Executive Officers

Mototsugu Ito

Dogi So

Nobuhiro Shimizu

Yasuo Shinohara

Takayasu Kato

Hirotohi Kiyofuji

Kazuo Kanaya

Teiichi Tamaki

Hiroyoshi Hiraga

Yusuke Tasaka

Hiroshi Katayama

Yasuhiro Inagawa

Hiromasa Omura

Yasuyuki Watanabe

Yoshikazu Kobayashi

Yukiya Nakagawa

Morihiko Kawabe

Motoki Yoshinaga

Isao Nakao

Tsuguharu Asayama

Sakae Ando

# Financial Section

## Consolidated Six-Year Summary

	Millions of yen					
	2003	2002	2001	2000	1999	1998
<b>For the year:</b>						
Net sales	¥1,019,061	¥1,082,402	¥1,114,817	¥ 995,063	¥1,053,896	¥1,089,321
Cost of sales	878,260	932,415	951,290	878,067	909,376	917,107
Gross profit	140,801	149,987	163,527	116,996	144,520	172,214
Operating income (loss)	24,640	27,233	39,947	(5,825)	17,895	42,144
(Loss) income before income taxes and minority interests	(6,521)	11,487	18,148	(127,630)	14,236	33,429
Net (loss) income	(9,672)	5,539	9,205	(78,998)	5,818	15,579
<b>At year-end:</b>						
Total assets	¥1,381,240	¥1,422,110	¥1,481,841	¥1,413,453	¥1,322,216	¥1,334,800
Current assets	875,264	886,738	943,852	985,306	958,391	978,518
Net property, plant and equipment	287,096	307,677	295,775	275,738	268,711	266,607
Current liabilities	741,404	791,496	825,103	848,397	823,809	901,889
Long-term liabilities	447,870	427,087	439,179	386,221	270,815	203,300
Total shareholders' equity	171,323	187,589	201,349	162,796	210,801	212,960
<b>Amounts per share (yen):</b>						
Net (loss) income	¥ (7.57)	¥ 4.27	¥ 7.09	¥ (60.84)	¥ 4.48	¥ 12.00
Cash dividends	1.50	3.00	3.00	—	6.00	6.00
Shareholders' equity	131.96	144.47	155.06	125.37	162.34	164.01
<b>Other data:</b>						
Number of employees	23,575	22,980	24,311	24,363	24,719	—
Number of shares issued (millions)	1,298	1,298	1,298	1,298	1,298	1,298
<b>Ratios:</b>						
Return on average assets (%)	(0.69)	0.38	0.64	(5.78)	0.44	1.17
Return on average equity (%)	(5.39)	2.85	5.06	(42.29)	2.75	7.45
Total shareholders' equity ratio (%)	12.40	13.19	13.59	11.52	15.94	15.95

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35	Consolidated Statements of Shareholders' Equity		
36	Consolidated Statements of Cash Flows		

## Operating Results

During the fiscal year under review, IHI's consolidated net sales declined 5.9% to ¥1,019.1 billion. Although sales increased in logistics systems and structures operations, aero-engine and space operations, and other operations, this growth was unable to compensate for sales declines in industrial machinery operations, energy and plant operations, and shipbuilding and offshore operations. Overseas sales decreased 3.0% to ¥239.8 billion, representing 23.5% of consolidated net sales. Domestic sales fell 6.7% to ¥779.3 billion, accounting for 76.5% of consolidated net sales, compared with 77.2% last term.

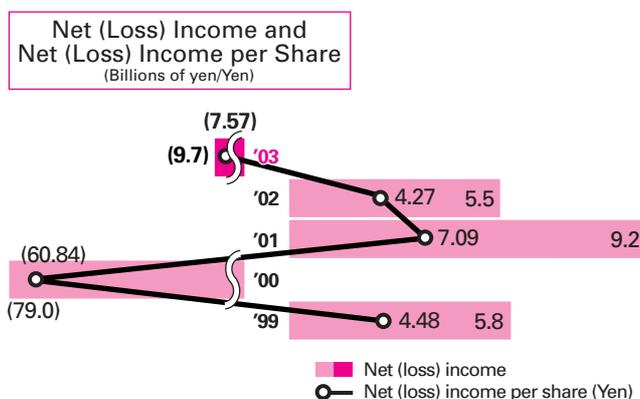
Cost of sales as a percentage of net sales rose from 86.1% in the previous fiscal year to 86.2%. Gross profit, however, decreased 6.1% to ¥140.8 billion. Selling, general and administrative expenses declined 5.4% to ¥116.2 billion, and as a percentage of net sales were nearly constant at 11.4%, compared with 11.3% in the previous term. As a result of the foregoing, operating income fell 9.5% to ¥24.6 billion.

Turning to the performance of industry segments, sales of Logistics Systems and Structures Operations totaled ¥200.6 billion, representing 19.7% of net sales. This segment posted operating income of ¥4.0 billion. In Industrial Machinery Operations, sales amounted to ¥91.2 billion, making up 9.0% of net sales. Operating loss for the segment was ¥1.3 billion. In

Energy and Plant Operations, sales were ¥260.6 billion, or 25.5% of net sales. Operating income for the segment was ¥2.2 billion. Aero-Engine and Space Operations recorded sales of ¥239.1 billion, accounting for 23.5% of net sales. Operating income for the segment was ¥10.2 billion. Sales in the Shipbuilding and Offshore Operations segment were ¥92.9 billion, or 9.1% of net sales. Operating income totaled ¥4.7 billion. Other Operations turned in sales of ¥134.6 billion, which was 13.2% of net sales. Operating income in this segment was ¥5.2 billion.

Interest expense exceeded interest and dividend income by ¥2.0 billion, down from ¥2.3 billion in the previous fiscal year. Other, net, expenses grew during the term under review, increasing from ¥13.4 billion in the previous fiscal year to ¥29.1 billion. The Company recorded loss before income taxes and minority interests of ¥6.5 billion, compared with income before income taxes and minority interests of ¥11.5 billion in the previous fiscal year.

Current income taxes rose 4.2% to ¥6.9 billion, and deferred income taxes of ¥3.5 billion were recorded, up from ¥0.6 billion in the previous term. IHI posted a net loss of ¥9.7 billion, compared with net income of ¥5.5 billion in the previous term. Consequently, net loss per share was ¥7.57. Cash dividends for the fiscal year under review were ¥1.50 per share, or half that of the previous fiscal year.



## Cash Flows

Net cash used in operating activities was ¥6.1 billion. Principal uses of cash included notes and accounts payable of ¥25.0 billion.

Net cash used in investing activities was ¥46.8 billion, up from ¥29.6 billion in the previous fiscal year. The largest use of cash was purchases of property, plant and equipment and intangible fixed assets of ¥48.9 billion, and the largest source of cash was proceeds from sale of property, plant and equipment of ¥7.5 billion.

Net cash provided by financing activities totaled ¥23.0 billion. The most significant sources of cash were proceeds from issuance of long-term debt of ¥57.2 billion, and proceeds from issuance of debentures of ¥30.0 billion. The principal use of cash was repayment of long-term debt of ¥35.4 billion.

As a result of the factors outlined above, cash and cash equivalents, end of year, totaled ¥83.8 billion.

## Financial Position

IHI's basic financial strategy is to maintain a sound financial position by covering investments with funds from operating activities, supplemented by external financing on a needs basis.

IHI made capital expenditures of ¥49.3 billion during the fiscal year under review. Depreciation and amortization totaled

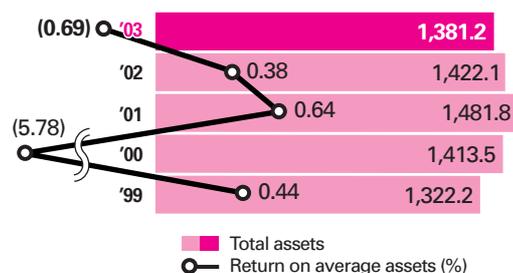
¥35.6 billion, and interest-bearing debt (defined as short-term loans, current portion of long-term loans and debentures, and long-term loans and debentures) rose 0.6% to ¥452.9 billion.

Cash and time deposits fell 16.4% to ¥77.5 billion, while marketable securities were reduced 85.0% to ¥2.0 billion, and deferred income taxes in current assets declined 15.0% to ¥17.7 billion. However, trade receivables increased 7.9% to ¥345.6 billion, and together with the aforementioned reduction in marketable securities and an increase in the allowance for doubtful receivables, there was a 1.3% contraction in total current assets to ¥875.3 billion.

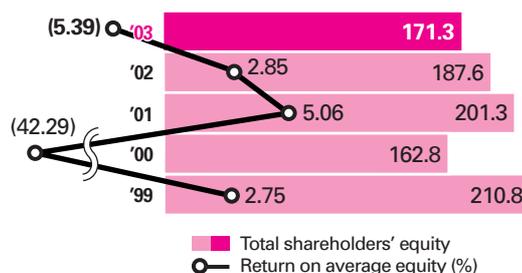
Net property, plant and equipment declined 6.7% to ¥287.1 billion. Total investments fell 6.3% to ¥199.3 billion as a result of a decrease in investment securities. Total assets, as a result of the above developments, decreased 2.9% to ¥1,381.2 billion.

Total current liabilities fell 6.3% to ¥741.4 billion, chiefly the result of declines in short-term loans and accrued expenses, and the absence of commercial paper. However, total long-term liabilities grew 4.9% to ¥447.9 billion, owing mainly to an increase in long-term loans and debentures. Total shareholders' equity decreased 8.7% to ¥171.3 billion, due primarily to a decrease in retained earnings.

**Total Assets and Return on Average Assets**  
(Billions of yen/%)



**Total Shareholders' Equity and Return on Average Equity**  
(Billions of yen/%)



Note: Figures in the Financial Review are in billions of yen rounded to the nearest first decimal place and exclude intersegment sales and transfers.

# Consolidated Balance Sheets

March 31, 2003 and 2002  
Ishikawajima-Harima Heavy Industries Co., Ltd., and Consolidated Subsidiaries

	Millions of yen		Thousands of U.S. dollars (Note 1)
	2003	2002	2003
<b>ASSETS</b>			
<b>Current assets:</b>			
Cash and time deposits (Note 7)	¥ 77,503	¥ 92,747	\$ 644,784
Marketable securities (Note 3)	2,037	13,544	16,947
Trade receivables (Note 7)	345,615	320,426	2,875,333
Less allowance for doubtful receivables	(3,190)	(3,132)	(26,539)
Inventories (Notes 4 and 7)	385,539	378,728	3,207,479
Deferred income taxes (Note 9)	17,663	20,775	146,947
Other current assets	50,097	63,650	416,779
Total current assets	875,264	886,738	7,281,730
<b>Property, plant and equipment (Notes 5 and 7):</b>			
Buildings and structures	291,713	285,719	2,426,897
Machinery and equipment	384,314	413,196	3,197,288
Land (Note 13)	91,799	84,956	763,719
Construction in progress	1,628	7,522	13,544
Less accumulated depreciation	(482,358)	(483,716)	(4,012,962)
Net property, plant and equipment	287,096	307,677	2,388,486
<b>Intangible assets</b>	<b>19,553</b>	15,072	<b>162,670</b>
<b>Investments:</b>			
Investment securities (Notes 3 and 7)	96,480	118,014	802,662
Deferred income taxes (Note 9)	60,703	48,358	505,017
Other	55,135	60,369	458,694
Less allowance for doubtful receivables	(12,991)	(14,118)	(108,078)
Total investments	199,327	212,623	1,658,295
<b>Total assets</b>	<b>¥1,381,240</b>	¥1,422,110	<b>\$11,491,181</b>

The accompanying notes to the consolidated financial statements are an integral part of these statements.

	Millions of yen		Thousands of U.S. dollars (Note 1)
	2003	2002	2003
<b>LIABILITIES AND SHAREHOLDERS' EQUITY</b>			
<b>Current liabilities:</b>			
Trade payables	¥ 291,111	¥ 299,209	\$ 2,421,888
Short-term loans (Notes 6 and 7)	157,610	172,494	1,311,231
Current portion of long-term loans and debentures (Notes 6 and 7)	72,058	62,329	599,484
Commercial paper (Note 6)	—	10,000	—
Advances from customers	126,143	132,703	1,049,443
Accrued income taxes	5,818	3,568	48,403
Accrued expenses (Note 8)	44,766	55,451	372,429
Reserve for losses on sales contracts	1,160	2,483	9,651
Other current liabilities	42,738	53,259	355,557
Total current liabilities	741,404	791,496	6,168,086
<b>Long-term liabilities:</b>			
Long-term loans and debentures (Notes 6 and 7)	223,265	215,292	1,857,446
Allowance for employees' retirement benefits (Note 17)	157,236	165,480	1,308,120
Deferred tax liabilities from revaluation of land (Note 13)	4,092	4,189	34,043
Consolidation adjustment accounts	1,692	—	14,077
Other long-term liabilities	61,585	42,126	512,354
Total long-term liabilities	447,870	427,087	3,726,040
<b>Contingent liabilities (Note 11)</b>			
Minority interests in consolidated subsidiaries	20,643	15,938	171,739
<b>Shareholders' equity:</b>			
Common stock			
Authorized: 3,300,000,000 shares			
Issued: 1,298,495,152 shares	64,925	64,925	540,141
Capital surplus	15,687	15,597	130,508
Retained earnings	77,508	89,725	644,825
Unrealized holding gain on other securities	14,778	18,867	122,945
Foreign exchange translation adjustments	(1,551)	(1,523)	(12,903)
Less treasury stock, at cost	(24)	(2)	(200)
Total shareholders' equity	171,323	187,589	1,425,316
<b>Total liabilities and shareholders' equity</b>	<b>¥1,381,240</b>	<b>¥1,422,110</b>	<b>\$11,491,181</b>

# Consolidated Statements of Operations

Years ended March 31, 2003 and 2002  
Ishikawajima-Harima Heavy Industries Co., Ltd., and Consolidated Subsidiaries

	Millions of yen		Thousands of
	2003	2002	U.S. dollars (Note 1)
			<b>2003</b>
<b>Net sales</b>	<b>¥1,019,061</b>	¥1,082,402	<b>\$8,478,045</b>
<b>Cost of sales</b> (Note 10)	<b>878,260</b>	932,415	<b>7,306,656</b>
Gross profit	<b>140,801</b>	149,987	<b>1,171,389</b>
<b>Selling, general and administrative expenses</b> (Note 10)	<b>116,161</b>	122,754	<b>966,397</b>
Operating income	<b>24,640</b>	27,233	<b>204,992</b>
<b>Other income (expense):</b>			
Interest and dividend income	<b>3,518</b>	3,486	<b>29,268</b>
Interest expense	<b>(5,562)</b>	(5,807)	<b>(46,273)</b>
Other, net (Note 12)	<b>(29,117)</b>	(13,425)	<b>(242,238)</b>
(Loss) income before income taxes and minority interests	<b>(6,521)</b>	11,487	<b>(54,251)</b>
<b>Income taxes:</b>			
Current	<b>(6,923)</b>	(6,644)	<b>(57,596)</b>
Deferred	<b>3,454</b>	625	<b>28,735</b>
(Loss) income before minority interests	<b>(9,990)</b>	5,468	<b>(83,112)</b>
<b>Minority interests in consolidated subsidiaries</b>	<b>318</b>	71	<b>2,646</b>
Net (loss) income	<b>¥ (9,672)</b>	¥ 5,539	<b>\$ (80,466)</b>
		Yen	U.S. dollars (Note 1)
<b>Amounts per share:</b>			
Net (loss) income	<b>¥ (7.57)</b>	¥ 4.27	<b>\$ (0.063)</b>
Cash dividends	<b>1.50</b>	3.00	<b>0.012</b>

The accompanying notes to the consolidated financial statements are an integral part of these statements.

# Consolidated Statements of Shareholders' Equity

Years ended March 31, 2003 and 2002  
Ishikawajima-Harima Heavy Industries Co., Ltd., and Consolidated Subsidiaries

	(Thousands)		(Millions of yen)				
	Number of shares of common stock	Common stock	Capital surplus	Retained earnings	Unrealized holding gain on other securities	Foreign exchange translation adjustments	Treasury stock, at cost
<b>Balance at March 31, 2001</b>	1,298,495	¥64,925	¥15,756	¥88,073	¥34,509	¥(1,914)	¥ 0
Net income for the year	—	—	—	5,539	—	—	—
Transfer from capital surplus	—	—	(159)	159	—	—	—
Decrease resulting from inclusion of subsidiaries in consolidation	—	—	—	(1)	—	—	—
Cash dividends	—	—	—	(3,895)	—	—	—
Change for the year	—	—	—	—	(15,642)	391	—
Purchase of treasury stock	—	—	—	—	—	—	(2)
Bonuses to directors and corporate auditors	—	—	—	(150)	—	—	—
<b>Balance at March 31, 2002</b>	1,298,495	64,925	15,597	89,725	18,867	(1,523)	(2)
Net loss for the year	—	—	—	(9,672)	—	—	—
Capitalization of land revaluation excess	—	—	90	—	—	—	—
Increase resulting from inclusion of subsidiaries in consolidation	—	—	—	50	—	—	—
Decrease resulting from inclusion of subsidiaries in consolidation	—	—	—	(304)	—	—	—
Decrease resulting from inclusion of affiliates accounted for by the equity method	—	—	—	(192)	—	—	—
Cash dividends	—	—	—	(1,947)	—	—	—
Change for the year	—	—	—	—	(4,089)	(28)	—
Purchase of treasury stock	—	—	—	—	—	—	(22)
Bonuses to directors and corporate auditors	—	—	—	(152)	—	—	—
<b>Balance at March 31, 2003</b>	<b>1,298,495</b>	<b>¥64,925</b>	<b>¥15,687</b>	<b>¥77,508</b>	<b>¥14,778</b>	<b>¥(1,551)</b>	<b>¥(24)</b>

(Thousands of U.S. dollars) (Note 1)

<b>Balance at March 31, 2002</b>	\$540,141	\$129,759	\$746,464	\$156,963	\$(12,670)	\$ (17)
Net loss for the year	—	—	(80,466)	—	—	—
Capitalization of land revaluation excess	—	749	—	—	—	—
Increase resulting from inclusion of subsidiaries in consolidation	—	—	416	—	—	—
Decrease resulting from inclusion of subsidiaries in consolidation	—	—	(2,529)	—	—	—
Decrease resulting from inclusion of affiliates accounted for by the equity method	—	—	(1,597)	—	—	—
Cash dividends	—	—	(16,198)	—	—	—
Change for the year	—	—	—	(34,018)	(233)	—
Purchase of treasury stock	—	—	—	—	—	(183)
Bonuses to directors and corporate auditors	—	—	(1,265)	—	—	—
<b>Balance at March 31, 2003</b>	<b>\$540,141</b>	<b>\$130,508</b>	<b>\$644,825</b>	<b>\$122,945</b>	<b>\$(12,903)</b>	<b>\$(200)</b>

The accompanying notes to the consolidated financial statements are an integral part of these statements.

# Consolidated Statements of Cash Flows

Years ended March 31, 2003 and 2002  
Ishikawajima-Harima Heavy Industries Co., Ltd., and Consolidated Subsidiaries

	Millions of yen		Thousands of U.S. dollars (Note 1)
	2003	2002	2003
<b>Operating Activities:</b>			
(Loss) income before income taxes and minority interests	¥ (6,521)	¥ 11,487	\$ (54,251)
Depreciation and amortization	35,582	35,552	296,023
Amortization of long-term prepaid expenses	4,500	3,567	37,438
Increase in allowance for bad debts	61	1,299	507
Decrease in allowance for employees' bonuses	(2,528)	(1,275)	(21,032)
Decrease in reserve for guaranteed contracts	(1,556)	(1,074)	(12,945)
(Decrease) increase in accrued losses on sales contracts	(1,323)	557	(11,007)
Decrease in accrued employees' retirement allowances	(8,247)	(6,589)	(68,611)
Interest and dividends income	(3,518)	(3,486)	(29,268)
Interest expense	5,562	5,807	46,273
Loss (gain) on foreign exchange	13	(103)	108
Gain on disposal of property, plant and equipment	(7,874)	(4,644)	(65,507)
Gain on sale of marketable and investment securities	(1,395)	(230)	(11,606)
Loss on valuation of marketable and investment securities and golf club memberships	17,030	5,515	141,681
Equity in losses of affiliates	10	605	83
Changes in operating assets and liabilities:			
Notes and accounts receivable	1,139	34,787	9,476
Advances received	(7,795)	(63,820)	(64,850)
Inventories	1,700	30,246	14,143
Advance payments	4,162	(8,223)	34,626
Notes and accounts payable	(25,048)	(9,331)	(208,386)
Other current assets	(2,288)	1,966	(19,035)
Other current liabilities	(2,648)	5,345	(22,030)
Accrued consumption taxes	147	(1,717)	1,223
Directors' and corporate auditors' bonuses	(172)	(236)	(1,431)
Others	—	(83)	—
<b>Subtotal</b>	<b>(1,007)</b>	<b>35,922</b>	<b>(8,378)</b>
Interest and dividends received	3,550	3,572	29,534
Interest paid	(5,447)	(5,616)	(45,316)
Income taxes paid	(3,221)	(14,645)	(26,797)
<b>Net cash (used in) provided by operating activities</b>	<b>(6,125)</b>	<b>19,233</b>	<b>(50,957)</b>
<b>Investing Activities:</b>			
Net increase in time deposits due in more than three months	(1,186)	(111)	(9,867)
Purchases of marketable and investment securities	(5,167)	(6,867)	(42,987)
Proceeds from sale of marketable and investment securities	2,371	598	19,726
Net decrease by sales of subsidiaries' stock resulting in changes in scope of consolidation	(757)	—	(6,298)
Purchases of property, plant and equipment and intangible fixed assets	(48,938)	(44,304)	(407,138)
Proceeds from sale of property, plant and equipment	7,512	17,045	62,496
Expenditure for business transferred from Niigata Engineering Co., Ltd.	(4,209)	—	(35,017)
Net decrease (increase) in short-term loan receivables	733	(617)	6,098
Increase in long-term loan receivables	(1,440)	(1,460)	(11,980)
Decrease in long-term loan receivables	1,526	239	12,696
Decrease (increase) in other non-current assets	345	(2,206)	2,870
Increase in other fixed liabilities	2,394	8,099	19,917
<b>Net cash used in investing activities</b>	<b>(46,816)</b>	<b>(29,584)</b>	<b>(389,484)</b>

	Millions of yen		Thousands of U.S. dollars (Note 1)
	2003	2002	2003
<b>Financing Activities:</b>			
Net increase (decrease) in short-term debt	¥ 2,298	¥ (5,560)	\$ 19,118
Net (decrease) increase in commercial paper	(10,000)	10,000	(83,195)
Proceeds from issuance of long-term debt	57,226	48,602	476,090
Repayment of long-term debt	(35,446)	(50,815)	(294,892)
Proceeds from issuance of debentures	30,000	—	249,584
Expenditures for redemption of debentures	(20,000)	—	(166,389)
Purchase of treasury stock	(22)	(2)	(183)
Purchase of treasury stock of subsidiaries in consolidation	(5)	(113)	(42)
Dividends paid	(3,895)	(3,895)	(32,404)
Dividends paid to minority interests	(131)	(312)	(1,090)
Proceeds from minority interest payments	2,960	—	24,626
<b>Net cash provided by (used in) financing activities</b>	<b>22,985</b>	<b>(2,095)</b>	<b>191,223</b>
<b>Effect of Exchange Rate Changes on Cash and Cash Equivalents</b>	<b>41</b>	<b>494</b>	<b>341</b>
<b>Net Decrease in Cash and Cash Equivalents</b>	<b>(29,915)</b>	<b>(11,952)</b>	<b>(248,877)</b>
<b>Cash and Cash Equivalents, Beginning of Year</b>	<b>111,063</b>	<b>122,391</b>	<b>923,985</b>
<b>Increase in Cash and Cash Equivalents Due to Newly Consolidated Subsidiaries</b>	<b>2,690</b>	<b>624</b>	<b>22,380</b>
<b>Cash and Cash Equivalents, End of Year</b>	<b>¥ 83,838</b>	<b>¥111,063</b>	<b>\$ 697,488</b>

Note: A reconciliation of cash and cash equivalents to the amounts shown in the consolidated balance sheets is as follows:

	Millions of yen	
	2002	2001
<b>Cash and Cash Equivalents, Beginning of Year:</b>		
Cash and time deposits	¥ 92,747	¥ 65,215
Time deposits due in more than three months	(1,020)	(909)
Convertible time deposits included in marketable securities	4,500	21,700
Commercial paper including marketable securities	1,498	6,066
Investment trust including marketable securities	7,339	23,932
Sales under agreement to repurchase included in other current assets (short-term loans)	5,999	6,387
<b>Cash and Cash Equivalents</b>	<b>¥111,063</b>	<b>¥122,391</b>

	Millions of yen		Thousands of U.S. dollars (Note 1)
	2003	2002	2003
<b>Cash and Cash Equivalents, End of Year:</b>			
Cash and time deposits	¥77,503	¥ 92,747	\$644,784
Time deposits due in more than three months	(2,206)	(1,020)	(18,353)
Convertible time deposits included in marketable securities	—	4,500	—
Commercial paper included in marketable securities	2,000	1,498	16,639
Investment trust included in marketable securities	37	7,339	308
Sales under agreement to repurchase included in other current assets (short-term loans)	5,997	5,999	49,892
Beneficial interest in trust included in other current assets	507	—	4,218
<b>Cash and Cash Equivalents</b>	<b>¥83,838</b>	<b>¥111,063</b>	<b>\$697,488</b>

# Notes to the Consolidated Financial Statements

Ishikawajima-Harima Heavy Industries Co., Ltd., and Consolidated Subsidiaries

## 1. Basis of financial statements

The accompanying consolidated financial statements of Ishikawajima-Harima Heavy Industries Co., Ltd. (the "Company") and consolidated subsidiaries (together the "Companies") have been prepared from the financial statements filed with the Prime Minister as required by the Japanese Securities and Exchange Law in accordance with accounting principles and practices generally accepted in Japan, which may differ in some material respects from accounting principles and practices generally accepted in countries and jurisdictions other than Japan. Certain reclassifications have been made in the accompanying consolidated financial statements to facilitate understanding by readers outside Japan.

The Company has prepared the consolidated statements of shareholders' equity for the purpose of inclusion in this report,

although such statements are not customarily prepared in Japan.

The Companies have adopted new accounting standards for net income per share and treasury stock and reversal of legal reserves, effective the year ended March 31, 2003, in the preparation of the consolidated financial statements.

The U.S. dollar amounts are included solely for convenience and are stated, as a matter of arithmetical computation only, at the rate of U.S.\$1=¥120.20, the rate of exchange prevailing on March 31, 2003. These translations should not be construed as representations that the Japanese yen amounts actually represent, or have been or could be converted into U.S. dollars at that or any other rate.

## 2. Significant accounting policies

### (a) Scope of consolidation

The consolidated financial statements for the years ended March 31, 2003 and 2002 include the accounts of the Company and 55 and 52 subsidiaries, respectively.

For the years ended March 31, 2003 and 2002, 47 and 53 subsidiaries, respectively, were excluded from the scope of the consolidation. The exclusion of these subsidiaries has not had a material effect on the consolidated financial statements.

### (b) Application of the equity method of accounting

The consolidated financial statements for the year ended March 31, 2003 and 2002, included 11 and 5 affiliates in the scope of the application of the equity method of accounting, respectively.

For the years ended March 31, 2003 and 2002, investments in 47 and 53 unconsolidated subsidiaries, respectively, and 35 and 34 affiliates, respectively, for both years were stated at cost because they did not have a material effect on the consolidated financial statements.

### (c) Consolidated subsidiaries having different fiscal year-ends

As Star Farm Machinery Mfg. Co., Ltd. closes its books of account annually on September 30, it prepares its interim financial statements for consolidation as of March 31.

IHI Inc., IHI Turbo America CO., IHI Charging Systems International GmbH and IHI Charging Systems International S.p.A. close their books of account annually on December 31, and no particular financial reports are prepared for consolidation to match the parent company's fiscal year. However, certain adjustments are made for important transactions occurring during the three months ended March 31.

### (d) Sales recognition

Net sales from contracts are recognized at the time the contracts are completed, except that net sales for projects with construction lasting more than two years and revenue of more than ¥5 billion are recorded by the percentage-of-completion method.

### (e) Allowance for doubtful receivables

The allowance for doubtful receivables is provided based on historical default rates, plus additional estimated amounts to cover specific uncollectible receivables.

### (f) Inventories

Finished goods, work in process and contracts in process are stated principally at identified cost, and raw materials and supplies are stated at the lower of cost or market, cost being determined by the moving-average method.

### (g) Securities

Held-to-maturity securities are either amortized or accumulated to face value by the straight-line method.

Investment securities in non-consolidated subsidiaries and affiliates are stated at cost as determined by the moving-average method.

Other securities with market prices available are carried at market value as of the balance-sheet date, with the cost of sale computed by the moving-average method. The difference between the acquisition cost and the carrying value of other securities, including unrealized gains and losses, is recognized as a component of the shareholders' equity under "Unrealized holding gain on other securities."

Other securities without market price available are stated at the cost by the moving-average method.

### (h) Property, plant and equipment and intangible assets

Depreciation of plant and equipment is principally computed by the declining-balance method.

However, depreciation of the Toyosu Center Building (office building for lease) held by the Company, lend-lease properties, certain assets of consolidated subsidiaries and buildings (excluding building fixtures) acquired after April 1, 1998, are computed by the straight-line method. Amortization of intangible assets is computed by the straight-line method.

*(i) Leases*

Non-cancelable lease transactions of the Companies are accounted for by the operating lease accounting method regardless of whether such leases are classified as operating or finance leases, except that lease agreements which stipulate the transfer of ownership of the leased property to the lessee are accounted for as finance leases.

*(j) Financial instruments*

The Companies do not hold derivative financial instruments for trading purposes. Derivative financial instruments held by the Companies are composed principally of foreign exchange contracts to hedge currency risk and interest swaps to hedge interest risk.

Japanese GAAP provides for two general accounting methods for hedging financial instruments. One method is to recognize the changes in fair value of a hedging instrument in earnings in the period of the change as a gain or loss together with the offsetting loss or gain on the hedged item attributable to the risk being hedged. The other method is to defer the gain or loss over the period of the hedging contract together with the offsetting loss or gain deferral of the hedged items. The Company and its consolidated subsidiaries have adopted the latter accounting method.

With forward foreign exchange contracts, however, the Company recognizes changes in fair value of a hedging instrument in earnings in the period of the change as a gain or loss together with the offsetting loss or gain on the hedged item attributable to the risk being hedged.

The amounts of interest income or expense under the swap agreements are accrued and recognized as interest related to the assets and liabilities over the contact period.

The Companies have entered into primarily interest-rate swap agreement and forward foreign exchange contracts, in order to hedge interest rate and foreign exchange risks.

The Companies use the above-defined method consistently throughout the hedge period, to assess at inception of the hedge and on an ongoing basis whether the ineffective part of the hedge is expected.

*(k) Employees' retirement benefits*

Allowance for employees' retirement benefits are provided for based on the projected retirement benefits obligation and the pension fund assets.

The transition differences from the initial adoption of the new accounting standard are amortized over five years in principle.

Actuarial losses (gains) are amortized (accumulated) from the next fiscal year using the straight-line method over a certain number of years within the average remaining work period of employees.

Past service costs are amortized from the fiscal year using the straight-line method over a certain number of years within the average remaining work period of employees.

*(l) Foreign currency translations*

The assets, liabilities, income and expenses of overseas subsidiaries are translated at the exchange rates prevailing at the

balance-sheet date. Translation differences are included as minority interests in consolidated subsidiaries and a component of shareholders' equity in foreign exchange translation adjustments.

*(m) Accrued losses on sales contracts*

Among sales orders on hand at the balance sheet date, for projects in which the estimated cost is expected to exceed the amount of the sales order by a wide margin, accrued losses on sales contracts are recognized at the estimated aggregate amount of such losses.

*(n) Income taxes*

Deferred tax assets and liabilities are determined based on the differences between financial reporting and the tax bases of the assets and liabilities, and are measured using the enacted tax rates and laws, announced by the fiscal year-end.

*(o) Elimination of intercompany investments and relevant shareholders' equity*

At the date of acquisition, the cost of the Companies' investment in a subsidiary is allocated to the subsidiary's individual identifiable assets and liabilities on the basis of their fair value. Any difference between the cost of the Companies' investment and the Companies' share in the amount allocated to individual identifiable assets and liabilities is amortized through the estimated effective period of the investment, with the exception that when the amount of the resulting difference is immaterial, it is charged or credited to income as incurred.

*(p) Appropriations of retained earnings*

Appropriations of retained earnings with respect to each year ended March 31 are retroactively reflected in the consolidated financial statements for each applicable period on the assumption that the shareholders' approval relating to such appropriations is retroactively effective at each year end.

*(q) Cash and cash equivalents*

The Companies substantially consider all highly liquid low-risk investments purchased with original maturities of three months or less to be cash equivalents.

*(r) Amounts per share*

Net income per share of common stock is computed by dividing net income available to common stockholders by the weighted average number of shares of common stock outstanding during each period. Shareholders' equity is computed based on the number of shares of common stock outstanding at each balance sheet date. Cash dividends per share shown for each period in the consolidated statements of operations represent the dividends applicable to the respective year.

Effective the year ended March 31, 2003, the Companies have adopted the new accounting standard for net income per share, issued by the Financial Accounting Standard Committee on September 25, 2002. The effect of this charge was not material.

*(s) Accounting for Treasury Stock and Reversal of Legal Reserves*

Effective the year ended March 31, 2003, the Companies have adopted the accounting standard for treasury stock and reversal of

legal reserves issued by the Financial Accounting Standard Committee on February 21, 2002. The effect on the Company's statements of income following adoption of the accounting change was immaterial.

### 3. Marketable securities and investment securities

A summary of held-to-maturity securities with market prices at March 31, 2002, is as follows:

	Millions of yen		
	2002		
	Amount recorded in the balance sheet	Market prices	Difference
Held-to-maturity securities whose market prices do not exceed their amount recorded in the balance sheet:			
Public bonds	¥ —	¥ —	¥ —
Corporate bonds	203	203	0
Other	2,000	1,964	(36)
<b>Total</b>	<b>¥2,203</b>	<b>¥2,167</b>	<b>¥(36)</b>

A summary of held-to-maturity securities with market prices at March 31, 2003, is as follows:

	Millions of yen			Thousands of U.S. dollars		
	2003			2003		
	Amount recorded in the balance sheet	Market prices	Difference	Amount recorded in the balance sheet	Market prices	Difference
Held-to-maturity securities whose market prices exceed their amount recorded in the balance sheet:						
Public bonds	¥ —	¥ —	¥—	\$ —	\$ —	\$—
Corporate bonds	—	—	—	—	—	—
Other	2,000	2,002	2	16,639	16,656	17
<b>Total</b>	<b>¥2,000</b>	<b>¥2,002</b>	<b>¥ 2</b>	<b>\$16,639</b>	<b>\$16,656</b>	<b>\$17</b>

A summary of other securities with stated market prices at March 31, 2002, is as follows:

	Millions of yen		
	2002		
	Acquisition cost	Amount recorded in the balance sheet	Difference
Other securities whose market prices exceed their acquisition cost recorded in the balance sheet:			
Equity securities	¥30,444	¥69,385	¥38,941
Debt securities	3	4	1
Other	—	—	—
<b>Subtotal</b>	<b>30,447</b>	<b>69,389</b>	<b>38,942</b>
Other securities whose market prices do not exceed their acquisition cost recorded in the balance sheet:			
Equity securities	¥27,847	¥21,339	¥ (6,508)
Debt securities	2	2	0
Other	297	296	(1)
<b>Subtotal</b>	<b>28,146</b>	<b>21,637</b>	<b>(6,509)</b>
<b>Total</b>	<b>¥58,593</b>	<b>¥91,026</b>	<b>¥32,433</b>

A summary of other securities with stated market prices at March 31, 2003, is as follows:

	Millions of yen			Thousands of U.S. dollars		
	<b>2003</b>			<b>2003</b>		
	Acquisition cost	Amount recorded in the balance sheet	Difference	Acquisition cost	Amount recorded in the balance sheet	Difference
Others securities whose market prices exceed their acquisition cost recorded in the balance sheet:						
Equity securities	¥23,127	¥50,144	¥27,017	\$192,404	\$417,171	\$224,767
Debt securities	3	4	1	26	34	8
Other	—	—	—	—	—	—
Subtotal	23,130	50,148	27,018	192,430	417,205	224,775
Other securities whose market prices do not exceed their acquisition cost recorded in the balance sheet:						
Equity securities	18,374	16,306	(2,068)	152,862	135,657	(17,205)
Debt securities	2	2	0	17	17	0
Other	84	61	(23)	698	507	(191)
Subtotal	18,460	16,369	(2,091)	153,577	136,181	(17,396)
Total	¥41,590	¥66,517	¥24,927	\$346,007	\$553,386	\$207,379

Because the total amounts of gains and losses on sales of securities for the year ended March 31, 2002 had immaterial effect, these amounts are omitted.

A summary of other securities which were sold in the year ended March 31, 2003, is as follows:

	Millions of yen			Thousands of U.S. dollars		
	Selling prices	Amount of gain on sales	Amount of loss on sales	Selling prices	Amount of gain on sales	Amount of loss on sales
Other securities	¥1,078	¥1,307	¥12	\$8,968	\$10,874	\$100

A summary of securities without stated market prices at March 31, 2003 and 2002, is as follows:

	Millions of yen		Thousands of U.S. dollars	
	2003	2002	2003	
	Amount recorded in the balance sheet	Amount recorded in the balance sheet	Amount recorded in the balance sheet	
Held-to-maturity securities:				
Negotiable certificates of deposit	¥ —	¥ 4,500	\$ —	
Commercial paper	—	1,498	—	
Other	—	3,999	—	
Other securities:				
Bond investment trusts	2,037	3,137	16,947	
Unlisted equity securities except for those traded on the over-the-counter market	16,891	13,689	140,524	
Other	—	8	—	

The contractual maturities of held-to-maturity and other securities as of March 31, 2002, were as follows:

	Millions of yen		
	2002		
	Due within one year	Due after one year through five years	Due after five years through ten years
Debt securities:			
Public bonds	¥ —	¥ —	¥ —
Corporate bonds	203	2	4
Commercial paper	1,498	—	—
Other	—	—	2,000
Other:			
Negotiable certificates of deposit	4,500	—	—
Other	4,198	22	—
<b>Total</b>	<b>¥10,399</b>	<b>¥24</b>	<b>¥2,004</b>

The contractual maturities of held-to-maturity and other securities as of March 31, 2003, were as follows:

	Millions of yen			Thousands of U.S. dollars		
	2003			2003		
	Due within one year	Due after one year through five years	Due after five years through ten years	Due within one year	Due after one year through five years	Due after five years through ten years
Debt securities:						
Other	¥—	¥—	¥2,000	\$—	\$—	\$16,639
<b>Total</b>	<b>¥—</b>	<b>¥—</b>	<b>¥2,000</b>	<b>\$—</b>	<b>\$—</b>	<b>\$16,639</b>

#### 4. Inventories

Inventories at March 31, 2003 and 2002, are summarized as follows:

	Millions of yen		Thousands of U.S. dollars
	2003	2002	2003
Finished goods	¥ 18,855	¥ 19,870	\$ 156,864
Contracts in process	278,096	281,692	2,313,611
Work in process	29,291	20,084	243,685
Raw materials and supplies	59,297	57,082	493,319
<b>Total</b>	<b>¥385,539</b>	<b>¥378,728</b>	<b>\$3,207,479</b>

#### 5. Depreciation of plant and equipment

Depreciation of most plant and equipment is computed by the declining-balance method; however, the Company and certain consolidated subsidiaries partially adopt the straight-line method.

The estimated useful lives for depreciation of major items of plant and equipment are summarized as follows:

March 31	Years	
	2003	2002
Buildings and structures:		
Metal-frame manufacturing buildings	31–38	31–38
Building berths	24	24
Docks	45	45
Machinery and equipment	10–12	10–12

## 6. Short-term bank loans, long-term loans, debentures and commercial paper

The weighted interest rates on short-term bank loans were 0.74 percent at March 31, 2003, and 0.72 percent at March 31, 2002.

Long-term loans and debentures at March 31, 2003 and 2002, consisted of the following:

	Millions of yen		Thousands of U.S. dollars
	2003	2002	2003
Banks and insurance companies, bearing interest rates from 0.2 percent to 5.3 percent	<b>¥159,544</b>	¥161,452	<b>\$1,327,321</b>
Government-owned banks, bearing interest rates from 0.7 percent to 5.4 percent	<b>24,796</b>	24,968	<b>206,290</b>
National and local government agencies, bearing interest rates from 0 percent to 0.3 percent	<b>610</b>	703	<b>5,074</b>
Debentures, bearing interest rates from 1.0 percent to 1.9 percent	<b>100,000</b>	90,000	<b>831,947</b>
Others, bearing interest rates from 0 percent to 5.6 percent	<b>10,373</b>	498	<b>86,298</b>
Commercial paper, bearing interest rates of 0.1 percent	—	10,000	—
Less current portion	<b>(72,058)</b>	(72,329)	<b>(599,484)</b>
Net long-term loans and debentures	<b>¥223,265</b>	¥215,292	<b>\$1,857,446</b>

The aggregate annual maturities of long-term loans and debentures at March 31, 2003, are summarized as follows:

	Millions of yen	Thousands of U.S. dollars
Year ending March 31,		
2004	<b>¥ 72,058</b>	<b>\$ 599,484</b>
2005	<b>41,134</b>	<b>342,213</b>
2006	<b>56,493</b>	<b>469,992</b>
2007	<b>36,952</b>	<b>307,421</b>
2008 and after	<b>88,686</b>	<b>737,820</b>
Total	<b>¥295,323</b>	<b>\$2,456,930</b>

## 7. Assets pledged as collateral

The following assets were pledged as collateral at March 31, 2003 and 2002:

	Millions of yen		Thousands of U.S. dollars
	2003	2002	2003
Cash and time deposits	<b>¥ 126</b>	¥ 119	<b>\$ 1,048</b>
Trade receivables	<b>2,454</b>	1,204	<b>20,416</b>
Inventories	<b>3</b>	3	<b>25</b>
Buildings and structures	<b>1,519</b>	1,880	<b>12,638</b>
Machinery and equipment	<b>611</b>	18,561	<b>5,083</b>
Land	<b>8,972</b>	9,100	<b>74,642</b>
Investment securities	<b>1,974</b>	658	<b>16,423</b>
Property, plant and equipment pledged as industrial factory foundation	<b>16,903</b>	17,111	<b>140,624</b>
Total	<b>¥32,562</b>	¥48,636	<b>\$270,899</b>

The obligations collateralized by the above assets at March 31, 2003 and 2002, were as follows:

	Millions of yen		Thousands of U.S. dollars
	2003	2002	2003
Short-term bank loans	¥14,242	¥19,564	\$118,486
Long-term debt	19,614	30,721	163,178
	¥33,856	¥50,285	\$281,664

## 8. Accrued expenses

Included in accrued expenses were allowances for employees' bonuses of ¥18,723 million (\$155,765 thousand) and ¥21,086 million at March 31, 2003 and 2002, respectively.

## 9. Deferred tax assets and liabilities

Significant components of the Companies' deferred tax assets and liabilities at March 31, 2003 and 2002, were as follows:

	Millions of yen		Thousands of U.S. dollars
	2003	2002	2003
Deferred tax assets:			
Allowances for employees' bonuses	¥ 5,616	¥ 5,793	\$ 46,722
Reserve for losses on sales contracts	448	1,044	3,727
Reserve for guaranteed contracts	1,892	2,658	15,740
Employees' retirement allowances	52,428	53,094	436,173
Elimination of unrealized profits	4,996	6,516	41,564
Net loss carried forward	14,189	5,455	118,045
Other	16,180	18,598	134,609
Valuation allowance	(9,645)	(9,246)	(80,241)
	86,104	83,912	716,339
Deferred tax liabilities:			
Depreciation	366	372	3,045
Unrealized holding gain on other securities	10,266	13,567	85,408
Other	1,646	887	13,693
	12,278	14,826	102,146
Net deferred tax assets	¥73,826	¥69,086	\$614,193

As the "Law to Amend the Local Tax Laws" (Law No. 9, March 2003) was made public on March 31, 2003, the statutory tax rate applied in the calculation of deferred tax assets and deferred tax liabilities after the fiscal year ending March 31, 2004, will change from 42.0% to 40.8%. With this change, deferred tax assets and deferred tax liabilities from revaluation of land decreased by ¥1,447 million (\$12,038 thousand) and ¥97 million (\$807 thousand), respectively, and income tax deferred increased by ¥1,714 million (\$14,260 thousand).

## 10. Research and development expenses

Research and development expenses, included in product cost, and selling, general and administrative expenses, were ¥22,056 million (\$183,494 thousand) and ¥25,088 million for the years ended March 31, 2003 and 2002, respectively.

## 11. Contingent liabilities

Contingent liabilities for trade notes receivable discounted and endorsed in the ordinary course of business amounted to ¥1,115 million (\$9,276 thousand) and ¥1,012 million at March 31, 2003 and 2002, respectively.

Contingent liabilities for guarantees of debts of unconsolidated subsidiaries and others amounted to ¥29,455 million (\$245,050 thousand) and ¥19,681 million at March 31, 2003 and 2002, respectively.

Contingent liabilities arising from similar guarantees of debts amounted to ¥23,944 million (\$199,201 thousand) and ¥26,283 million at March 31, 2003 and 2002, respectively, of which ¥19,157 million (\$159,376 thousand) and ¥21,023 million at March 31, 2003 and 2002, respectively, were for employee housing loans which were secured by life insurance and loan insurance, and therefore, the Companies were at low risk.

## 12. Other income (expense)—other, net

Other income (expense)—other, net, consists of the following:

Year ended March 31	Millions of yen		Thousands of U.S. dollars
	2003	2002	2003
Gain on sales of securities	¥ 1,407	¥ —	\$ 11,706
(Loss) gain on foreign exchange	(1,752)	2,364	(14,576)
Idle-assets administrative expenses	(2,191)	(882)	(18,228)
Write-downs of marketable and investment securities	—	(1,149)	—
Loss on disposal of property, plant and equipment	(3,542)	(5,046)	(29,468)
Equity in losses of unconsolidated subsidiaries and affiliates	(10)	(605)	(83)
Provision for allowance for doubtful receivables of affiliates	—	(894)	—
Provision for employees' retirement allowances for prior period	(4,459)	(4,511)	(37,096)
Extraordinary retirement benefits	(2,551)	(742)	(21,223)
Loss on valuation of investment securities	(16,958)	(4,353)	(141,082)
Gain on sale of land	11,441	9,422	95,183
Restructuring-related losses	(1,503)	—	(12,504)
Other, net	(8,999)	(7,029)	(74,867)
Total	¥(29,117)	¥(13,425)	\$(242,238)

The loss of ¥3,542 million and ¥5,046 million in the above "Loss on disposal of property, plant and equipment," and the gain of ¥11,441 million and ¥9,422 million in the above "Gain on sale of land" for 2003 and 2002, respectively, are related to the Toyosu Area Development Project.

## 13. Revaluation of land

In accordance with the "Law Concerning Revaluation of Land" enacted on March 31, 1998, land used for business owned by one of the consolidated subsidiaries has been revalued.

"Deferred tax liabilities from revaluation of land" relates to this revaluation; and the minority interests related to the unrealized

gain from revaluation, net of deferred tax, were included in ¥455 million (\$3,785 thousand) and ¥448 million at March 31, 2003 and 2002, respectively. The remainder of the unrealized gain was included in capital surplus.

Book value of land before revaluation	¥ 2,532 million
Book value of land after revaluation	¥12,567 million
Dates of revaluation	March 31, 2000 and September 30, 2000

The difference between the market value of land at the end of the fiscal year that was revalued in the previous fiscal year and book value following revaluation was ¥2,564 million (\$21,331 thousand) and ¥1,546 million at March 31, 2003 and 2002, respectively.

## 14. Supplementary cash flow information

### (a) Summary of assets and liabilities included following acquisition of business

A summary of assets and liabilities that increased due to acquisition of business from Niigata Engineering Co., Ltd. is as follows:

	Millions of yen	Thousands of U.S. dollars
	2003	2003
Current assets	¥ 16,471	\$ 137,030
Fixed assets	7,424	61,764
Current liabilities	(8,425)	(70,092)
Long-term liabilities	(11,261)	(93,685)
Cash payment for the acquisition	¥ 4,209	\$ 35,017

### (b) Summary of assets and liabilities of companies excluded from consolidation following the sales of their stock

This following is a summary of the transferred assets and liabilities from the sales of stock of Kaisho Shipping Co., Ltd., resulting in changes in the scope of consolidation in the year ended March 31, 2003:

	Millions of yen	Thousands of U.S. dollars
	2003	2003
Current assets	¥ 1,285	\$ 10,691
Fixed assets	34,978	290,998
Current liabilities	(11,891)	(98,927)
Long-term liabilities	(25,648)	(213,378)

## 15. Leases

### (a) Finance leases (Lessee)

The following pro forma amounts represent the acquisition costs, accumulated depreciation and net book value of the leased property as of March 31, 2003 and 2002, which would have been

reflected in the balance sheets if finance lease accounting had been applied to the finance leases currently accounted for by the operating lease accounting method:

	Millions of yen		Thousands of U.S. dollars
	2003	2002	2003
Acquisition costs:			
Buildings and structures	¥ 143	¥ 136	\$ 1,190
Machinery and equipment	14,205	12,005	118,178
Others	722	223	6,006
Total	¥ 15,070	¥ 12,364	\$ 125,374
Accumulated depreciation:			
Buildings and structures	¥ 42	¥ 19	\$ 350
Machinery and equipment	6,390	4,969	53,161
Others	162	68	1,348
Total	¥ 6,594	¥ 5,056	\$ 54,859
Net book value:			
Buildings and structures	¥ 101	¥ 117	\$ 840
Machinery and equipment	7,815	7,036	65,017
Others	560	155	4,659
Total	¥ 8,476	¥ 7,308	\$ 70,516

Concerning the above finance lease transactions, the lease payments, and estimated depreciation expense, which is mainly calculated as ten-ninths of the amount computed by the declining-

balance method over the respective lease terms and assuming a 10% scrap value, and estimated interest expense for the years ended March 31, 2003 and 2002, were as follows:

	Millions of yen		Thousands of U.S. dollars
	2003	2002	2003
Lease payments	<b>¥2,646</b>	¥2,245	<b>\$22,013</b>
Estimated depreciation expense	<b>2,852</b>	2,298	<b>23,727</b>
Estimated interest expense	<b>293</b>	259	<b>2,438</b>

Future minimum lease payments subsequent to March 31, 2003 and 2002, for finance leases accounted for as operating leases are summarized as follows:

	Millions of yen		Thousands of U.S. dollars
	2003	2002	2003
Within one year	<b>¥ 2,269</b>	¥2,080	<b>\$18,877</b>
Thereafter	<b>8,624</b>	6,719	<b>71,747</b>
Total	<b>¥10,893</b>	¥8,799	<b>\$90,624</b>

*(b) Operating leases (Lessee)*

Future minimum lease payments subsequent to March 31, 2003 and 2002, for non-cancelable operating leases are summarized as follows:

	Millions of yen		Thousands of U.S. dollars
	2003	2002	2003
Within one year	<b>¥ 744</b>	¥ 514	<b>\$ 6,190</b>
Thereafter	<b>2,758</b>	2,652	<b>22,945</b>
Total	<b>¥3,502</b>	¥ 3,166	<b>\$29,135</b>

*(c) Finance leases (Lessor)*

The following amounts are the acquisition costs, accumulated depreciation and net book value of property leased to others under

finance leases at March 31, 2003 and 2002, to which the Companies have adopted the operating lease accounting method:

	Millions of yen		Thousands of U.S. dollars
	2003	2002	2003
Acquisition costs:			
Buildings and structures	<b>¥7,419</b>	¥7,417	<b>\$61,722</b>
Machinery and equipment	<b>2,270</b>	2,290	<b>18,885</b>
Others	<b>2</b>	2	<b>17</b>
Total	<b>¥9,691</b>	¥9,709	<b>\$80,624</b>
Accumulated depreciation:			
Buildings and structures	<b>¥2,466</b>	¥2,182	<b>\$20,516</b>
Machinery and equipment	<b>1,260</b>	1,167	<b>10,483</b>
Others	<b>1</b>	0	<b>8</b>
Total	<b>¥3,727</b>	¥3,349	<b>\$31,007</b>
Net book value:			
Buildings and structures	<b>¥4,953</b>	¥5,235	<b>\$41,206</b>
Machinery and equipment	<b>1,010</b>	1,123	<b>8,403</b>
Others	<b>1</b>	1	<b>8</b>
Total	<b>¥5,964</b>	¥6,359	<b>\$49,617</b>

Concerning the above finance leases, the lease payments, depreciation expense and estimated interest income for the years ended March 31, 2003 and 2002, were as follows:

	Millions of yen		Thousands of U.S. dollars
	2003	2002	2003
Recorded lease payments	¥867	¥868	\$7,213
Recorded depreciation expense	509	505	4,235
Estimated interest income, assuming that the finance lease accounting had been adopted	332	347	2,762

Future minimum lease payments subsequent to March 31, 2003 and 2002, for finance lease transactions accounted for by the operating lease accounting method are summarized as follows:

	Millions of yen		Thousands of U.S. dollars
	2003	2002	2003
Within one year	¥ 508	¥ 533	\$ 4,226
Thereafter	6,905	7,794	57,446
Total	¥7,413	¥8,327	\$61,672

*(d) Operating leases (Lessor)*

Future minimum lease payments subsequent to March 31, 2003 and 2002, for non-cancelable operating leases are summarized as follows:

	Millions of yen		Thousands of U.S. dollars
	2003	2002	2003
Within one year	¥10	¥51	\$83
Thereafter	—	10	—
Total	¥10	¥61	\$83

## 16. Derivatives

*(a) Foreign currency*

The Companies had no outstanding forward foreign exchange contracts in fiscal 2003 and 2002, as hedge accounting was applied to all derivative transactions.

*(b) Interest rate*

The Companies had no outstanding interest-rate swap agreements in fiscal 2003 and 2002, as hedge accounting was applied to all derivative transactions.

*(c) Stocks*

As of March 31, 2003, notional amounts, market prices and valuation gains/losses for derivative transactions were as follows:

	Millions of yen				Thousands of U.S. dollars			
	Notional amount	Over one year	Market prices	Valuation loss	Notional amount	Over one year	Market prices	Valuation loss
Option transactions								
To sell:								
Call	¥29	¥—	¥60	¥(31)	\$241	\$—	\$499	\$(258)
To buy:								
Put	5	—	3	(2)	42	—	25	(17)
Total	¥—	¥—	¥—	¥(33)	\$ —	\$—	\$ —	\$(275)

## 17. Retirement benefits

The Company and domestic subsidiaries have defined benefit pension plans, and certain overseas subsidiaries have lump-sum retirement payment plans. In addition, an employee, if eligible,

may receive additional payments under the plans.

The following information is a summary of the plans:

Retirement benefit obligation:

March 31	Millions of yen		Thousands of U.S. dollars
	2003	2002	2003
Projected benefit obligation	¥(195,341)	¥(207,667)	\$ (1,625,133)
Fair value of plan assets	2,972	3,050	24,725
Funded status	(192,369)	(204,617)	(1,600,408)
Unrecognized transition obligation	8,886	13,532	73,927
Unrecognized actuarial losses	25,997	25,363	216,281
Unrecognized past service costs	250	242	2,080
Obligation recognized in the consolidated balance sheet	(157,236)	(165,480)	(1,308,120)
Allowance for employees' retirement benefits	¥(157,236)	¥(165,480)	\$ (1,308,120)

Components of net periodic pension cost:

Year ended March 31	Millions of yen		Thousands of U.S. dollars
	2003	2002	2003
Service cost benefits earned during the year	¥ 9,223	¥ 9,129	\$ 76,730
Interest cost on projected benefit obligation	4,989	5,847	41,506
Expected return on assets	(40)	(37)	(333)
Amortization of transition obligation	4,645	4,511	38,644
Amortization of actuarial losses	2,387	718	19,858
Amortization of past service costs	21	21	175
Additional payments	1,993	1,003	16,581
Net periodic pension cost	¥23,218	¥21,192	\$193,161

	2003	2002
Assumptions used in the actuarial calculation were:		
Actuarial cost method:	Projected unit credit method	Projected unit credit method
Discount rate:	2.50%	2.50%
Expected rate of return:	1.50%	1.50%
Amortization period for past service costs (within the employees' average remaining years of service):	10 years	10 years
Amortization period for actuarial losses (within the employees' average remaining years of service):	13 years	14 years
Amortization period for transition obligation:	5 years	5 years

## 18. Segment information

### (a) Industry segments

Industry segment information of the Companies for the years ended or as of March 31, 2003 and 2002, is shown below:

Year ended or as of March 31, 2003	Millions of yen						Total	Eliminations and Corporate	Consolidated
	(1)	(2)	(3)	(4)	(5)	(6)			
<b>Sales and operating income:</b>									
Sales to outside customers	¥200,561	¥ 91,226	¥260,588	¥239,124	¥ 92,921	¥134,641	¥1,019,061	¥ —	¥1,019,061
Intersegment sales and transfers	16,323	14,292	13,100	4,763	20,403	26,778	95,659	(95,659)	—
Total	216,884	105,518	273,688	243,887	113,324	161,419	1,114,720	(95,659)	1,019,061
Operating expenses	212,922	106,769	271,458	233,707	108,586	156,178	1,089,620	(95,199)	994,421
Operating income (loss)	¥ 3,962	¥ (1,251)	¥ 2,230	¥ 10,180	¥ 4,738	¥ 5,241	¥ 25,100	¥ (460)	¥ 24,640
<b>Assets, depreciation expense and capital expenditures:</b>									
Assets	¥190,633	¥87,218	¥263,914	¥295,113	¥133,010	¥222,703	¥1,192,591	¥188,649	¥1,381,240
Depreciation expense	3,136	2,800	3,741	12,333	2,995	7,557	32,562	3,020	35,582
Capital expenditures	2,855	2,229	2,974	15,643	4,570	22,272	50,543	(1,264)	49,279

Year ended or as of March 31, 2002	Millions of yen						Total	Eliminations and Corporate	Consolidated
	(1)	(2)	(3)	(4)	(5)	(6)			
<b>Sales and operating income:</b>									
Sales to outside customers	¥193,079	¥117,469	¥306,452	¥235,348	¥ 96,359	¥133,695	¥1,082,402	¥ —	¥1,082,402
Intersegment sales and transfers	15,798	11,811	15,288	4,144	11,984	27,777	86,802	(86,802)	—
Total	208,877	129,280	321,740	239,492	108,343	161,472	1,169,204	(86,802)	1,082,402
Operating expenses	211,903	127,110	304,305	232,595	108,479	156,190	1,140,582	(85,413)	1,055,169
Operating income (loss)	¥ (3,026)	¥ 2,170	¥ 17,435	¥ 6,897	¥ (136)	¥ 5,282	¥ 28,622	¥ (1,389)	¥ 27,233
<b>Assets, depreciation expense and capital expenditures:</b>									
Assets	¥182,158	¥104,095	¥234,900	¥306,068	¥106,325	¥276,067	¥1,209,613	¥212,497	¥1,422,110
Depreciation expense	2,527	2,998	4,131	13,328	2,536	8,269	33,789	1,763	35,552
Capital expenditures	2,005	2,499	4,248	15,101	9,437	14,283	47,573	2,625	50,198

Year ended or as of March 31, 2003	Thousands of U.S. dollars						Total	Eliminations and Corporate	Consolidated
	(1)	(2)	(3)	(4)	(5)	(6)			
<b>Sales and operating income:</b>									
Sales to outside customers	\$1,668,561	\$758,952	\$2,167,953	\$1,989,384	\$ 773,053	\$1,120,142	\$8,478,045	\$ —	\$8,478,045
Intersegment sales and transfers	135,799	118,902	108,985	39,626	169,742	222,778	795,832	(795,832)	—
Total	1,804,360	877,854	2,276,938	2,029,010	942,795	1,342,920	9,273,877	(795,832)	8,478,045
Operating expenses	1,771,398	888,262	2,258,386	1,944,318	903,377	1,299,317	9,065,058	(792,005)	8,273,053
Operating income (loss)	\$ 32,962	\$ (10,408)	\$ 18,552	\$ 84,692	\$ 39,418	\$ 43,603	\$ 208,819	\$ (3,827)	\$ 204,992
<b>Assets, depreciation expense and capital expenditures:</b>									
Assets	\$1,585,965	\$725,607	\$2,195,624	\$2,455,183	\$1,106,572	\$1,852,771	\$9,921,722	\$1,569,459	\$11,491,181
Depreciation expense	26,090	23,295	31,123	102,604	24,917	62,870	270,899	25,124	296,023
Capital expenditures	23,752	18,544	24,742	130,141	38,020	185,292	420,491	(10,516)	409,975

Notes: i The Companies operate in six industry segments as follows:

(1) Logistics Systems and Structures Operations

Material handling systems, physical distribution and factory automation systems, parking systems, bridges and others

(2) Industrial Machinery Operations

Iron and steel manufacturing equipment, vehicular turbochargers, mass-produced machinery and others

(3) Energy and Plant Operations

Boilers, gas turbines, components for nuclear power plants, environmental control systems, storage facilities and others

(4) Aero-Engine and Space Operations

Jet engines, space-related equipment and others

(5) Shipbuilding and Offshore Operations

Shipbuilding, ship repairs, offshore structures and others

(6) Other Operations

Diesel engines, agricultural machinery, construction machinery, construction materials, financing and service industry, marine transport and others

- ii Operating expenses are entirely allocated to each industry segment.
- iii Corporate assets, which amounted to ¥263,382 million (\$2,191,198 thousand) and ¥247,585 million as of March 31, 2003 and 2002 respectively, mainly consisted of cash, time deposits, marketable securities and insurance premiums paid of the Company and deferred income taxes.
- iv Consolidated operating expenses represent cost of sales and selling, general and administrative expenses shown in the accompanying consolidated statements of operations.
- v Effective April 1, 2002, the Companies have changed the categorization of industry segments and the method of allocation for operating expenses based on the reorganization of land section. The previous five segments of Industrial Machinery and Steel Structure Operations; Energy, Environment and Plant Operations; Standard Machinery and Other Operations; Aero-Engine and Space Operations; and Shipbuilding and Offshore Operations have been changed into the six segments of Logistics Systems and Structures Operations; Industrial Machinery Operations; Energy and Plant Operations; Aero-Engine and Space Operations; Shipbuilding and Offshore Operations; and Other Operations.
- This change was made to reflect more adequately the actual business of the Companies. The information by industry segments for the year ended March 31, 2002, has been restated by the same categories as those presented for the year ended March 31, 2003.

#### (b) Overseas sales

Millions of yen						
Year ended March 31, 2003	Europe	Asia	North America	Central and South America	Others	Total
Overseas sales	¥29,567	¥48,312	¥98,158	¥48,154	¥15,608	¥239,799
Overseas sales as a percentage of consolidated net sales	2.9%	4.8%	9.6%	4.7%	1.5%	23.5%

Millions of yen						
Year ended March 31, 2002	Europe	Asia	North America	Central and South America	Others	Total
Overseas sales	¥28,373	¥32,092	¥96,397	¥56,318	¥33,958	¥247,138
Overseas sales as a percentage of consolidated net sales	2.6%	3.0%	8.9%	5.2%	3.1%	22.8%

Thousands of U.S. dollars						
Year ended March 31, 2003	Europe	Asia	North America	Central and South America	Others	Total
Overseas sales	\$245,982	\$401,930	\$816,622	\$400,616	\$129,850	\$1,995,000

Note: The countries included in each segment are as follows:

- (1) Europe.....The U.K., Germany, France, Italy, Ireland, Greece, Kazakhstan, Sweden, etc.
- (2) Asia .....China, Taiwan, Korea, Thailand, Singapore, Malaysia, Indonesia, Philippines, India, Pakistan, etc.
- (3) North America .....U.S.A., Canada
- (4) Central and South America .....Brazil, Panama, etc.

## 19. Amounts per share

Net income per share and shareholders' equity for the year ended March 31, 2002, have been recomputed based on the new accounting standard (see Note 2. (r)) and are restated in the accompanying financial statements.

Year ended March 31	Yen		U.S. dollars
	2003	2002	2003
Net (loss) income	¥ (7.57)	¥ 4.15	\$(0.06)
Cash dividends	1.50	3.00	0.01
Shareholders' equity	131.96	144.47	1.10

## 20. Subsequent event

The term of the Company's 27th bond issue was determined at the Board of Directors meeting held on May 19, 2003.

Details are as follows:

### 27th Unsecured Bond (five-year bond)

- (1) Issue amount: ¥15.0 billion (\$125 million)
- (2) Issue price: ¥100 par value of ¥100
- (3) Annual interest rate: 0.58%
- (4) Issue date: June 6, 2003
- (5) Date of redemption: June 6, 2008
- (6) Use of funds: Repayment of corporate bonds
- (7) Subscription: Public subscription

# Report of Independent Certified Public Accountants

## Certified Public Accountants

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## The Board of Directors Ishikawajima-Harima Heavy Industries Co., Ltd.

We have audited the accompanying consolidated balance sheets of Ishikawajima-Harima Heavy Industries Co., Ltd. and consolidated subsidiaries as of March 31, 2003 and 2002, and the related consolidated statements of operations, shareholders' equity, and cash flows for the years then ended, all expressed in yen. These financial statements are the responsibility of the Company's management. Our responsibility is to independently express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with auditing standards, procedures and practices generally accepted and applied in Japan. Those standards, procedures and practices require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the consolidated financial position of Ishikawajima-Harima Heavy Industries Co., Ltd. and consolidated subsidiaries at March 31, 2003 and 2002, and the consolidated results of their operations and their cash flows for the years then ended in conformity with accounting principles and practices generally accepted in Japan.

The U.S. dollar amounts in the accompanying consolidated financial statements with respect to the year ended March 31, 2003 are presented solely for convenience. Our audit also included the translation of yen amounts into U.S. dollar amounts and, in our opinion, such translation has been made on the basis described in Note 1 to the consolidated financial statements.



Shin Nihon & Co.

Tokyo, Japan  
June 27, 2003

*See Note 1 to the consolidated financial statements which explains the basis of preparation of the consolidated financial statements of Ishikawajima-Harima Heavy Industries Co., Ltd. and consolidated subsidiaries under Japanese accounting principles and practices.*

## Head Office

Ishikawajima-Harima Heavy Industries Co., Ltd.  
Shin Ohtemachi Building, 2-1, Ohtemachi 2-chome,  
Chiyoda-ku, Tokyo 100-8182, Japan  
Tel: +81-3-3244-5111  
Fax: +81-3-3244-5131  
Internet home page: <http://www.ihl.co.jp/index-e.html>

## Founded

1853

## Incorporated

1889

## Number of Employees (Non-Consolidated)

8,836

## Transfer Agent

The Chuo Mitsui Trust and Banking Company, Ltd.

## Consolidated Subsidiaries

55

## Non-Consolidated Subsidiaries

49

## Affiliates

46\*

(Note\*: Includes 11 affiliates applying the equity method of accounting)

## Stock Exchange Listings

Tokyo, Osaka, Nagoya, Fukuoka, Sapporo

## Shares Outstanding

1,298,495,152

## Number of Shareholders

99,444

## Major Shareholders

Japan Trustee Services Bank, Ltd. (Holder in Trust)	7.57%
Mitsui Asset Trust and Banking Co., Ltd., General Trust (Toshiba Account)	4.26%
The Daiichi Mutual Life Insurance Company	4.15%
Mizuho Bank, Ltd. (Standing proxy: Trust & Custody Services Bank, Ltd.)*	3.36%
J.P. Morgan Trust Bank Ltd. (Tax Exempt Account)	3.19%
Nippon Life Insurance Company	3.07%
The Master Trust Bank of Japan, Ltd. (Holder in Trust)	2.25%
UFJ Trust Bank Limited (Holder in Trust A)	2.06%
Sumitomo Life Insurance Company	2.04%
Mitsui Sumitomo Insurance Co., Ltd.	1.88%

\* The shares of Ishikawajima-Harima Heavy Industries Co., Ltd. stock held by Mizuho Bank, Ltd. are part of that company's retirement benefit trust and are deposited as trust assets at Mizuho Trust & Banking Co., Ltd., Retirement Benefit Trust (for Mizuho Bank, Ltd.). Voting rights for the shares are exercised in accordance with instructions from Mizuho Bank, Ltd.

## Independent Auditors

Shin Nihon & Co.

## Investor Relations

If you have any questions or would like copies of any of our reports, please contact:

Investor Relations Division  
Ishikawajima-Harima Heavy Industries Co., Ltd.  
Shin Ohtemachi Building, 2-1, Ohtemachi 2-chome,  
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Tel: +81-3-3244-5344  
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## Stock Performance of IHI and Average Trading Volume Per Day

