

2003 ANNUAL REPORT

YASKAWA ELECTRIC CORPORATION

Year Ended March 20, 2003

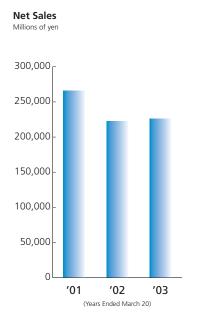


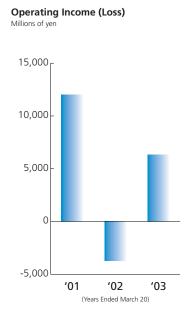
Established in 1915, Yaskawa Electric Corporation has grown to become one of the world's leading manufacturers of a diverse lineup of mechatronics products, including MOTOMAN industrial robots, inverters, servos, and programmable and motion controllers for use in all types of highly advanced machinery. Yaskawa also manufactures and markets an array of systems products, including products for integrated manufacturing systems for factory automation. In addition, the Company offers various heavy electrical products, including induction motors, generators, switches, and breakers. In recent years, the Company has steadily expanded the scope of its overseas activities, which it carries out through an international network of offices, subsidiaries, and affiliates as well as in collaboration with local communities.

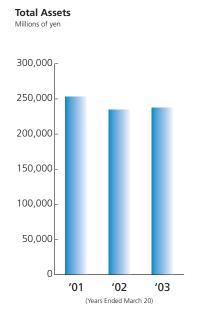
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	Millions of yen (except per share amounts)			Thousands of U.S. dollars (except per share amounts	
	2003	2002	2001	2003	
Net sales	¥226,144	¥222,707	¥266,068	\$ 1,878,272	
Operating income (loss)	6,308	(3,728)	12,013	52,392	
Income (loss) before income taxes and minority interests	(850)	(18,897)	6,755	(7,060)	
Net income (loss)	(2,524)	(12,657)	3,319	(20,963)	
Per Share Data					
Net income (loss) (Yen)	¥ (11.00)	¥ (54.54)	¥ 14.31	\$ (0.091)	
Cash dividends (Yen)	-	_	4.00	_	
At Year-End					
Total assets	¥237,641	¥234,560	¥252,912	\$ 1,973,754	
Shareholders' equity	30,632	36,525	47,070	254,418	

Note: Dollar figures are translated, for convenience only, at the rate of ¥120.4 to US\$1.









Hiroshi Nagatsugi Chairman of the Board

We would like to express our sincere gratitude to you for extending your support to us. We are pleased to report a summary of this year's operating results.

During fiscal year 2002 (ended March 20, 2003), Japan's economic situation continued to be difficult. The stock market was weak because of uncertainty concerning the financial sector and the future direction of the economy. Although the decline in private sector capital investment showed signs of leveling out, there was little positive sentiment that a recovery was near. Internationally, China and other Asian countries achieved steady results. The global outlook overall, however, remained clouded, as anxieties about possible recession appeared in the United States and Europe against the backdrop of an unstable international situation.

# Result of "Win21"

Fiscal year 2002 was the concluding year of mid-term plan "Win21" and the structural reforms that we pursued under this plan. In this last year's harsh business environment, we redoubled our efforts to achieve the plan's four reform targets.

We achieved nearly all the main objectives initially set out under "Win21" for business structure reforms. For instance, in our Motion Control Strategic Business Unit (SBU) we positioned the solutions business as its core activity. We focused on increasing orders received through more accurate customer needs analysis. Ensuring timely solutions for our customers has increased customer satisfaction.

We executed reforms to our corporate structure by concentrating operations in three SBUs: Motion Control, Robotics Automation, and System Engineering. We also implemented rapid and efficient business operations. The functions of our corporate headquarters were further strengthened in order to provide greater support to each SBU, and we executed several complementary measures such as office consolidations.

A new performance-based personnel system aimed at greater customer satisfaction was the focus of management structure reforms. This new system was implemented throughout the Yaskawa Group.

Under the auspices of financial structure reforms, the fundamental cost structure of our company was transformed through activities such as the introduction of enterprise resource planning (ERP) and supply chain management (SCM). Through these measures and company-wide centralized purchasing and the reduction of suppliers, we achieved the largest cost reductions to date in the Company's history. We also dramatically improved production efficiency, to ensure we remain competitive against tough cost competition at the global level. In addition to boosting production volume in China, in the Motion Control business sector, we established a new production company within the Group. Finally, many fixed costs have been converted to variable costs for greater flexibility.

As a result of promoting various measures based on "Win21" as described above, consolidated net sales increased by 1.5% compared to the previous fiscal year to ¥226.1 billion.

By devoting our full efforts to cutting cost and reducing overhead as pricing conditions grew increasingly severe, we increased operating income from a negative ¥3.7 billion of the previous year to a very sound ¥6.3 billion for fiscal year 2002. Due to some extraordinary items, including amortization relating to the change in accounting method for retirement benefits, losses on the sale of marketable securities, and return of the entrusted portion of the employee welfare pension fund to the government, we were unable to avoid a net loss for the year. However, this year's net loss of ¥2.5 billion represents an 80% increase over the previous year.

As a result, we regretfully decided to forgo dividend payments this year. On behalf of the Company, we would like to express our appreciation for our shareholders' understanding and support of this difficult decision.

Turning to the next period, we anticipate conditions will remain unchanged, with little likelihood of an upbeat outlook. We expect the future direction of the global economy to remain uncertain as the international situation remains unstable.



**Shin Nakayama** President and Chief Executive Officer

## New Mid-Term Plan "Win21 Plus"

Given these circumstances, we have launched "Win21 Plus," our new three-year mid-term plan (FY 2003-FY 2005). Our objective under this plan is to turn our company into the highest earnings firm within our industry. Faced with intense changes in our operating environment, we will further expand the "Win21" mid-term plan objectives that were the focus of our efforts over the past four years.

The fundamental objectives of "Win21 Plus" are to (1) double added-value productivity, (2) attain a 10% ordinary income margin, and (3) achieve a debt/equity ratio (ratio of interest-bearing liabilities to shareholders' equity) of 1.0 or less. By building on the four structural reforms of "Win21," we will attain several new goals. Yaskawa will, through "Win21 Plus," create continuous cost reductions and faster time-to-market, increase the competitive dominance of our core businesses in the marketplace, cultivate new business, and create a new corporate model.

In this endeavor we will focus first and foremost on financial reforms. Under "Win21" we began fundamental cost structure reforms. To successfully complete this effort, we will execute cost reduction measures for each business process. This will include cost reductions from the product development stage, sweeping improvements to production costs through expansion of overseas production and optimized local production. There will be reductions in the number of necessary positions and redundant costs through enhanced operating efficiency and consolidation of functions and locations.

Balance sheet reforms will include substantive reductions to inventory assets, total assets and the repayment of interestbearing debt.

The second area of concentration will be business reforms. To achieve further growth in our share of the mechatronics business sector, which we emphasized under "Win21," we will introduce high added-value or low-cost products in markets where we anticipate growth. These include key industries such as automobiles, semiconductors and liquid crystal panels and key geographic markets such as China.

We are also planning to expand our business area by positioning our information business alongside our three SBUs as the fourth pillar of our company.

In the past we devoted our efforts to creating new businesses from mechatronics application sectors, such as handling robots for semiconductor and liquid crystal panel manufacturing devices, to strengthen and expand our core businesses. In the future, we will develop and accelerate new business areas such as environmental application and energy conservation, robotics and information. We will also continue to apply and develop core technologies in which we excel and enter into strategic alliances.

Under our management and corporate reforms, we will continue toward creation of our highly profitable corporate model by building upon structural reforms of "Win21," focusing on results-oriented activities. Specifically, under management reforms, we will improve on the reforms already begun in the areas of customer satisfaction, human resources, and business processes. Under corporate structure reforms, we will reform our value chain.

Under "Win21," we substantially improved our cost structure and heightened every employee's awareness of the reforms. By responding rapidly to business environment changes in the future, and anticipating trends in the marketplace ahead of the competition, we will create a new corporate model and move towards completion of critical policies and objectives of "Win21 Plus," our new mid-term plan.

We look forward to continuing to serve you and we thank you for your continuing support.

Hiroshi Nagatsugi
Chairman of the Board

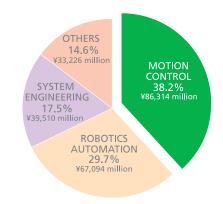
Shir Wakayama

Shin Nakayama

President and Chief Executive Officer

# **MOTION CONTROL**

In every application, Yaskawa draws upon its rich product line and abundant applications expertise to provide high-productivity solutions with high performance and reliability.



#### 2003 Business Segments

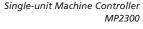
- \* Year Ended March 20 \* does not include inter-segment sales

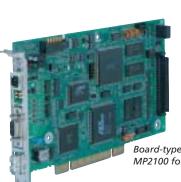
# PRODUCT INFORMATION

# Machine Controller MP2000 Series

Highly accurate, high-speed, easy-to-use controllers are always in demand. With our Machine Controller MP2000 Series we achieved a transmission speed 2.5 times faster than our traditional product speed by using MECHATROLINK-II, our own unique network.

By combining the series with Servo Drive  $\Sigma$ -III, customers can attain even higher speeds. Yaskawa will continue to serve our customers controller needs, and improve our market share as a result.







Board-type Machine Controller MP2100 for Personal Computers

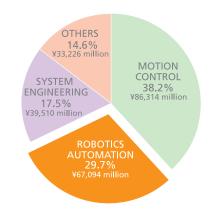
# **MECHATROLINK**

MECHATROLINK, our high-speed motion network, is now available in open architecture. This represents the first adaptation of open architecture in this sector in Japan. To broadly disseminate MECHATROLINK throughout the market, we established MECHATROLINK Members Club. We are actively recruiting member firms and providing user support. Component products that can be connected with MECHATROLINK have already been commercialized by member firms, and the product lineup will continue to grow in the future.



# **ROBOTICS AUTOMATION**

Yaskawa's MOTOMAN industrial robots are the most widely used industrial robots in the world. Yaskawa also offers super-mechatronics products that have earned extensive acclaim in the semiconductor industry. Yaskawa combines these products and others to provide total solutions.



## 2003 Business Segments

- \* Year Ended March 20 \* does not include inter-segment sales

# PRODUCT INFORMATION

## Vacuum Robot RV Series

Yaskawa has commercialized its RV Series vacuumenvironment robots, capable of transferring glass panels measuring up to 400 x 500 mm used in the manufacturing of organic EL displays that are now moving towards practical application in cellular telephone, small and medium-sized televisions and personal computers. We will broaden the product lineup in the future with enhancements, such as a double arm for handling high-speed transfers.



## Clean Robot Series

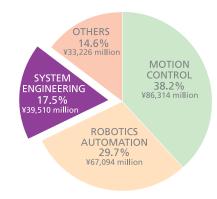
We have begun selling MOTOMAN-CSL2000D, a clean-room robot capable of high-speed replacement of large-scale liquid crystal panels (maximum size 2,150 x 2,250 mm) by using a double arm.

As a result, Yaskawa has a full lineup that can support the transfer of the very small to the ultra large glass panels. Through products like this we have achieved and will continue to hold the world's leading share in clean-room robot sales.



# SYSTEM ENGINEERING

Yaskawa solutions are applied to applications that improve the environment, manufacture products, and provide public services of all types.



#### 2003 Business Segments

- \* Year Ended March 20 \* does not include inter-segment sales

# PRODUCT INFORMATION

# High-voltage Inverter

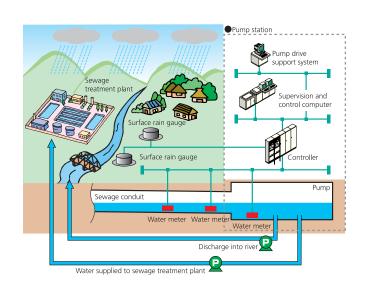
Our VARISPEED-686HV5 series is the industry's first voltage type multiple series high-voltage inverter that we began selling in 1996. It has earned strong positive evaluations from customers based on its substantial energy-saving results from use of wind and water energy from components such as fans and pumps. We recently commercialized a more compact, easy-to-use VARISPEED-686HV5SD with dramatically improved customer benefits including enhanced motor control performance and telecommunications function, smooth restart following momentary power loss and reduced maintenance requirements.



High-voltage inverter VARISPEED-686HV5SD

# Inflow Volume Projection System

Rainwater collected at pumping stations through sewage pipes during periods of rainfall is discharged into rivers and the ocean by pumping operations to prevent local flooding. For these pumping operations, we developed the Inflow Volume Projection System, software capable of operations that correspond to flow volume. We will promote creation of systems utilizing this software in the future.



We are aggressively promoting technology development essential for new products to respond rapidly to the diverse demands in this era of globalization.

# **R&D REVIEW**

# Robot Systems That Cooperate and Coexist with People

At Yaskawa, we dream of joint human-robot activities, in numerous fields including assembly, equipment maintenance, service and rehabilitation. We are now developing a variety of technologies that will be needed in a future society where humans and robots cooperate and coexist. With these technologies, individuals will be able to give robots instructions on the direction and speed at which they should move by adjusting the amount of pressure at which a common object is being handled. Voice commands will also become more reliable for people communicating with robots.



Robot system cooperates and coexists with people\*







Transfer robot



Rehabilitation therapy machine\*

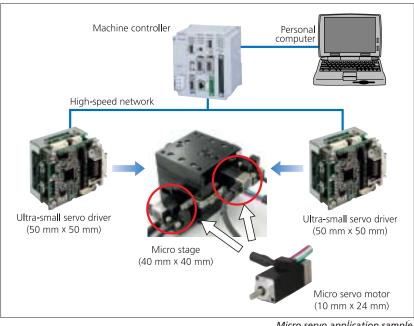


Guided robot

\*A NEDO Project

# Micro-servos

We've developed micro-servos composed of small, high-output efficient micro-servo motors and ultra-compact servo drivers. Industries in which we expect these products to find broad application are growth sectors such as micromachining, humanoid robotics, biotechnology and nanotechnology and optical communications.



Micro servo application sample

We are aggressively promoting development of technology essential for new product development to respond rapidly to the diversified demands in this era of globalization.

# 1. Environmental Protection Policy

At Yaskawa, we recognize that environmental issues are vital to our business. The Company has enacted the following fundamental environmental protection concepts and basic action program.

# **Basic Philosophy**

Yaskawa's Management Philosophy states that "Our Company's Mission is to contribute to the evolution of society and the welfare of mankind through the conduct of our business." The Yaskawa Group therefore recognizes protection of the earth's environment as one of the most important issues common to mankind. We must consider and plan for environmental protection in every aspect of business. In so doing, we will fulfill our management philosophy and accomplish our duty to society.

#### **Basic Activities**

- 1. Set goals for environmental protection and continually improve environmental protection activities.
- Evaluate the environment impact within the realm of our business activities and product development. Cooperate to reduce our burden on the environment in each phase of activity including manufacturing, distribution, use and disposal.
- 3. Observe environmental laws and regulations, establish our own standards and further increase our levels of control through the audit process.
- 4. Provide environmental education to increase every employee's awareness concerning environmental protection. Work with regional communities to create environmental protection programs.
- 5. Inform both the general public and the Company's employees about Yaskawa's environmental plans and activities.

# 2. Reduction of Environmental Burden

Yaskawa is aiming to reduce various environmental burdens and seeks to improve its activities each and every day. All of the Company's offices have obtained ISO14001 environmental management system certification.

Energy conservation
 During fiscal year 2002, we reduced our energy consumption requirement per output standard unit by 12% compared with the previous fiscal year, through measures such as efficient operation of air conditioning equipment, conversion of lighting and production facilities to inverters, and adjustments of summertime electric usage.

- 2. Reduction of waste materials The Company reduced its volume of final industrial waste per output standard unit in fiscal year 2002 by 14% compared with the previous fiscal year, by promoting recycling efforts such as full separation of materials and use of waste materials as fuel.
- 3. Reduction of hazardous air pollutants
  During fiscal year 2002, the Company increased its
  production volume. As a result, our atmospheric emissions
  of dichloromethane also rose slightly compared with the
  previous fiscal year. We will take steps to cut emissions in
  the future by introducing alternative washing tanks.
- 4. Launch of Yaskawa's lead-free project team In response to lead regulations in Europe and other regions, Yaskawa formed a company-wide project team that has begun activities aimed at ensuring every Company product is lead-free by April 2006. The Company began applying lead-free production for part of its inverter models at the end of fiscal year 2002.

# 3. International Environmental Technical Cooperation

Yaskawa conducts activities such as training for overseas trainees in the use of energy-saving equipment operations. During fiscal year 2002, the Company provided training on 13 product models for 130 overseas trainees.



Orientation of trainees

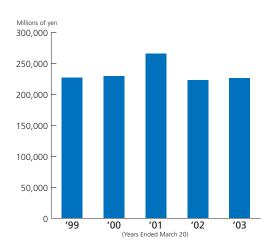
# 4. Environment-friendly Products

- Yaskawa supplies society with highly energy efficient electric power application products. Examples of such products released in fiscal year 2002 are the Company's L7 Series special-purpose inverters for elevators, and its VS-686HV5SD inverter series for fan pumps.
- 2. Yaskawa is focusing its efforts not only on technology to reduce consumption of existing energy sources, but also on development of products that effectively utilize natural energy. The Company began developing a wind power generation system prototype during fiscal year 2002, and conducted empirical tests and marketing surveys.

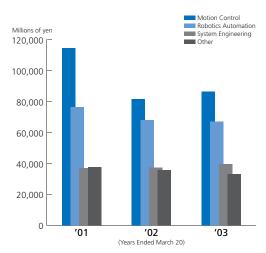
# **Financial Section**

Financial Review
Consolidated Balance Sheets
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Consolidated Statements of Shareholders' Equity
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Notes to Consolidated Financial Statements
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Consolidated Five-Year Financial Summary

#### **Net Sales**



## **Net Sales by Segment**



This year marked the final fiscal year of "Win21," the mid-term plan the Yaskawa Electric Group implemented during fiscal years 1999 through 2002. Under "Win21," we resolutely carried out four structural reforms (business, corporate, management and financial). In particular, we completed the shift of our business structure to Yaskawa's core businesses in Motion Control and Robotics Automation, concentrating management resources in these sectors. Although wrenching changes in our external environment prevented us from fully realizing the anticipated results of this structural reform, we did attain tangible results such as lower production costs. These reforms are contributing greatly to improvement of our profit structure.

By expanding the four structural reforms implemented under "Win21," Yaskawa will construct a new enterprise model under which we will achieve continuous cost reductions and early market introductions of new products, and foster new businesses while increasing our competitive dominance in core businesses.

## **Group Overview**

The Yaskawa Group includes 75 subsidiaries and 27 affiliated companies, with Yaskawa Electric Corporation as the central entity. Based on the scope of consolidation and application of equity method accounting for the fiscal year ended March 20, 2003, Yaskawa accounts for 59 companies as consolidated subsidiaries, 20 firms as affiliated companies to which equity method accounting is applied and two companies as non-consolidated subsidiaries to which equity method accounting is applied.

The Group is organized into four main business segments. These are Motion Control (AC servo motors and controllers, general purpose inverters and other products), Robotics Automation (including welding, painting and handling robots, and clean room and vacuum room robots for use with semiconductor and liquid crystal manufacturing devices), System Engineering (electrical machinery systems for steel plants, electrical machinery and instrumentation systems for service water and sewage systems, other systems), and Others (floppy disk drives, information processing services, distribution services, etc.).

# **Net Sales**

For the fiscal year ended March 20, 2003, Yaskawa recorded an increase of 1.5% in consolidated net sales to ¥226,144 million. By product segment, we expanded sales in both our Motion Control SBU and our System Engineering SBU, which helped to increase total consolidated net sales compared to previous fiscal year. Sales in our Robotics Automation SBU were roughly even with the previous year, but declined in our other business segments. Business segment results are reported below.

In the Motion Control SBU, sales of AC servo motors and controllers, the SBU's main products, remained steady for metalworking and injection molding machinery-related applications, while sales to semiconductor and electronic components-related industries showed a recovering trend from the previous year's sharply depressed level. Exports to Asia and China, in particular of general-purpose inverters used mainly for general industrial applications, also continued at a strong pace. As a result, net sales in this product segment rose 5.8% to ¥86,314 million.

The Robotics Automation business succeeded in expanding market share by aggressively increasing sales of spot welding and painting robots for the automobile industry, even as capital investment in that industry as a whole remained flat. Sales of products for liquid crystal manufacturing devices remained steady, and clean room and vacuum room robots for semiconductor-related applications showed an upward trend from the slack demand of the previous year. Nevertheless, it is obvious that the robotics automation industry as a whole still has room for recovery. As a result of the overall industry climate, net sales in this product segment edged downward 1.3% to ¥67,094 million.

Sales of electrical machinery systems for steel plants and service water and sewage treatment plants, the key System Engineering SBU products, were basically unchanged from the previous year. However, we were able to expand sales in our new system solutions business for set manufacturers. Accordingly, net sales in this product segment increased 5.7% to ¥39,510 million.

In our other business segments, information services continued at a steady pace but demand in the computer peripherals business was weak. Net sales for this product segment declined 7.2% to ¥33,226 million.

By geographical segment, sales in Japan increased 5.8% to ¥184,997 million, sales in North America fell 12.1% to ¥33,919 million, sales in Europe were off 1.4% to ¥27,681 million and sales in Asia jumped 49.2% to ¥13,675 million. These figures for sales by geographical segment are prior to inter-Company sales.

# Cost of Sales, Selling, General and Administrative Expenses and Operating Income

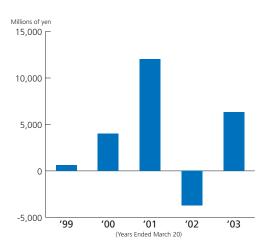
Cost of sales for the fiscal year amounted to \$165,318 million, 2.3% less than in the previous fiscal year. This lowered the Company's cost of sales ratio by 2.9 percentage points, to 73.1%. The main reason for this improvement was our success in implementing cost reduction measures thoroughly across all business sectors through execution of "Win21," Yaskawa Group's mid-term management plan.

Selling, general and administrative expenses declined 4.7% to ¥54,518 million. SG&A expenses as a percentage of net sales decreased by 1.6 percentage points to 24.1%. As a result, the entire Yaskawa Group achieved positive operating income of ¥6,308 million, compared to an operating loss of ¥3,728 million in the previous fiscal year.

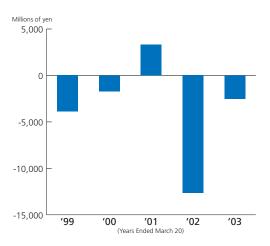
By business segment, the Motion Control SBU returned to profitability and generated operating income of ¥305 million, after incurring an operating loss of ¥6,099 million in the previous fiscal year. Operating income in the Robotics Automation SBU increased 15.6 times to ¥2,985 million, and operating income in the System Engineering SBU jumped 44.4% to ¥1,260 million. Other business segments, operating income rose 33.4% to ¥1,681 million. The effect from cost reductions is contributing substantially to achieving higher profitability, even in business segments that experienced a drop in sales.

By geographical segment, activities in Japan turned an operating loss of ¥4,361 million in the previous fiscal year into operating income of ¥3,698 million in the fiscal year under review. Although our operations in North America incurred another operating loss, we've begun to see a better sales and expenditures balance and we reduced the operating loss from ¥3,114 million in the previous fiscal year to ¥134 million. In Europe,

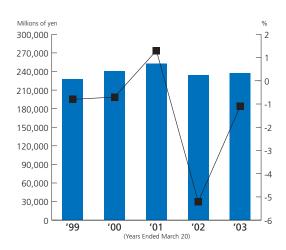
# Operating Income (Loss)



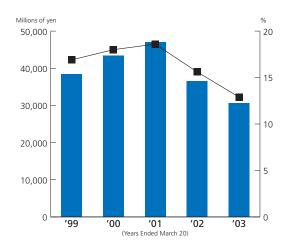
#### Net Income (Loss)



#### **Total Assets & Return on Assets**



#### Shareholders' Equity & Shareholders' Equity Ratio



operating income was affected by lower sales and decreased 22.7% to ¥1,502 million. Operating income in Asia rose 57.9% to ¥1,042 million as a result of higher sales. The figures provided above for operating income (loss) by geographical segment are prior to inter-company eliminations.

#### **Net Loss**

Although non-operating income dropped 39.0% to ¥381 million and nonoperating expenses also fell 52.3% to ¥7,539 million, there were no factors causing these changes that deserve special mention. Extraordinary gains were ¥5,710 million, 19.0% higher than in the previous fiscal year, mainly due to gains on sale of marketable securities and a gain on return of the entrusted portion of the employee welfare pension fund. On the other hand, as extraordinary losses we booked a loss relating to the onetime change in accounting standards for retirement benefits, and a valuation loss on marketable securities. Although the extraordinary loss was 40.2% less than in the previous fiscal year, the absolute amount was ¥10,568 million, still a high level. As a result of the above activities, for the second consecutive year Yaskawa Group incurred a loss before taxes and minority interests totaling ¥850 million compared to a loss before taxes and minority interests of ¥18,897 million in the previous fiscal year. Net loss after corporate, inhabitants and enterprise taxes, corporate tax adjustment and minority interest was ¥2,524 million, compared to a net loss in the previous fiscal year of ¥12,657 million. Net loss per share was ¥11.00, compared to a net loss per share in the previous fiscal year of ¥54.54. Given this result, the Company's board of directors decided not to pay a dividend for the fiscal year. This was a difficult decision we deeply regret, but which we believe prudent in light of the circumstances.

Yaskawa Group has established ROE (return on equity) as one of its key management indicators. Because we incurred a net loss as a result of extraordinary losses for amortization, our ROE was -7.5%. Nevertheless, because of our various management efforts based on "Win21," this represents a vast improvement from our -30.3% ROE of the previous fiscal year.

# **Financial Position**

At the end of the financial period under review, consolidated total assets increased 1.3% to ¥237,641 million, up ¥3,081 million from the end of the previous fiscal year.

Current assets increased by ¥10,499 million, up 7.1% compared to the previous fiscal year-end to ¥158,461 million. The main factor was a higher balance for notes and accounts receivable, which increased by ¥8,463 million to ¥70,151 million along with growth in sales.

Fixed assets were ¥79,181 million. This was ¥7,417 million less than at the end of the previous fiscal year, an 8.6% decrease that resulted from a review of tangible fixed asset purchases as part of the Company's capital investment efficiency improvement effort and the sale of marketable securities.

Consolidated total liabilities increased 4.0% to ¥202,783 million at the end of the fiscal year under review, ¥7,826 million greater than at the end of the previous fiscal year. Although the Company decreased shortterm loans payable by ¥3,300 million, trade payables increased by ¥10,360 million to ¥49,198 million as we increased production.

Total shareholders' equity declined 16.1% to ¥30,632 million, ¥5,893 million less than at the end of the previous fiscal year. This was mainly because of a decrease in consolidated retained earnings and a smaller balance for other securities valuation.

The debt/equity ratio, one of our key management indicators, deteriorated slightly to 2.85 from 2.48 at the end of the previous fiscal year. Although we repaid ¥3,301 million of interest-bearing debt and reduced total interest-bearing debt by 3.6% to ¥87,317 million, the debt/equity ratio was affected by the fall in shareholders' equity as expressed above.

Yaskawa seeks to achieve a maximum increase in earnings on invested shareholders' equity. The Company is also concerned with the interests of all its stakeholders, including shareholders and employees. Yaskawa will therefore aggressively work to improve the level of its management indicators in the future.

#### **Cash Flows**

The balance of cash and cash equivalents at the end in the consolidated fiscal year under review increased to ¥16,268 million, up ¥40 million. The factors affecting cash flows for the consolidated fiscal year are described below.

# Cash flows from operating activities:

Net cash provided by operating activities was ¥8,444 million, an improvement of ¥19,988 million compared with the previous fiscal year. Although the Company incurred a loss before income taxes and minority interests of ¥850 million, cash flow improved mainly due to ¥13,900 million in non-cash expenses.

# Cash flows from investing activities:

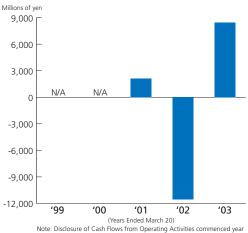
Net cash used in investing activities was ¥1,950 million. Proceeds from sales of marketable securities and fixed assets were ¥5,970 million, and payments for capital equipment and information technology investments totaled ¥7,303 million. Net cash used in investing activities improved by ¥6,057 million compared to previous fiscal year.

As a result free cash flow, calculated as cash flows from operating activities less cash flows from investing activities, was greatly improved from a negative amount of ¥19,550 million in the previous fiscal year to a positive ¥6,494 million.

## Cash flows from financing activities:

Net cash used in financing activities was ¥6,526 million, a reversal of ¥29,715 million from the previous fiscal year. Although Yaskawa raised ¥7,801 million as proceeds from long-term debt, the Company decreased short-term borrowings by ¥9,939 million, repaid ¥4,707 million of longterm debt and redeemed ¥10,000 million of debentures.

# Cash Flows from Operating Activities



ended March 20, 2001. Data from earlier periods is not available

Consolidated Balance Sheets
Yaskawa Electric Corporation and Consolidated Subsidiaries As of March 20, 2003 and 2002

	Millio	Thousands of U.S. dollars (Note 3)		
ASSETS	2003	2002	2003	
Current assets:				
Cash and time deposits (Note 4)	¥ 15,638	¥ 16,138	\$ 129,884	
Short-term investments (Notes 4 and 5)	1,360	674	11,296	
Trade receivables				
Notes	13,562	11,328	112,641	
Accounts (Note 7)	56,589	50,360	470,008	
Allowance for doubtful accounts	(602)	(609)	(5,000)	
Inventories (Notes 6 and 7)	54,162	54,341	449,842	
Other current assets (Note 9)	17,752	15,730	147,442	
Total current assets	158,461	147,962	1,316,113	
Investment securities (Note 5) Investments in and advances to unconsolidated subsidiaries and affiliates	8,965 3,975	14,069 4,328	74,460	
subsidialles alla attiliales	12,940	18,397	107,475	
Property, plant and equipment, at cost (Note 7):				
Land	9,411	9,667	78,164	
Buildings and structures	35,612	36,777	295,781	
Machinery and equipment	33,764	34,193	280,432	
Other	24,077	25,473	199,975	
	102,864	106,110	854,352	
Less accumulated depreciation	(63,763)	(63,197)	(529,593)	
Net property, plant and equipment	39,101	42,913	324,759	
Other assets (Note 9)	27,139	25,288	225,407	
Total assets	¥237,641	¥234,560	\$1,973,754	

	N 4111:	os of von	Thousands of U.S. dollars
LIABILITIES AND SHAREHOLDERS' EQUITY	2003	ns of yen 2002	(Note 3) 2003
Current liabilities:			
Short-term bank loans (Notes 4 and 7)	¥ 50,028	¥ 61,160	\$ 415,515
Current portion of long-term debt (Note 7)	12,289	4,458	102,068
Trade payables			
Notes payable	7,817	7,587	64,925
Accounts payable	41,381	31,251	343,696
Accrued income taxes (Note 9)	2,483	1,275	20,623
Other current liabilities	24,584	24,883	204,170
Total current liabilities	138,582	130,614	1,150,997
Long-term liabilities:			
Long-term debt (Note 7)	36,879	42,153	306,304
Accrued retirement benefits (Note 8)	24,973	19,825	207,417
Other long-term liabilities (Note 9)	2,349	2,365	19,518
Total long-term liabilities	64,201	64,343	533,239
Minority interests	4,226	3,078	35,100
Contingent liabilities (Note 10)			
Shareholders' equity (Note 11):			
Common stock:	15,541	15,541	129,078
Authorized: 560,000,000 shares			
Issued: 232,059,582 shares			
Additional paid-in capital	14,750	14,750	122,508
Retained earnings (deficit)	(286)	2,517	(2,375)
Net unrealized holding gain on securities	250	2,006	2,076
Foreign currency translation adjustments	582	1,720	4,834
Treasury stock, at cost: 609,209 shares in 2003;			
18,110 shares in 2002	(205)	(9)	(1,703)
Total shareholders' equity	30,632	36,525	254,418
Total liabilities and shareholders' equity	¥ 237,641	¥ 234,560	\$1,973,754

# Consolidated Statements of Operations Yaskawa Electric Corporation and Consolidated Subsidiaries Years Ended March 20, 2003 and 2002

	Millio	ns of yen	Thousands of U.S. dollars (Note 3)
	2003	2002	2003
Net sales	¥226,144	¥222,707	\$1,878,272
Operating costs and expenses:			
Cost of sales (Note 12)	165,318	169,232	1,373,073
Selling, general and administrative expenses (Note 12)	54,518	57,203	452,807
Operating income (loss)	6,308	(3,728)	52,392
Other income (expenses):			
Interest and dividend income	381	625	3,164
Interest expense	(2,188)	(2,573)	(18,173)
Other, net (Note 13)	(5,351)	(13,221)	(44,443)
Loss before income taxes and minority interests	(850)	(18,897)	(7,060)
Income taxes (Note 9):			
Current	2,702	749	22,442
Deferred	(1,039)	(7,021)	(8,630)
Loss before minority interests	(2,513)	(12,625)	(20,872)
Minority interests	11	32	91
Net loss	¥ (2,524)	¥ (12,657)	\$ (20,963)
PER SHARE OF COMMON STOCK	Y	⁄en	U.S. dollars
Net loss – basic	¥ (11.00)	¥ (54.54)	\$ (0.091)
Cash dividends	_	_	_

# Consolidated Statements of Shareholders' Equity Yaskawa Electric Corporation and Consolidated Subsidiaries Years Ended March 20, 2003 and 2002

	,		Thousands of U.S. dollars
	Million	ns of yen 2002	(Note 3) 2003
Common stock	2003	2002	
Balance at beginning of year	¥ 15,541	¥ 15,541	\$129,078
Balance at end of year	¥ 15,541	¥ 15,541	\$129,078
Additional paid-in capital			
Balance at beginning of year	¥ 14,750	¥ 14,750	\$122,508
Balance at end of year	¥ 14,750	¥ 14,750	\$122,508
Retained earnings (deficit)			
Balance at beginning of year	¥ 2,517	¥ 16,780	\$ 20,905
Net loss	(2,524)	(12,657)	(20,963
Cash dividends	-	(928)	-
Bonuses to directors and corporate auditors	(50)	(127)	(415
Effect of increase in consolidated subsidiaries	19	396	158
Effect of decrease in consolidated subsidiaries	(248)	(585)	(2,060
Other		(362)	
Balance at end of year	¥ (286)	¥ 2,517	\$ (2,375
let unrealized holding gain on securities			
Balance at beginning of year	¥ 2,006	¥ –	\$ 16,661
Net changes during the year	(1,756)	2,006	(14,585
Balance at end of year	¥ 250	¥ 2,006	\$ 2,076
oreign currency translation adjustments			
Balance at beginning of year	¥ 1,720	¥ (325)	\$ 14,286
Net changes during the year	(1,138)	2,045	(9,452
Balance at end of year	¥ 582	¥ 1,720	\$ 4,834
reasury stock, at cost			
Balance at beginning of year	¥ (9)	¥ (1)	\$ (75
Net changes during the year	(196)	(8)	(1,628
Balance at end of year	¥ (205)	¥ (9)	\$ (1,703

Consolidated Statements of Cash Flows
Yaskawa Electric Corporation and Consolidated Subsidiaries Years Ended March 20, 2003 and 2002

	Millio	ns of yen	Thousands of U.S. dollars (Note 3)
	2003	2002	(Note 3) 2003
Cash flows from operating activities			
Loss before income taxes and minority interests	¥ (850)	¥(18,897)	\$ (7,060)
Depreciation and amortization	6,752	6,882	56,080
Interest and dividend income	(381)	(625)	(3,164)
Interest expense	2,188	2,573	18,173
Gain on sales of property, plant and equipment, net	(172)	(3,850)	(1,429)
Amortization of net retirement benefit obligation at transition	5,698	6,407	47,325
Write-down of investment securities	1,493	3,792	12,400
(Increase) decrease in trade receivables	(8,944)	25,057	(74,285)
Increase) decrease in inventories	(827)	8,796	(6,869)
ncrease (decrease) in trade payables	10,806	(23,721)	89,751
Other, net	(3,404)	(12,931)	(28,272)
Subtotal	12,359	(6,517)	102,650
nterest and dividend received	428	778	3,555
nterest paid	(2,367)	(2,672)	(19,659)
ncome taxes paid	(1,976)	(3,133)	(16,412)
Net cash provided by (used in) operating activities	8,444	(11,544)	70,134
Cash flows from investing activities  Purchases of property, plant and equipment and			
intangible assets	(6,139)	(10,907)	(50,988)
Proceeds from sales of property, plant and equipment	2,228	2,814	18,505
Purchases of investment securities	(1,165)	(509)	(9,676)
Proceeds from sales of investment securities	2,510	1,414	20,847
Other, net	616	(819)	5,116
Net cash used in investing activities	(1,950)	(8,007)	(16,196)
Cash flows from financing activities  Decrease) increase in shot-term debt	(9,939)	23,613	(82,550)
Proceeds from long-term debt	7,801	5,260	64,792
Repayments of long-term debt	(4,707)	(4,629)	(39,095)
Proceeds from issuance of convertible bonds	9,964	(4,023)	82,757
Redemption of bonds	(10,000)	_	(83,056)
Dividends paid to stockholders of the Company	(10,000)	(928)	(03,030)
Other, net	355	(127)	2,949
Net cash (used in) provided by financing activities	(6,526)	23,189	(54,203)
Effect of exchanges rate changes on cash and cash equivalents	20	84	165
Net (decrease) increase in cash and cash equivalents	(12)	3,722	(100)
Cash and cash equivalents at beginning of year	16,228	12,506	134,784
ncrease due to inclusion of subsidiaries in consolidation	139	12,300	1,155
Decrease due to exclusion of subsidiaries from consolidation	(87)		(723)
Cash and cash equivalents at end of year (Note 4)	¥16,268	¥ 16,228	(723)_ \$135,116

# **Notes to Consolidated Financial Statements**

Yaskawa Electric Corporation and Consolidated Subsidiaries

# 1. Basis of Preparation

YASKAWA ELECTRIC CORPORATION (the "Company") and its domestic subsidiaries maintain their books of account in conformity with the financial accounting standards of Japan, and its foreign subsidiaries maintain their books of account in conformity with those of their countries of domicile.

The accompanying consolidated financial statements have been prepared in accordance with accounting principles and practices generally accepted and applied in Japan, which may differ in certain material respects from accounting principles and practices generally accepted in countries and jurisdictions other than Japan, and have been compiled from the consolidated financial statements prepared by the Company as required by the Securities and Exchange Law of Japan.

In preparing the accompanying consolidated financial statements, certain reclassifications and rearrangements have been made to the consolidated financial statements issued domestically in order to present them in a form that is more familiar to readers outside Japan.

# 2. Summary of Significant Accounting Policies

(a) Principles of consolidation and accounting for investments in unconsolidated subsidiaries and affiliates

The accompanying consolidated financial statements include the accounts of the Company and significant companies controlled directly or indirectly by the Company. Significant companies over which the Company exercises significant influence in terms of their operating and financial policies are included in the consolidated financial statements on an equity basis. All significant intercompany balances and transactions are eliminated in consolidation.

The excess of cost over underlying net assets at fair value as of the dates of acquisition is amortized over a period of 5 years on a straight-line basis.

Investments in subsidiaries and affiliates, which are not consolidated or accounted for by the equity method, are carried at cost or less. Where there has been a permanent decline in the value of such investments, the Company has written down the investments.

(b) Cash equivalents

All highly liquid investments with a maturity of three months or less when purchased are considered cash equivalents.

(c) Foreign currency translation

Monetary assets and liabilities denominated in foreign currencies are translated into yen at the exchange rates prevailing at the balance sheet date. All revenues and expenses associated with foreign currencies are translated at the rates of exchange prevailing when such transactions were made. The resulting exchange gains and losses are credited or charged to income.

The revenue and expense accounts of the foreign subsidiaries are translated into yen at the rates of exchange in effect at the balance sheet date. Except for the components of shareholders' equity, the balance sheet accounts are also translated into yen at the rates of exchange in effect at the balance sheet date. The components of shareholders' equity are translated at their historical exchange rates.

(d) Securities

Securities other than those of subsidiaries and affiliates are classified into three categories: trading, held-to-maturity or other securities. Trading securities are carried at fair value and held-to-maturity securities are carried at amortized cost. Marketable securities classified as other securities are carried at fair value with changes in unrealized holding gain or loss, net of the applicable income taxes, included directly in shareholders' equity. Non-marketable securities classified as other securities are carried at cost. Cost of securities sold is determined by the moving average method.

(e) Inventories

Ordered finished products and work in process are mainly stated at cost determined by the specific identification method. Standard finished products, semi-finished products and raw materials are mainly stated at cost determined by the average method.

(f) Allowance for doubtful accounts

The allowance for doubtful receivables is provided at an amount determined based on the historical experience of bad debt with respect to ordinary receivables, plus an estimate of uncollectible amounts determined by reference to specific doubtful receivables from customers which are experiencing financial difficulties

(g) Property, plant and equipment and intangible fixed assets

Depreciation of property, plant and equipment is calculated principally by the declining-balance method. The useful lives of property, plant and equipment are summarized as follows:

Buildings and structures 3 to 50 years Machinery and equipment 3 to 17 years

Maintenance and repairs, including minor renewals and improvements, are charged to income as incurred.

(h) Intangible fixed assets

Intangible fixed assets are amortized by the straight-line method.

Effective the year ended March 20, 2003, the Company's U.S. consolidated subsidiaries have adopted SFAS No. 142, "Goodwill and Other Intangible Assets." Under SFAS No. 142, goodwill and certain other intangible assets which have an indefinite useful life will no longer be amortized, but will be devalued for impairment on an annual basis and between annual tests as well if an event occurs or circumstances change that would more likely than not reduce the fair value below the carrying amount. As a result of the adoption of SFAS No. 142, loss before income taxes and minority interests for the year ended March 20, 2003 decreased by ¥534 million (\$4,435 thousand) from the amount which would have been reported if the previous method of accounting (the straight-line method over 10 to 15 years) had been applied.

Capitalized computer software costs are being amortized over a period of five years.

(i) Accrued retirement benefits

Accrued retirement benefits for employees are provided mainly at an amount calculated based on the retirement benefit obligation and the fair value of the pension plan assets as of balance sheet date, as adjusted for unrecognized net retirement benefit obligation at transition, unrecognized actuarial gain or loss, and unrecognized prior service cost. The retirement benefit obligation is attributed to each period by the straight-line method over the estimated years of service of the eligible employees.

The net retirement benefit obligation at transition is being amortized principally over a period of five years by the straight-line method. Actuarial gain and loss are amortized in the year following the year in which the gain or loss is recognized primarily by the straight-line method over the average remaining years of service of the employees (16 years).

See Note 9 for the method of accounting for the separation of the substitutional portion of the benefit obligation from the corporate portion of the benefit obligation under Welfare Pension Fund Plan.

#### (i) Leases

Non-cancelable lease transactions are primarily accounted for as operating leases except that lease agreements which stipulate the transfer of ownership of the leased assets to the lessee are accounted for as finance leases.

- (k) Research and development expenses and advertising costs
  - Research and development expenses and advertising costs are charged to income as incurred.
- (I) 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 which will be in effect when the differences are expected to reverse.

#### (m) Amounts per share

In accordance with a new accounting standard for earnings per share which became effective March 21, 2002, basic net loss per share for the year ended March 20, 2003 was computed based on the net loss attributable to shareholders of common stock and the weighted average number of shares of common stock outstanding during each year. Diluted net loss per share was computed based on the net loss attributable to the shareholders and the weighted average number of shares of common stock outstanding during each year assuming full conversion of convertible bonds. The effect of the adoption of this new standard on net loss per share for the year ended March 20, 2002 was immaterial.

No diluted net loss per share is presented for the years ended March 20, 2003 and 2002 because the effect of any conversion would be antidilutive. Cash dividends per share represent the cash dividends declared as applicable to the respective years, together with the interim cash dividends paid.

(n) Derivative financial instruments

The Company has entered into various derivative transactions in order to manage certain risks arising from adverse fluctuations in foreign currency exchange rates and interest rates. Derivative financial instruments are carried at fair value with changes in unrealized gain or loss charged or credited to operations, except for those which meet the criteria for deferral hedge accounting under which unrealized gain or loss is deferred as an asset or a liability. Receivables and payables hedged by qualified forward foreign exchange contracts are translated at the corresponding foreign exchange contract rates.

- (o) Treasury stock and reduction of legal reserves
  - Effective March 21, 2002, the Company adopted a new accounting standard for treasury stock and reduction of legal reserves. The effect of the adoption of this new standard was immaterial for the year ended March 20, 2003.
- (p) Appropriation of retained earnings

Under the Commercial Code of Japan, the appropriation of retained earnings with respect to a given financial period is made by resolution of the shareholders at a general meeting to be held subsequent to the close of such financial period. The accounts for that period do not, therefore, reflect such appropriations.

# 3. U.S. Dollar Amounts

The Company and its consolidated subsidiaries in Japan maintain their books of account in yen. The U.S. dollar amounts included in the accompanying consolidated financial statements and the notes thereto represent the arithmetic results of translating yen into U.S. dollars at ¥120.4 = U.S.\$1, the approximate rate of exchange prevailing on March 20, 2003.

The U.S. dollar amounts are presented solely for the convenience of the reader and the translation is not intended to imply that the assets and liabilities which originated in yen have been or could readily be converted, realized or settled in U.S. dollars at the above or any other rate.

# 4. Cash and Cash Equivalents

The components of cash and cash equivalents at March 20, 2003 and 2002 were as follows:

			THOUSAITAS OF
	Millions of yen		U.S. dollars
	2003	2002	2003
Cash and time deposits	¥ 15,638	¥16,138	\$129,884
Time deposits with a maturity of more than three months	(124)	(144)	(1,030)
Short-term investments with a maturity of three months or less	1,054	559	8,754
Bank overdrafts included in short-term bank loans	(300)	(325)	(2,492)
Cash and cash equivalents	¥ 16,268	¥16,228	\$135,116

Thousands of

# 5. Securities

a) Information regarding marketable securities classified as other securities as of March 20, 2003 and 2002 is as follows:

		March 20, 2003				
		Millions of yen		Thousand of U.S. dollars		
	Acquisition cost	Carrying value	Difference	Acquisition cost	Carrying value	Difference
Securities whose carrying value						
exceeds their acquisition cost:						
Stocks	¥ 2,370	¥ 3,719	¥ 1,349	\$ 19,684	\$ 30,889	\$ 11,205
Bonds	162	165	3	1,346	1,370	24
Others		_	_	_	_	
Subtotal	¥ 2,532	¥ 3,884	¥ 1,352	\$ 21,030	\$ 32,259	\$ 11,229
Securities whose acquisition cost						
exceeds their carrying value:						
Stocks	¥ 4,346	¥ 3,433	¥ (913)	\$ 36,096	\$ 28,513	\$ (7,583)
Bonds	_	_	_	_	_	_
Others	61	38	(23)	506	315	(191)
Subtotal	¥ 4,407	¥ 3,471	¥ (936)	\$ 36,602	\$ 28,828	\$ (7,774)
Total	¥ 6,939	¥ 7,355	¥ 416	\$ 57,632	\$ 61,087	\$ 3,455

		Лarch 20, 2002		
		Millions of yen		
	Acquisition cost	Carrying value	Difference	
Securities whose carrying value exceeds their acquisition cost:				
Stocks	¥ 3,177	¥ 7,591	¥ 4,414	
Bonds	32	34	2	
Others	_	_	_	
Subtotal	¥ 3,209	¥ 7,625	¥ 4,416	
Securities whose acquisition cost exceeds their carrying value:				
Stocks	¥ 5,901	¥ 4,769	¥ (1,132)	
Bonds	130	130	_	
Others	60	48	(12)	
Subtotal	¥ 6,091	¥ 4,947	¥ (1,144)	
Total	¥ 9,300	¥ 12,572	¥ 3,272	

b) Sales of securities classified as other securities for the years ended March 20, 2003 and 2002 is summarized as follows:

			Thousands of
		Millions of yen	U.S. dollars
	200	2002	2003
Proceeds from sales	¥2,5	<b>10</b> ¥ 1,411	\$ 20,847
Gains on sales	1,6	<b>18</b> 1,098	13,439
Losses on sales		<b>96</b> 57	797

c) The redemption schedule for securities with maturity dates classified as other securities as of March 20, 2003 is summarized as follows:

			N	/larch 20, 200	)3			
		Millions of yen				Thousands	of U.S. dollars	
		Due after	Due after			Due after	Due after	
	Due within	1 year and	5 years and	Due after	Due within	1 year and	5 years and	Due after
	1 year	within 5 years	within 10 years	10 years	1 year	within 5 years	within 10 years	_10 years_
Bonds	¥ 95	¥ 60	¥10	_	\$ 789	\$ 498	\$ 83	_
Others	_	_	_	_	_	_	_	_
Total	¥ 95	¥ 60	¥10	_	\$ 789	\$ 498	\$ 83	_

# 6. Inventories

Inventories at March 20, 2003 and 2002 consisted of the following:

			THOUSands Of
	Millions	Millions of yen	
	2003	2002	2003
Finished products	¥ 26,587	¥ 25,657	\$220,822
Semifinished products, work in process	10,005	11,287	83,090
Raw materials	17,570	17,397	145,930
	¥ 54,162	¥ 54,341	\$449,842

# 7. Short-Term Bank Loans and Long-Term Debt

The weighted average interest rates of short-term bank loans were 1.3% and 1.5% at March 20, 2003 and 2002, respectively. Short-term bank loans at March 20, 2003 and 2002 consisted of following:

Short-term bank loans at March 20, 2005 and 2002 consisted of following.			
	Million	s of yen	Thousands of U.S. dollars
	2003	2002	2003
Secured	¥ 1,977	¥ 5,020	\$ 16,420
Unsecured	48,051	56,140	399,095
	¥50,028	¥61,160	\$415,515
Long-term debt at March 20, 2003 and 2002 consisted of the following:			
			Thousands of
	Million	s of ven	U.S. dollars
	2003	2002	2003
Unsecured convertible bonds:			
0.30% due 2005	¥ 15,000	¥ 15,000	\$124,585
	¥ 13,000	<b># 15,000</b>	\$ 124,565
Unsecured bonds:			
2.50% due 2003	-	10,000	-
1.66% due 2008	10,000	_	83,056
Bank loans with interest rates ranging from 0.87% to 7.07%, due through 2008:			
Secured	1,610	1,890	13,372
Unsecured	22,558	19,721	187,359
Officeated	49,168	46.611	408,372
	•		•
Current portion of long-term debt	(12,289)	(4,458)	(102,068)
	¥ 36,879	¥ 42,153	\$306,304

At March 20, 2003, unsecured convertible bonds, unless previously redeemed, were convertible at the option of the holders into shares of common stock of the Company at the current conversion prices as follows:

Conversion price per share (yen)	Conversion period
¥ 952	September 1, 2000 – March 17, 2005

At March 20, 2003, if all the outstanding convertible bonds had been converted at the then current conversion prices, 15,756 thousand new shares of common stock would have been issuable.

Under the indentures and trust deeds of the convertible bonds, conversion price is subject to adjustment in certain cases which include stock splits. A sufficient number of shares of common stock is reserved for the conversion of all outstanding convertible bonds.

The aggregate annual maturities of long-term debt subsequent to March 20, 2003 are summarized as follows:

Year ending March 20,	Millions of yen	Thousands of U.S. dollars
2004	¥12,289	\$102,068
2005	18,264	151,694
2006	3,112	25,847
2007	2,804	23,289
2008	11,064	91,894
2009 and thereafter	1,635	13,580
	¥49.168	\$408.372

The assets pledged as collateral for short-term bank loans and long-term bank loans at March 20, 2003 and 2002 were as follows:

			THOUSAITUS OF
	Millions of yen		U.S. dollars
	2003	2002	2003
Accounts receivable	¥2,676	¥ 2,857	\$ 22,226
Inventories	746	811	6,196
Property, plant and equipment, at net book value	4,472	3,897	37,143
	¥7,894	¥7,565	\$ 65,565

As is customary in Japan, substantially all loans from banks (including short-term loans) are made under general agreements which provide that, the request of the banks, the borrower is required to provide collateral or guarantors (or additional collateral or guarantors, as appropriate) with respect to such loans, and that all assets pledged as collateral under such agreements will be applicable to all present and future indebtedness to the banks concerned. These general agreements further provide that the banks have the right, as the indebtedness matures or becomes due prematurely by default, to offset deposits at the banks against the indebtedness due to the banks.

# 8. Retirement Benefit Plans

The Company and its domestic consolidated subsidiaries have defined benefit plans, i.e., welfare pension fund plans (WPFP) and lump-sum payment plans, covering substantially all employees who are entitled to lump-sum or annuity payments, the amounts of which are determined by reference to their basic rates of pay, length of service, and the conditions under which termination occurs.

The following table sets forth the funded and accrued status of the plans, and the amounts recognized in the consolidated balance sheet as of March 20, 2003 and 2002 for the Company's and the consolidated subsidiaries' defined benefit plans:

Thousands of

	Millions of yen		U.S. dollars
	2003	2002	2003
Retirement benefit obligation	¥(73,411)	¥(121,183)	\$(609,726)
Plan assets at fair value	17,660	54,655	146,678
Unfunded retirement benefit obligation	(55,751)	(66,528)	(463,048)
Unrecognized net retirement benefit obligation at transition	10,782	25,628	89,551
Unrecognized actuarial loss	19,996	21,075	166,080
Accrued retirement benefits	¥(24,973)	¥ (19,825)	\$(207,417)

The substitutional portion of the benefits under the WPFP has been included in the amounts shown in the above table.

On January 17, 2003, the Company received approval from the Minister of Health, Labor and Welfare with respect to its application for an exemption from the obligation for benefits related to future employee services under the substitutional portion of the WPFP. In accordance with the transitional provision stipulated in "Practical Guidelines for Accounting for Retirement Benefits," the Company accounted for the separation of the substitutional portion of the benefit obligation from the corporate portion of the benefit obligation under its WPFP as of the date of approval of its exemption assuming that the transfer to the Japanese government of the substitutional portion of the benefit obligation and related pension plan assets had been completed as of that date. As a result, the Company recognized a gain of ¥126 million (\$1,047 thousand) for the year ended March 20, 2003. The pension assets that are to be transferred were calculated at ¥30,411 million (\$252,583 thousand) at March 20, 2003.

The components of retirement benefit expenses for the years ended March 20, 2003 and 2002 are outlined as follows:

			THOUSands Of
	Millions of yen		U.S. dollars
	2003	2002	2003
Service cost	¥ 2,863	¥ 2,823	\$ 23,779
Interest cost	3,133	2,337	26,022
Expected return on plan assets	(1,414)	(799)	(11,744)
Amortization of net retirement benefit obligation at transition	5,698	6,407	47,325
Amortization of net actuarial loss	1,298		10,781
Periodic benefit costs before extraordinary adjustments	11,578	10,768	96,163
Gain on return of the substitutional portion of welfare pension fund plans	(126)		(1,047)
Total	¥11,452	¥10,768	\$ 95,116
The assumptions used in the accounting for the above plans are as follows:			

	2003	2002
Discount rate	3.0%	3.0%
Expected return on plan assets	3.0%	3.5%

Thousands of

# 9. Income Taxes

Income taxes applicable to the Company and its domestic consolidated subsidiaries comprised corporation tax, enterprise tax and inhabitants' taxes which, in the aggregate, resulted in a statutory tax rate of approximately 41.7% for both 2003 and 2002. Income taxes of the foreign consolidated subsidiaries are based generally on the tax rates applicable in their countries of incorporation.

The effective tax rates reflected in the consolidated statements of operations for the years ended March 20, 2003 and 2002 differs from the statutory tax rate for the following reasons:

	2003	2002
Statutory tax rate	41.7%	41.7%
Effect of:		
Net operating loss of subsidiaries	-	(5.7)
Elimination of unrealized profits	-	0.8
Expenses not deductible for income tax purposes	(31.2)	(1.1)
Dividend income deductible for income tax purposes	-	0.8
Elimination of dividend income from overseas subsidiaries	(68.1)	(2.1)
Equity in earnings of unconsolidated subsidiaries and affiliates	(36.1)	(1.1)
Changes in valuation allowance	(95.0)	_
Other, net	(7.0)	(0.1)
Effective tax rates	(195.7)%	33.2%

The significant components of deferred tax assets and liabilities as of March 20, 2003 and 2002 were as follows:

	Millions of yen		U.S. dollars
	2003	2002	2003
Deferred tax assets:			
Allowance for doubtful accounts	¥ 89	¥ 103	\$ 739
Accrued bonus	1,205	988	10,008
Retirement allowances	8,151	5,686	67,699
Investments securities	2,595	2,079	21,553
Constructive dividend	299	294	2,483
Inventories valuation	925	1,749	7,683
Tax loss carry forwards	5,869	6,709	48,746
Other	1,791	2,204	14,876
Total gross deferred tax assets	20,924	19,812	173,787
Valuation allowance	(3,185)	(2,725)	(26,453)
Total deferred tax assets	17,739	17,087	147,334
Deferred tax liabilities:			
Net unrealized holding gains on securities	(174)	(1,474)	(1,445)
Special tax-purpose reserve for condensed booking of reserve fixed assets	_	(272)	_
Other	(142)	(530)	(1,180)
Total deferred tax liabilities	(316)	(2,276)	(2,625)
Net deferred tax assets	¥17,423	¥14,811	\$144,709

Net deferred tax assets and liabilities as of March 20, 2003 and 2002 were included in the consolidated balance sheets as follows:

			Thousands of
	Millions of yen		U.S. dollars
	2003	2002	2003
Other current assets	¥ 6,711	¥ 6,280	\$ 55,739
Other assets	10,835	8,960	89,991
Other long-term liabilities	(123)	(429)	(1,021)
Net deferred tax assets	¥ 17,423	¥ 14,811	\$144,709

# 10. Contingent Liabilities

The Company and its consolidated subsidiaries had the following contingent liabilities at March 20, 2003:

	Millions of yen	Thousands of U.S. dollars
Trade notes receivable discounted with banks	¥ 9,796	\$81,362
Guarantor of indebtedness of:		
Employee	212	1,761
Others	151	1,254

# 11. Additional Paid-In Capital and Retained Earnings

In accordance with the Commercial Code of Japan (the "Code"), the Company has prepared a legal reserve, which was included in retained earnings. The Code provides that an amount equal to at least 10% of the amount to be disbursed as a distribution of earnings be appropriated to the legal reserve until the total of such reserve and the capital surplus account equals 25% of the common stock account. The legal reserve amounted to \(\xi\_2,732\) million (\xi\_22,691\) thousand) as of both March 20, 2003 and 2002.

The Code provides that neither capital surplus nor the legal reserve is available for dividends, but both may be used to reduce or eliminate a deficit by resolution of the shareholders or may be transferred to common stock by resolution of the Board of Directors. On October 1, 2001, an amendment (the "Amendment") to the Code became effective. The Amendment provides that if the total amount of capital surplus and the legal reserve exceeds 25% of the amount of common stock, the excess may be distributed to the shareholders either as a return of capital or as dividends subject to the approval of the shareholders. In addition, the Amendment eliminates the stated par value of the Company's outstanding shares, which resulted in all outstanding shares having no par value as of October 1, 2001. The Amendment also provides that all share issuances after September 30, 2001 will be of shares with no par value. Prior to the date on which the Amendment came into effect, the Company's shares had a par value of ¥50.

# 12. Research and Development Expenses

Research and development expense included in manufacturing cost and selling, general and administrative expenses for the years ended March 20, 2003 and 2002 amounted to  $\pm$ 6,946 million (\$57,691 thousand) and  $\pm$ 7,683 million, respectively.

# 13. Other Income (Expenses)

Other income (expenses)-other, net for the years ended March 20, 2003 and 2002 consisted of the following:

			rnousands of
	Millions	of yen	U.S. dollars
	2003	2002	2003
Gain on sales of investment securities	¥ 1,522	¥ 1,041	\$ 12,641
Royalty income	331	703	2,749
Gain on expropriation of plant	3,197	_	26,553
Foreign exchange (losses) gains	(286)	174	(2,375)
Equity in losses of affiliates	(702)	(500)	(5,831)
Gain on sales of property, plant and equipment, net	172	3,850	1,429
Loss on write-down of investment securities	(1,493)	(3,792)	(12,400)
Amortization of net retirement benefit obligation at transition	(5,698)	(6,407)	(47,325)
Additional retirement benefits paid to employees	(1,105)	(2,451)	(9,178)
Business restructuring costs	(661)	(2,644)	(5,490)
Other, net	(628)	(3,195)	(5,216)
	¥(5,351)	¥(13,221)	\$ (44,443)

# 14. Derivative Financial Instruments

The Company has entered into forward foreign exchange contracts and interest rate swaps in order to hedge risks of adverse fluctuations in foreign currency exchange rates and interest rates associated with export-import transactions and financial liabilities, but does not enter into such transactions for speculative purposes.

The Company is exposed to credit risk in the event of nonperformance by the counterparties to the derivative transactions, but any such loss would not be material because the Company enters into transactions only with financial institutions with high credit ratings.

Execution and management of all derivative transactions are conducted pursuant to the internal management rule for derivatives by the Finance Department and the status of derivative transactions is reported on a monthly basis to the Board of Directors.

The fair value of the Companies' derivative financial instruments at March 20, 2003 and 2002 were as follows:

			March 2	0, 2003			
		Millions of yen			sands of U.S.	J.S. dollars	
		•	Unrealized gains			Unrealized gains	
	Contract amount	Fair value	(losses)	Contract amount	Fair value	(losses)	
Forward foreign exchange contracts:							
Sell							
U.S. dollars	¥ 591	¥ 602	¥(11)	\$ 4,909	\$5,000	\$(91)	
March 20, 2002							
Millions of yen							
						Unrealized gains	
				Contract amount	Fair value	(losses)	
Forward foreign exchange contracts:							
Sell							
U.S. dollars				¥ 379	¥410	¥(31)	
						` '	

Note: The contract amounts of the forward foreign exchange contracts presented above exclude those entered into to hedge receivables and payables denominated in foreign currencies which have been translated and are reflected at their corresponding contracted rates in the accompanying consolidated balance sheets.

# 15. Leases

## a) Lessors' accounting

The following amounts represent the acquisition costs, accumulated depreciation and net book value of leased assets relating to finance leases accounted for as operating leases at March 20, 2003 and 2002:

			Thousands of
		s of yen	U.S. dollars
		2002	2003
Acquisition costs:			
Property, plant and equipment			
Machinery and equipment	¥89	¥236	\$739
Accumulated depreciation:			
Property, plant and equipment			
Machinery and equipment	¥70	¥199	\$581
Net book value:			
Property, plant and equipment			
Machinery and equipment	¥19	¥ 37	\$158
machinery and equipment	<del>- 113</del>		

Lease income relating to finance leases accounted for as operating leases in the accompanying consolidated financial statements amounted to ¥18 million (\$150 thousand) and ¥38 million for the years ended March 20, 2003 and 2002, respectively. Depreciation of the assets leased under finance leases accounted for as operating leases income amounted to ¥18 million (\$150 thousand) and ¥38 million for the years ended March 20, 2003 and 2002, respectively.

Future minimum lease income subsequent to March 31, 2003 for finance leases accounted for as operating leases is summarized as follows:

Year ending march 20,	Millions of yen	Thousands of U.S. dollars
2004	¥10	\$ 83
2005 and thereafter	9	75
Total	¥19	\$158

#### b) Lessees' accounting

The following pro forma amounts represent the acquisition costs (including the interest portion), accumulated depreciation and net book value of the leased property as of March 20, 2003 and 2002 which would have been reflected in the consolidated balance sheets if finance lease accounting had been applied to the finance leases currently accounted for as operating leases:

			Thousands of
	Millions	of yen	U.S. dollars
	2003	2002	2003
Acquisition costs:			
Property, plant and equipment			
Machinery and equipment	¥ 4,500	¥ 4,604	\$37,375
Other	98	171	814
Other assets			
Intangible fixed assets (Software)	900	1,106	7,475
······································	¥ 5,498	¥ 5,881	\$45,664
Accumulated depreciation:			
Property, plant and equipment			
Machinery and equipment	¥ 2,832	¥ 2,763	\$23,521
Other	66	126	548
Other assets	•	.20	5.0
Intangible fixed assets (Software)	513	649	4,261
intally like timed assets (software)	¥ 3,411	¥ 3,538	\$28,330
Net book value:	+ 5,411	+ 3,330	\$20,550
Property, plant and equipment			
Machinery and equipment	¥ 1,668	¥ 1,841	\$ 13,854
Other	32	45	266
Other assets	32	45	200
	207	457	2 244
Intangible fixed assets (Software)	387	457	3,214
	¥ 2,087	¥ 2,343	\$ 17,334

Lease payments relating to finance leases accounted for as operating leases amounted to \$1,151 million (\$9,660 thousand) and \$1,178 million for the years ended March 20, 2003 and 2002, respectively. The depreciation expense of the leased assets computed by the declining-balance method over the respective lease terms amounted to \$1,151 million (\$9,660 thousand) and \$1,178 million for the years ended March 20, 2003 and 2002, respectively.

Future minimum lease payments (including the interest portion thereon) subsequent to March 20, 2003 on non-cancelable operating leases and finance leases accounted for as operating leases are summarized as follows:

Year ending March 20,	Million	s of yen	Thousands of U.S. dollars		
	Finance leases	Operating leases	Finance leases	Operating leases	
2004	¥ 865	¥ 893	\$ 7,185	\$ 7,417	
2005 and thereafter	1,228	6,124	10,199	50,864	
Total	¥ 2,093	¥ 7,017	\$17,384	\$ 58,281	

# 16. Segment Information

# **Business segments**

The business segment information for the Company and its consolidated subsidiaries for the years ended March 20, 2003 and 2002 is outlined as follows:

	Year ended March 20, 2003						
				Millions of yen			
	Motion	Robotics	System			Eliminations	
	Control	Automation	Engineering	Other	Total	or Corporate	Consolidated
Net sales							
Sales to third parties	¥86,314	¥ 67,094	¥39,510	¥33,226	¥226,144	¥ –	¥226,144
Inter-segment sales	3,144	5,291	3,870	12,307	24,612	(24,612)	_
Total sales	89,458	72,385	43,380	45,533	250,756	(24,612)	226,144
Operating cost and expense	89,153	69,400	42,120	43,852	244,525	(24,689)	219,836
Operating income	¥ 305	¥ 2,985	¥ 1,260	¥ 1,681	¥ 6,231	¥ 77	¥ 6,308
Total assets	¥91,315	¥ 72,691	¥32,627	¥34,268	¥230,901	¥ 6,740	¥237,641
Depreciation	3,699	2,006	678	381	6,764	(12)	6,752
Capital expenditures	2,844	2,017	917	295	6,073	-	6,073

	Year ended March 20, 2003						
				usands of U.S.	dollars		
	Motion	Robotics	System			Eliminations	
	Control	Automation	Engineering	Other	Total	or Corporate	Consolidated
Net sales							
Sales to third parties	\$716,894	\$557,259	\$ 328,156	\$275,963	\$1,878,272	\$ -	\$1,878,272
Inter-segment sales	26,113	43,945	32,143	102,218	204,419	(204,419)	_
Total sales	743,007	601,204	360,299	378,181	2,082,691	(204,419)	1,878,272
Operating cost and expense	740,473	576,412	349,834	364,219	2,030,938	(205,058)	1,825,880
Operating cost and expense Operating income	\$ 2,534	\$ 24,792	\$ 10,465	\$ 13,962	\$ 51,753		\$ 52,392
Total assets	\$758,430	\$603,754	\$ 270,988	\$284,618	\$1,917,790		\$1,973,754
Depreciation	30,723	16,661	5,632	3,164	56,180	(100)	56,080
Capital expenditures	23,621	16,752	7,616	2,450	50,439	(100)	50,439
Capital experiultures	23,021	10,732	•		•		30,433
			Year e	nded March 2			
				Millions of ye	n		
	Motion	Robotics	System			Eliminations	
	Control	Automation	Engineering	Other	Total	or Corporate	Consolidated
Net sales							
Sales to third parties	¥81,558	¥ 67,955	¥37,391	¥35,803	¥222,707	¥ –	¥222,707
			,	1 33,003	1222,707	•	1222,707
Inter-segment sales	2,401	4,792	5,662	12,993	25,848	(25,848)	-
Inter-segment sales Total sales			5,662	12,993	25,848	(25,848)	
Total sales	83,959	72,747	5,662 43,053	12,993 48,796	25,848 248,555	(25,848) (25,848)	222,707
Total sales Operating cost and expense	83,959 90,058	72,747 72,555	5,662 43,053 42,181	12,993 48,796 47,536	25,848 248,555 252,330	(25,848) (25,848) (25,895)	222,707 226,435
Total sales	83,959	72,747	5,662 43,053	12,993 48,796	25,848 248,555 252,330	(25,848) (25,848) (25,895)	222,707
Total sales Operating cost and expense	83,959 90,058	72,747 72,555	5,662 43,053 42,181	12,993 48,796 47,536	25,848 248,555 252,330	(25,848) (25,848) (25,895)	222,707 226,435
Total sales Operating cost and expense Operating income (loss) Total assets	83,959 90,058 ¥ (6,099) ¥87,782	72,747 72,555 ¥ 192 ¥ 66,611	5,662 43,053 42,181 ¥ 872	12,993 48,796 47,536 ¥ 1,260	25,848 248,555 252,330 ¥ (3,775) ¥220,326	(25,848) (25,848) (25,895) ¥ 47 ¥ 14,234	222,707 226,435 ¥ (3,728) ¥234,560
Total sales Operating cost and expense Operating income (loss)	83,959 90,058 ¥ (6,099)	72,747 72,555 ¥ 192	5,662 43,053 42,181 ¥ 872 ¥32,854	12,993 48,796 47,536 ¥ 1,260 ¥33,079	25,848 248,555 252,330 ¥ (3,775)	(25,848) (25,848) (25,895) ¥ 47	222,707 226,435 ¥ (3,728)

Notes: 1) The business segments are classified based on similarity of product nature and manufacturing methods and selling methods, etc.

- 2) Corporate assets included in "Eliminations or Corporate" at March 20, 2003 and 2002 amounted to ¥19,807 million (\$164,510 thousand) and ¥24,765 million, respectively. The assets principally consisted of working capital (cash and cash equivalents), long-term investments (investment securities) of the Company.
- 3) Depreciation and capital expenditures include amortization of and additions to long-term prepaid expenses.

Total assets

Geographical areas								
The geographical segment information for t	the Company and its consolic	dated subsidia	ries for the y	ears ended I	March 20, 200	03 and 2002	is outlined as	
follows:								
			Year e	ended March				
		North		Millions of ye	n	Eliminations		
	Japan	America	Europe	Asia	Total	or Corporate	Consolidated	
Net sales		America	Luiope		Total	огсогрогии	Corisolidated	
Sales to third parties	¥155,678	¥33,710	¥26,763	¥ 9,993	¥ 226,144	¥ –	¥226,144	
Inter-segment sales	29,319	209	918	3,682	34,128	(34,128)	_	
Total sales	184,997	33,919	27,681	13,675	260,272	(34,128)	226,144	
Operating cost and expense	181,299	34,053	26,179	12,633	254,164	(34,328)	219,836	
Operating income (loss)	¥ 3,698	¥ (134)	¥ 1,502	¥ 1,042	¥ 6,108	¥ 200	¥ 6,308	
Total assets	¥189,228	¥26,684	¥ 19,182	¥ 7,837	¥ 242,931	¥ (5,290)	¥237,641	
		Year ended March 20, 2003 Thousands of U.S. dollars						
	<del></del>	North	11100	usarias or 0.5.	dollars	Eliminations		
	Japan	America	Europe	Asia	Total	or Corporate	Consolidated	
Net sales								
Sales to third parties	\$1,293,007	\$ 279,983	\$222,284		\$1,878,272		\$1,878,272	
Inter-segment sales	243,513	1,735	7,624	30,581	283,453	(283,453)	4 070 272	
Total sales Operating cost and expense	1,536,520 1,505,804	281,718 282,839	229,908 217,432	113,579 104,921	2,161,725 2,110,996	(283,453) (285,116)	1,878,272 1,825,880	
Operating cost and expense  Operating income (loss)	\$ 30,716	\$ (1,121)	\$ 12,476		\$ 50,729		\$ 52,392	
Total assets	\$1,571,661	\$ 221,628	\$ 159,319	\$ 65,091	\$2,017,699		\$1,973,754	
Total assets	\$1,571,001	\$ 22 1,020	\$ 109,519	3 05,091	\$2,017,099	<b>3</b> (43,343)	\$1,975,754	
			Year e	ended March 2	0, 2002			
				Millions of ye	n			
	lanan	North	Furana	Asia	Total	Eliminations	Consolidated	
Net sales	Japan	America	Europe	ASId	TOTAL	or Corporate	Consolidated	
Sales to third parties	¥151,029	¥38,448	¥27,238	¥ 5,992	¥ 222,707	¥ –	¥222,707	
Inter-segment sales	23,797	121	844	3,171	27,933	(27,933)	-	
Total sales	174,826	38,569	28,082	9,163	250,640	(27,933)	222,707	
Operating cost and expense	179,187	41,683	26,139	8,503	255,512	(29,077)	226,435	
Operating income (loss)	¥ (4,361)	¥ (3,114)	¥ 1,943	¥ 660	¥ (4,872)	¥ 1,144	¥ (3,728)	
	1/474044	V2E C2E	1/16 201	V/ F 430	1/222 200	V/ 2.2E4	1/22 4 ECO	

¥ 16,291

¥ 5,439

¥232,306 ¥

Notes: 1) Geographical areas are divided into categories based on their geographical proximity.

- 2) Major nations or regions included in each geographical area:
  - (1) North America U.S.A.
  - (2) Europe Germany, Sweden, England
  - (3) Asia Singapore, Korea, China
- 3) Corporate assets included in "Eliminations or Corporate" at March 20, 2003 and 2002 amounted to ¥19,807 million (\$164,510 thousand) and ¥24,765 million, respectively. The assets principally consisted of working capital (cash and cash equivalents), long-term investments (investment securities) of the Company.

#### Overseas sales

Overseas sales, which include export sales of the Company and its domestic consolidated subsidiaries and sales (other than exports to Japan) of its foreign consolidated subsidiaries, for the years ended March 20, 2003 and 2002 are summarized as follows:

	Year ended March 20, 2003				
			Millions of yen		
	North				
	America	Europe	Asia	Other	Total
Overseas sales	¥ 33,489	¥ 27,123	¥ 22,802	¥ 3,987	¥ 87,401
Consolidated net sales	_	_	_	_	226,144
Overseas sales as a percentage of consolidated net sales	14.8%	12.0%	10.1%	1.8%	38.7%
			ended March 2		
		Tho	usands of U.S. d	ollars	
	North				
	America	Europe	Asia	Other	Total
Overseas sales	\$ 278,156	\$ 225,282	\$189,385	\$ 33,115	\$ 725,938
Consolidated net sales	_	_	_	_	1,878,272
Overseas sales as a percentage of consolidated net sales	14.8%	12.0%	10.1%	1.8%	38.7%
		Year	ended March 20	0, 2002	
			Millions of yen		
	North				
	America	Europe	Asia	Other	Total
Overseas sales	¥ 39,049	¥ 28,439	¥ 18,525	¥ 4,922	¥ 90,935
Consolidated net sales	_	_	_	-	222,707
Overseas sales as a percentage of consolidated net sales	17.5%	12.8%	8.3%	2.2%	40.8%

Notes: 1) Geographical areas are divided into categories based on their geographical proximity.

- 2) Major nations or regions included in each geographical area are as follows:
  - (1) North America U.S.A.
  - (2) Europe Germany, Sweden, England
  - (3) Asia Singapore, Korea, China

# The Board of Directors YASKAWA ELECTRIC CORPORATION

We have audited the accompanying consolidated balance sheets of YASKAWA ELECTRIC CORPORATION and consolidated subsidiaries as of March 20, 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

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 YASKAWA ELECTRIC CORPORATION and consolidated subsidiaries at March 20, 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.

# Supplemental Information

As described in Note 2 (h) to the consolidated financial statements, the Company's U.S. consolidated subsidiaries have adopted SFAS No. 142, "Goodwill and Other Intangible Assets," effective the year ended March 20, 2003.

The U.S. dollar amounts in the accompanying consolidated financial statements with respect to the year ended March 20, 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 3 to the consolidated financial statements.

Shin hihon & Co.

June 18, 2003

See Note 1 to the consolidated financial statements which explains the basis of preparation of the consolidated financial statements of YASKAWA ELECTRIC CORPORATION and consolidated subsidiaries under Japanese accounting principles and practices.

			Millions of yen			Thousands of U.S. dollars
	2003	2002	2001	2000	1999	2003
Net sales	¥ 226,144	¥ 222,707	¥ 266,068	¥ 229,844	¥227,457	\$1,878,272
Cost of sales	165,318	169,232	191,178	169,016	166,044	1,373,073
Gross profit						
Selling, general and administrative expenses	54,518	57,203	62,877	56,812	60,817	452,807
Operating income (loss)	6,308	(3,728)	12,013	4,015	596	52,392
Income (loss) before income taxes and minority interests	(850)	(18,897)	6,755	(705)	(1,377)	(7,060)
Income taxes	1,663	(6,272)	3,239	908	2,259	13,812
Net income (loss)	(2,524)	(12,657)	3,319	(1,712)	(3,880)	(20,963)
At Year-End						
Total assets	¥ 237,641	¥ 234,560	¥ 252,912	¥ 240,932	¥227,335	\$1,973,754
Shareholders' equity	30,632	36,525	47,070	43,458	38,468	254,418
Per Share Data			Yen			U.S. dollars
Net income (loss)	¥ (11.00)	¥ (54.54)	¥ 14.31	¥ (7.38)	¥ (16.72)	\$ (0.091)
Cash dividends	-	_	4.00	_	-	-
Shareholders' equity	132.31	157.41	202.84	187.27	165.77	1.10
Dation						
Ratios	(7 F)	(20.5)	%	(4.5)	(0.5)	
Return on equity	(7.5)	(30.3)	7.3	(4.2)	(9.5)	
Return on assets	(1.1)	(5.2)	1.3	(0.7)	(8.0)	
Shareholders' equity ratio	12.9	15.6	18.6	18.0	16.9	

Note: Dollar figures are translated, for convenience only, at the rate of ¥120.4 to US\$1.

# Japan

YASKAWA ELECTRIC ENGINEERING CORPORATION	Maintenance, trial operation, and adjustment of electric equipment as well as technical quidance		
YASKAWA MOTOR CORPORATION	Design, manufacture, sales, and maintenance of motors, generators and motor applications		
Y-E DATA INC.	Manufacture and sales of computer peripherals and terminals equipment; Ontrack Data Recovery service		
YASKAWA INFORMATION SYSTEMS CO., LTD.	Information processing services, software development, and sales of system equipment		
YASKAWA CONTROLS CO., LTD.	Manufacture and sales of electric equipment and related components, such as switches and controllers		
YASKAWA MECHATREC CORPORATION	Sales of electric equipment and various other types of machinery devices		
OJI ELECTRIC MFG. CO., LTD.	Manufacture and sales of electric equipment		
YASKAWA LOGISTEC CORPORATION	Comprehensive distribution and logistics planning		
YASKAWA OBVIOUS COMMUNICATIONS INC.	Planning, implementation, and production of tools and materials for advertising, promotion, and education		
YASKAWA BUSINESS STAFF CORPORATION	Temporary personnel, fee-based employment agency, security business, and various out- sourcing businesses		
DOEI CORPORATION	Sales of various products, insurance and travel agency business, and the management and operation of dining facilities and real estate		

# **North America**

YASKAWA ELECTRIC AMERICA, INC.	U.S.A.	Import, manufacture, sales, and service of electric equipment
MOTOMAN INC.	U.S.A.	Manufacture, sales, and service of robots and robot systems
SYNETICS SOLUTIONS INC.	U.S.A.	Development, design, production and sales of semiconductor manufacturing equipment

# Europe

YASKAWA ELECTRIC EUROPE GMBH	Germany	Import, sales, and service of electric equipment
MOTOMAN ROBOTEC GMBH	Germany	Manufacture, sales, and service of robots and robot systems
MOTOMAN ROBOTICS EUROPE AB	Sweden	Manufacture, sales, and service of robots and robot systems
YASKAWA ELECTRIC UK LTD.	United Kingdom	Manufacture, sales, and service of inverters

# Asia

YASKAWA ELECTRIC (SHANGHAI) CO., LTD.	China (Shanghai)	Import, sales and service of electric equipment
Shanghai yaskawa-tongji m&e co., Ltd.	China (Shanghai)	Manufacture, sales, and service of electric equipment
Y-E DRIVE COMPANY LIMITED SHANGHAI	China (Shanghai)	Manufacture and sales of electric equipment
YASKAWA ELECTRIC (SINGAPORE) PTE. LTD.	Singapore	Import, sales, and service of electric equipment
YASKAWA ELECTRIC KOREA CORPORATION	Korea	Import, sales, and service of electric equipment
YASKAWA ELECTRIC TAIWAN CORPORATION	Taiwan	Import, sales, and service of electric equipment

## **OVERSEAS SUBSIDIARIES**

## North America

# YASKAWA ELECTRIC AMERICA, INC.

Chicago Office (Headquarters) 2121 Norman Drive South, Waukegan, IL 60085, U.S.A. Phone: 1-847-887-7000 Fax: 1-847-887-7370

## MOTOMAN INC.

805 Liberty Lane, West Carrollton, OH 45449, U.S.A. Phone: 1-937-847-6200 Fax: 1-937-847-6277

# **SYNETICS SOLUTIONS INC.**

18870, NE Riverside Parkway, Portland, OR 97230, U.S.A. Phone: 1-503-465-6000 Fax: 1-503-465-6393

# **Europe**

#### YASKAWA ELECTRIC EUROPE GMBH

Head Office Am Kronberger Hang 2, 65824 Schwalbach, Germany Phone: 49-6196-569-300 Fax: 49-6196-888-301

#### MOTOMAN ROBOTEC GMBH

Kammerfeldstrasse 1, 85891 Allershausen, Germany Phone: 49-8166-90-100 Fax: 49-8166-90-103

## **MOTOMAN ROBOTICS EUROPE AB**

Box 504 S38525, Torsas, Sweden Phone: 46-486-48800 Fax: 46-486-41410

## YASKAWA ELECTRIC UK LTD.

1 Hunt Hill, Orchardton Woods, Cumbernauld G68 9LF, U.K. Phone: 44-1236-735000 Fax: 44-1236-458182

#### Asia

# YASKAWA ELECTRIC (SHANGHAI) CO., LTD.

4F No. 18 Aona Road, Waigaoqiao Free Trade Zone, Pudong New Area, Shanghai 200131, P.R. China Phone: 86-21-5866-3470 Fax: 86-21-5866-3869

# SHANGHAI YASKAWA-TONGJI M&E CO., LTD.

27 Hui He Road, Shanghai 200437, P.R. China Phone: 86-21-6553-6060 Fax: 86-21-5588-1190

# Y-E DRIVE CO., LTD. SHANGHAI

Chan Chang, Jian Bang, Jia Ding, Shanghai 201818, P.R. China Phone: 86-21-5951-0067 Fax: 86-21-5951-0467

# YASKAWA ELECTRIC (SINGAPORE) PTE. LTD.

151 Lorong Chuan, #04-01, New Tech Park Singapore, 556741 Singapore Phone: 65-6282-3003 Fax: 65-6289-3003

# YASKAWA ELECTRIC KOREA CORPORATION

Kfpa Bldg. #1201, 35-4 Youido-Dong, Yeongdungpo-ku, Seoul 150-010, Korea Phone: 82-2-784-7844

# YASKAWA ELECTRIC TAIWAN CORPORATION

9F, 16, Nanking E. Rd., Sec. 3, Taipei, Taiwan Phone: 886-2-2502-5003 Fax: 886-2-2505-1280

# **OVERSEAS OFFICES**

Fax: 82-2-784-8495

## **BEIJING OFFICE**

Room No. 301, Office Building of Beijing International Club, 21 Jianguomenwai Avenue, Beijing 100020, P.R. China Phone: 86-10-6532-1850

Fax: 86-10-6532-1851

## **TAIPEI OFFICE**

9F, 16, Nanking E. Rd., Sec. 3, Taipei, Taiwan

Phone: 886-2-2502-5003 Fax: 886-2-2505-1280

#### Chairman of the Board

Hiroshi Nagatsugi

**President and Chief Executive Officer** 

Shin Nakayama

**Executive Managing Directors** 

Junichi Hamada Koji Toshima

**Managing Directors** Takeshi Tanaka

Kenichi Matsumoto Masakazu Hatori

Koichi Takei

Directors

Keiichi Ishikawa Masao Kito Kaneyuki Hamada Toshihiro Sawa

Sadahiro Iwata Hajime Masubuchi Norio Miyahara

**Standing Auditor** 

Isao Nakamura

**Auditors** 

Muneshige Yamazaki Masaaki Tani Shuzo Ogawa

# **Corporate Data**

**Trade name** YASKAWA Electric Corporation

July 16, 1915 **Established** 

7,720 (Consolidated) **Employees MOTION CONTROL** Main products

> AC servo motors and controllers, general-purpose inverters, AC main axis motors and controllers for machine tools, linear motors and controllers, DC servo motors and controllers, high-speed motors, smallscale precision motors, hybrid motors, energy-saving motors and inverters, high-frequency inverters, programmable controllers, machine controllers, numerical control systems, vision systems, etc.

## **ROBOTICS AUTOMATION**

Arc welding robots, spot welding robots, painting robots, handling robots, clean/vacuum room robots for semiconductor and liquid crystal manufacturing equipment, special actuators, transfer systems for clean/vacuum room use, robot-application FA systems, medical care and welfare service robots, etc.

## SYSTEM ENGINEERING

Electrical systems for steel plants, electrical instrumentation for service water supply plants and sewage treatment facilities systems, roadway equipment power supplies, system, electrical equipment systems for environmental plants, elevator control systems, power mechatronics systems, control systems for harbor loading and unloading cranes, variable-speed drive systems for products such as paper, film or liquid crystals, system information control equipment, medium-capacity high-pressure inverters, high-pressure switching devices, control centers, system control panels, electric power distribution equipment, permanent magnet internal rotators, medium and large induction motors, small power generators and power generation equipment, etc.

Offices **Head Office** 2-1, Kurosaki-shiroishi, Yahatanishi-ku, Kitakyushu 806-0004, Japan

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Tokyo Office New Pier Takeshiba South Tower, 1-16-1, Kaigan, Minato-ku, Tokyo 105-6891, Japan

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Phone: 81-52-581-2761

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Phone: 81-6-6346-4500

Chugoku Office 1-8, Nishikoujinmachi, Minami-ku, Hiroshima 732-0806, Japan

Phone: 81-82-568-8191

4-1-1, Tenjin, Chuo-ku, Fukuoka 810-0001, Japan Kyushu Office

Phone: 81-92-714-5331

**Plants** Yahata, Kokura, Yukuhashi, Iruma

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