



**Business Results for  
the First Half of Fiscal Year ending March 31, 2003**

**Minebea Co., Ltd**

**Tsugio Yamamoto  
President and  
Representative Director  
November 15, 2002**

## Results for the First Half of Fiscal Year ending March 31, 2003

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(Millions of yen)	Year ended Mar. 2002		Year ending Mar. 2003	Change yoy	First half Original Forecast	vs. Forecast
	First Half	Second Half	First Half			
Net Sales	136,882	142,462	137,249	+0.3%	142,000	96.7%
Operating Income	12,496	9,476	10,176	-18.6%	10,000	101.8%
Ordinary Income	8,952	7,043	7,667	-14.4%	7,300	105.0%
Net Income	4,384	914	2,543	-42.0%	3,600	70.6%

Results for the first half of fiscal year ending March 31, 2003 were 137,200 million yen net sales, 10,100 million yen operating income, 7,600 million yen in ordinary income, and 2,500 million yen in net income.

Compared with the same period last year, net sales remained almost at the same level while earnings declined. Except for net income, however, results were just about in line with our original forecasts. Shortfall in net sales was mostly attributable to exchange fluctuation.

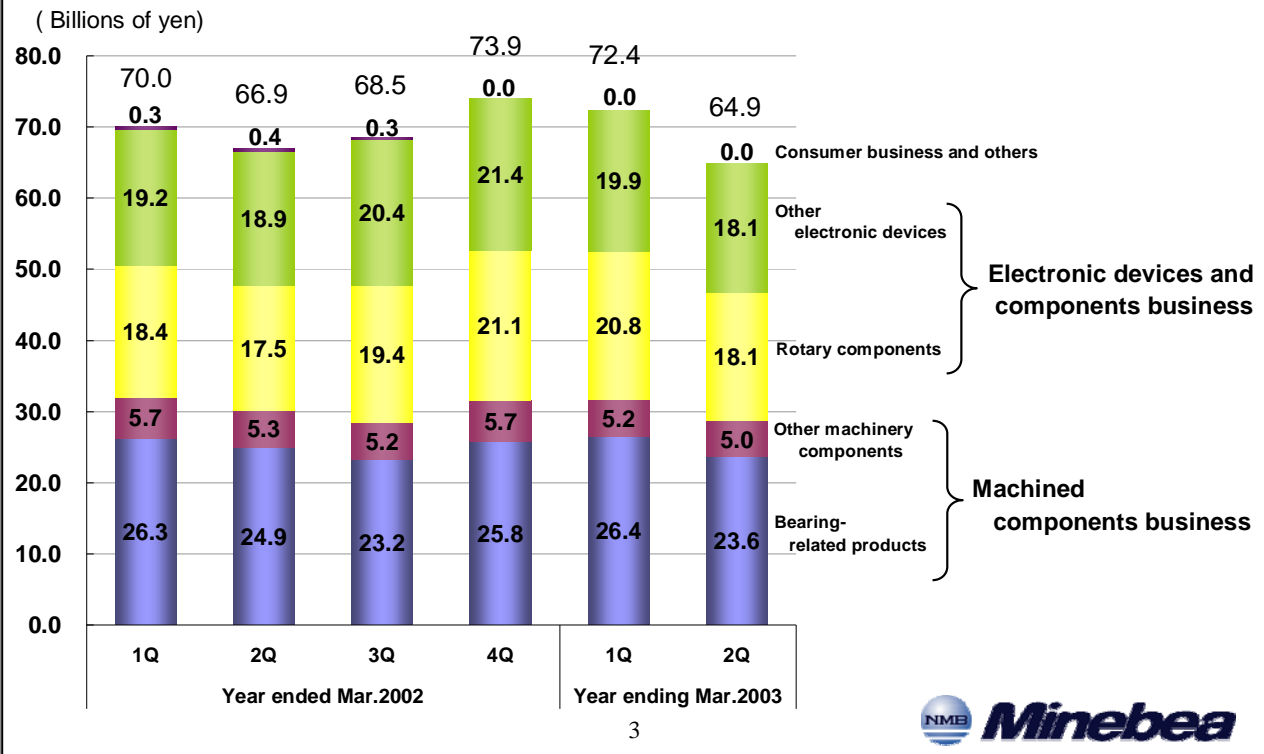
Net income fell short of forecast because the closure of Minebea Electronics (U.K.) - power supplies R&D center in U.K. - and income tax and income tax adjustment, which amounted more than we had expected, produced negative effects.

## Net Sales and Operating Income by Segment

(Millions of yen)	Year ended Mar. '02			Year ending Mar. '03	Change yoy	First half Original forecast	vs. Forecast
	First half	Second half	Full year	First half			
<b>[Net Sales]</b>							
Machined components business	62,195	59,830	122,025	60,309	-3.0%	59,450	101.4%
Bearing-related products	51,188	48,925	100,113	50,058	-2.2%	49,100	102.0%
Other machinery components	11,006	10,905	21,911	10,251	-6.9%	10,350	99.0%
Electronic devices and components business	73,978	82,325	156,303	76,940	+4.0%	82,550	93.2%
Rotary components	35,917	40,523	76,440	38,933	+8.4%	45,300	85.9%
Other electronic devices	38,062	41,800	79,862	38,005	-0.1%	37,250	102.0%
Consumer business and others	709	307	1,016	—	—	—	—
<b>Total Net Sales</b>	<b>136,882</b>	<b>142,462</b>	<b>279,344</b>	<b>137,249</b>	<b>+0.3%</b>	<b>142,000</b>	<b>96.7%</b>
<b>[Operating Income]</b>							
Machined components business	12,564	9,571	22,135	9,163	-27.1%	9,800	93.5%
Electronic devices and components business	△74	△88	△162	1,013	—	200	506.5%
Consumer business and others	6	△6	0	—	—	—	—
<b>Total Operating Income</b>	<b>12,496</b>	<b>9,476</b>	<b>21,972</b>	<b>10,176</b>	<b>-18.6%</b>	<b>10,000</b>	<b>101.8%</b>

Compared with the same period last year, operating income from machined components business declined, while electronic devices and components business turned around and its operating income substantially exceeded our original forecast.

## Net Sales and Operating Income by Segment



### Machined Components

Sales of ball bearings increased considerably in April and May. Though a little weaker in the second quarter, they remained relatively solid.

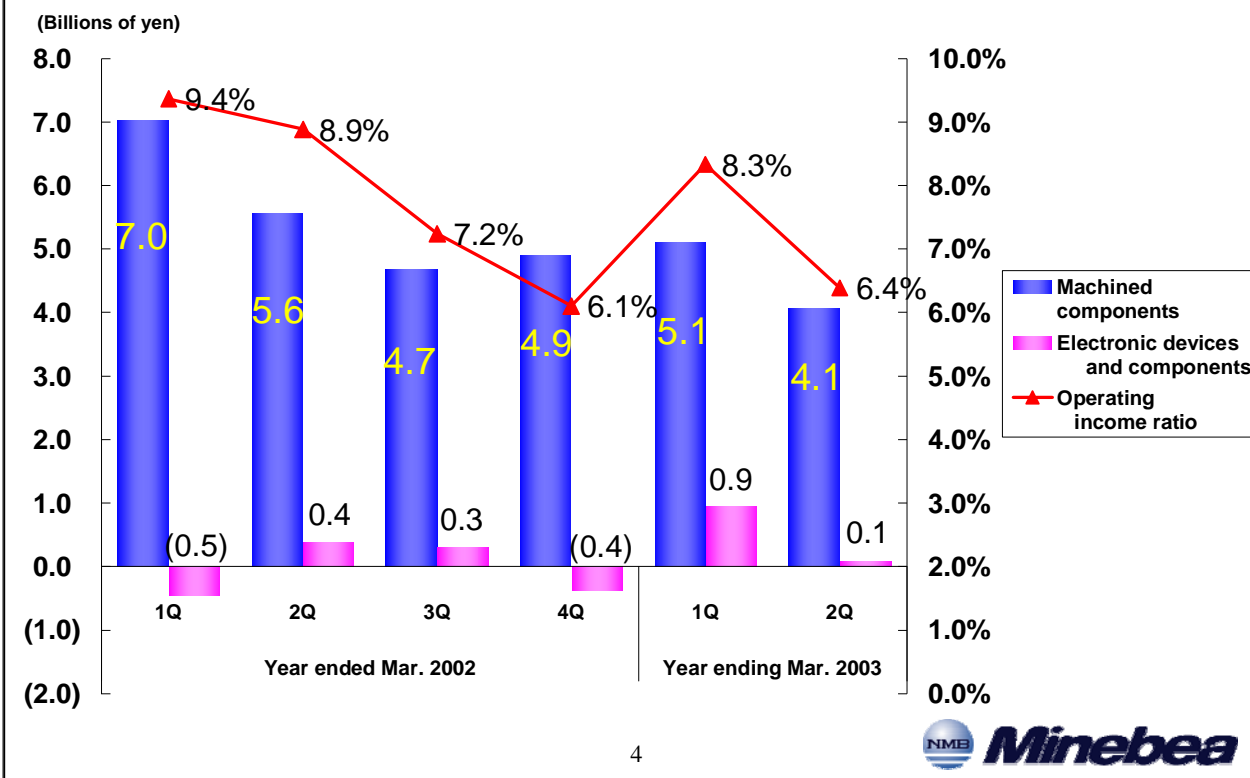
Sales of bearings for aerospace application decreased in the first quarter and further declined in the second quarter.

As for pivot assemblies, price declined more than expected as price-cutting competition became more intense.

### Electronic Devices and Components

Fan motors sales were strong throughout the first half. Sales of spindle motors peaked in April and May, however, dropped sharply in June and thereafter, affected by production adjustment at our major customers. Sales of other products, affected by weak IT-related industry, were sluggish in the second quarter.

## Operating Income by Segment



### Machined Components

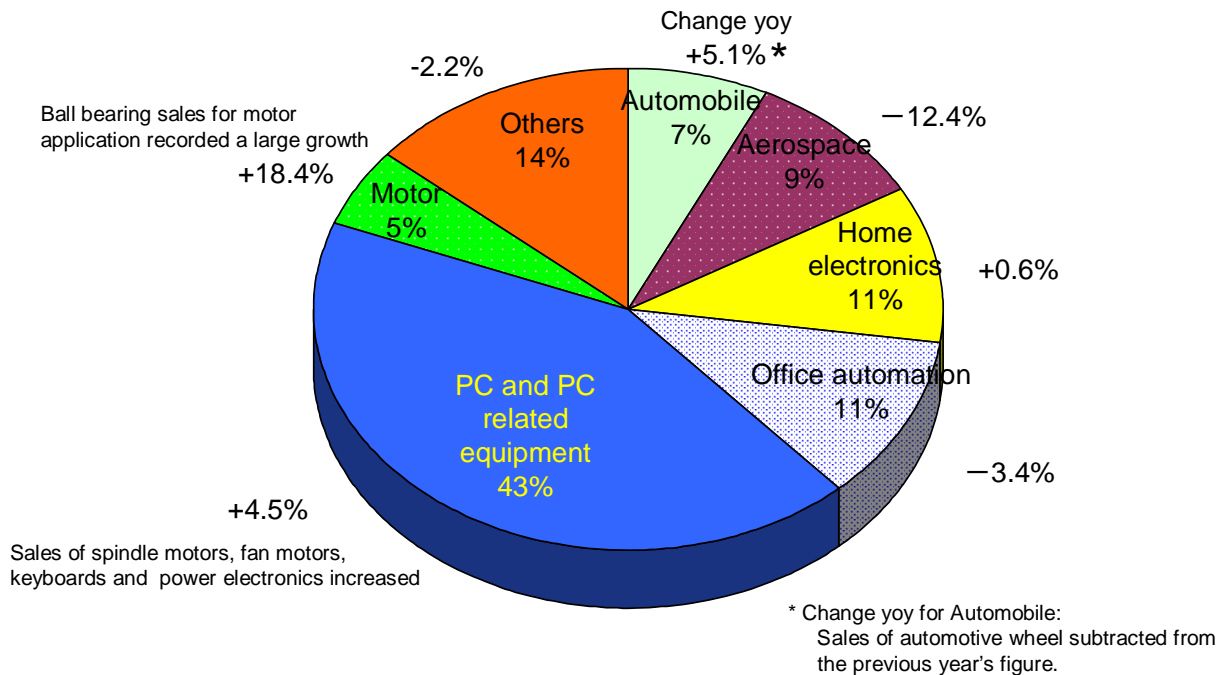
Just like sales of this product, operating income declined because of earnings decline in bearings for the U.S. aerospace industry and drop in the price of pivot assemblies as a result of fierce price competition.

Earnings from ball bearings remained flat despite lower sales in the second quarter. Thanks to increased production and better efficiency, operating income ratio did not decline. Rather, it increased in the second quarter compared with the first.

### Electronic Devices and Components

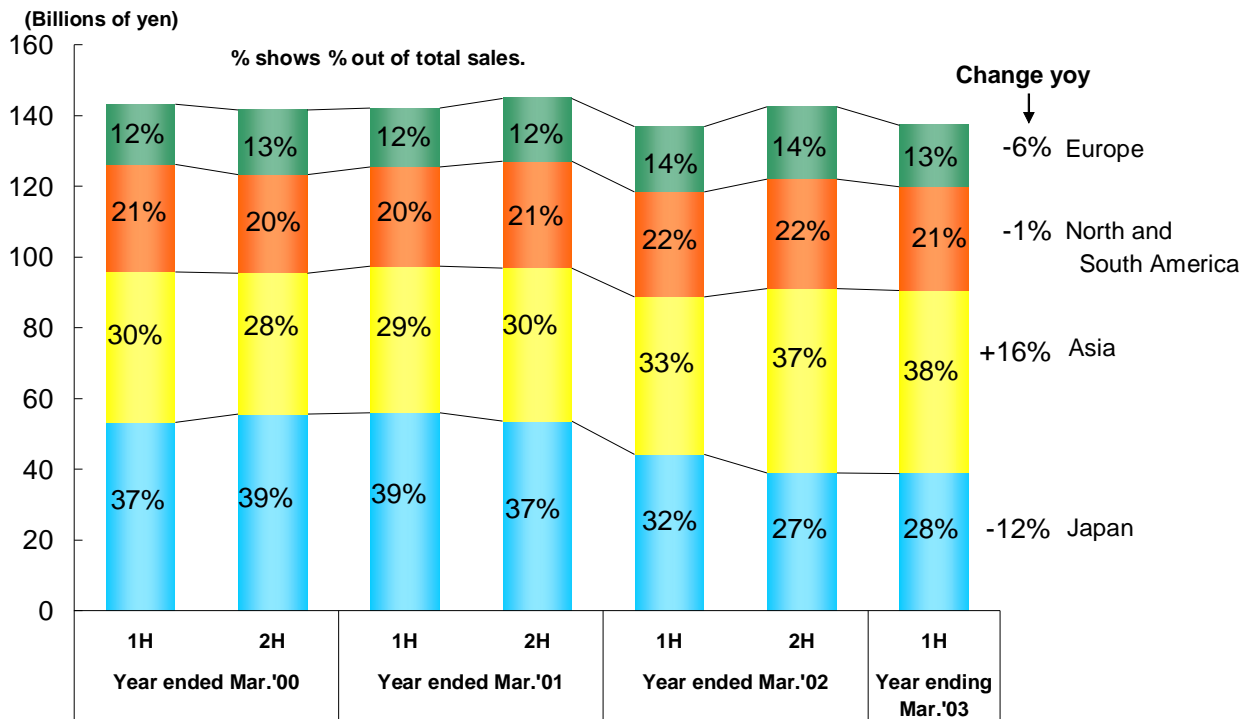
Decline in income from this product category was mainly attributable to the second quarter production cutback of spindle motors and to one-off cost of air transportation for past due keyboard shipment. However, strong sales of fan motors supported the overall income. Though operating income declined in the second quarter, we expect it will improve in and after the third quarter.

## Sales by User Industry (All Products)



Increased sales of spindle motors, fan motors, keyboards and switching power supplies led to increased sales for applications such as PCs and peripheral equipment. Bearings for motors considerably increased, while those for aerospace application declined.

## Sales by Region



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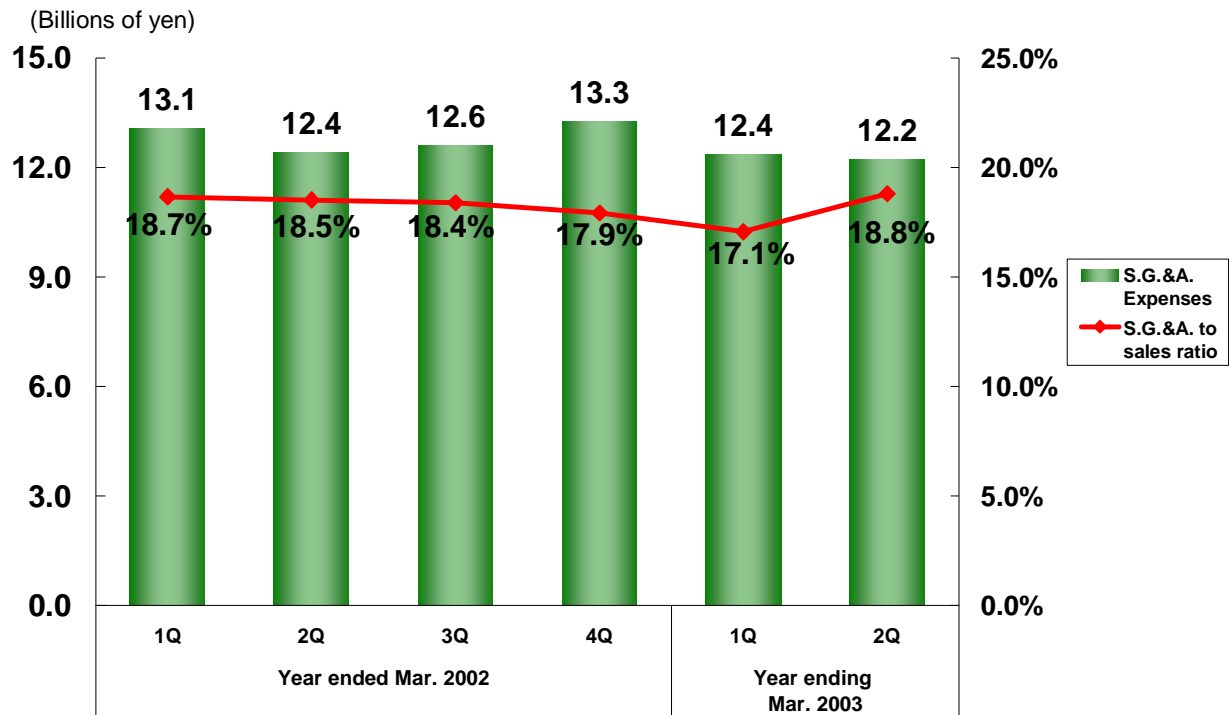


### Sales by Region Year on Year Comparison

Sales in Japan dropped 12%. In other parts of Asia, on the other hand, sales showed a two-digit growth of 16%. China, in particular, showed a sales growth of more than 40%. This clearly reflects an increasing shift by our customers of their production bases from Japan to China and other Asian countries. In spite of this, our efforts toward sales expansion in Japan for bearings and other products is putting brakes on a sharp drop in domestic sales.

In North and South America, sales of bearings for aerospace application decreased, while keyboard sales were strong. As a result, sales decline in this region remained only at 1%.

## S.G. & A. Expenses



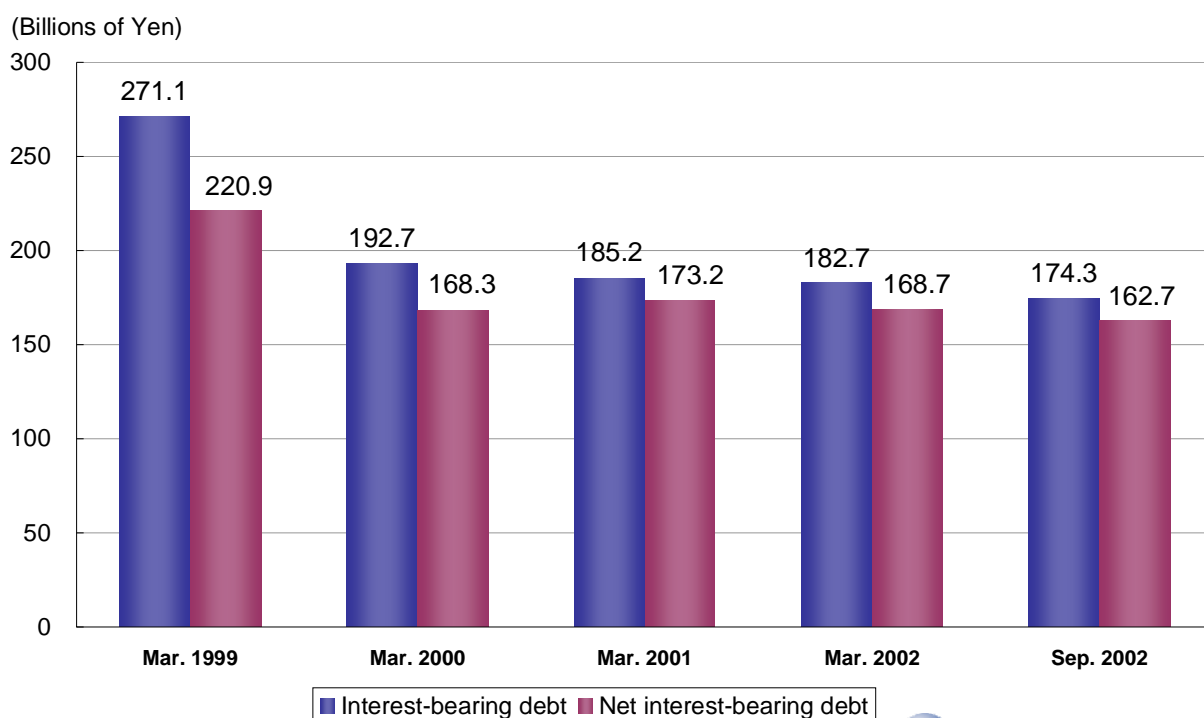
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In November last year, we established the Business Reform Committee. This committee plays a central role in reducing S.G.&A. expenses. Despite one-off cost of air transportation for past due keyboard shipment amounting to 450 million yen, the absolute value of S.G.&A. expenses decreased in the second quarter, too. In the second half, we expect to reduce S.G.&A. expenses to 23,000 million yen and to improve S.G.&A. to sales ratio to 17.1%.



## Interest-bearing Debt



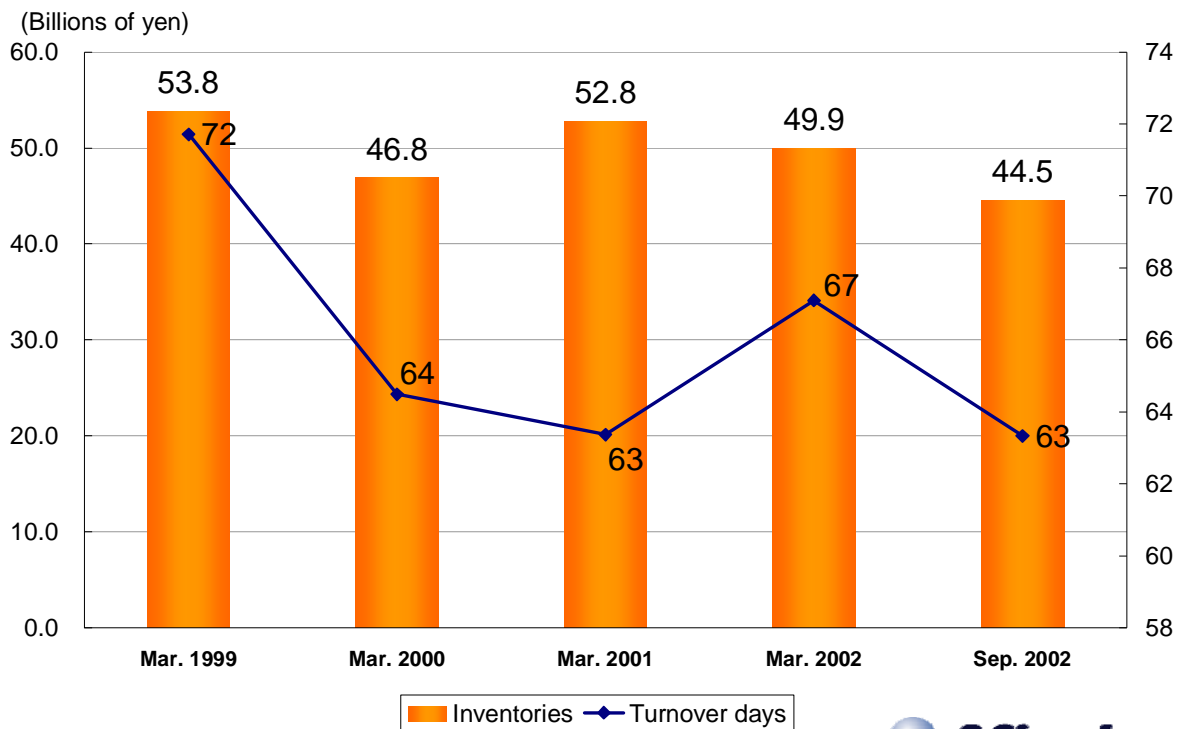
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We repaid a debt amounting to 6,000 million yen in the first half. Against our forecast for the full year period, we made a downward adjustment of our performance and an upward adjustment of capital expenditure. However, the originally planned target of debt reduction remains unchanged at 10,000 million yen.

Our financial position is improving as we continue to steadily generate positive cash flows from operating activities.

## Inventories



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We reduced inventories to a large degree in the first half. Inventory reduction during the period amounted to 5,400 million yen in the first half. We aim to achieve further reduction of 4,000 million yen in the second half.

## Full Year Forecast for Fiscal Year ending March 31, 2003

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(Millions of yen)	Year ended Mar. 2002			Year ending Mar. 2003			Change yoy Full year	Year ending Mar. '03 previous forecast	vs. Forecast
	First half	Second half	Full year	First half	Second half forecast	Full year forecast			
Net Sales	136,882	142,462	279,344	137,249	134,751	272,000	-2.6%	288,000	94.4%
Operating Income	12,496	9,476	21,972	10,176	11,324	21,500	-2.1%	24,000	89.6%
Ordinary Income	8,952	7,043	15,995	7,667	8,833	16,500	+3.2%	18,500	89.2%
Net Income	4,384	914	5,298	2,543	3,957	6,500	+22.7%	10,000	65.0%

\*Previous forecast  
announced on May 16, 2002

### Full Year Forecast

We made downward adjustments for the full year as follows:

Net sales	288,000 million yen to	272,000 million yen
Operating income	24,000 million yen to	21,500 million yen
Ordinary income	18,500 million yen to	16,500 million yen
Net income	10,000 million yen to	6,500 million yen

In making our original forecast, we assumed operating environment would improve considerably in the latter half of the calendar year, but we now anticipate tough environment will continue in the second half. However, we have taken countermeasures for core products and these are already yielding positive outcome.

## Full Year Forecast of Net Sales and Operating Income by Segment

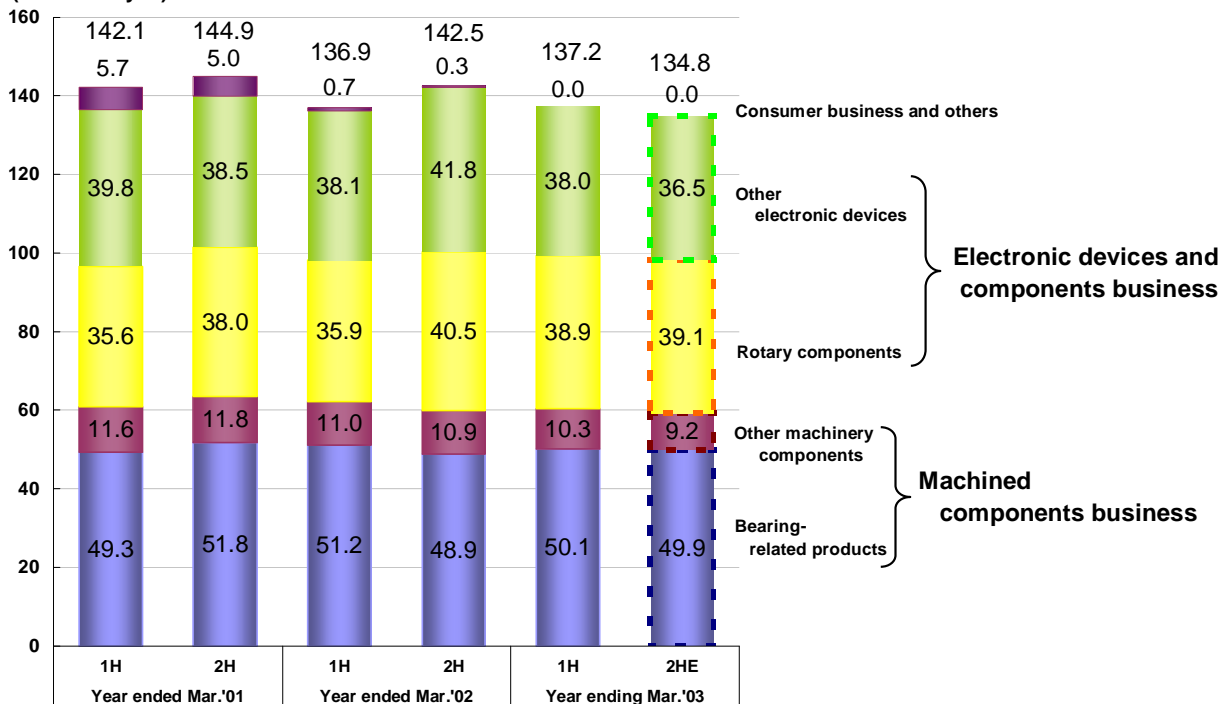
(Millions of yen)	Year ended March 2002			Year ending March 2003			Change yoy Full year	Year ending Mar.'03 Previous Forecast	vs. Forecast
	First half	Second half	Full year	First half	Second half Forecast	Full year Forecast			
<b>[Net Sales]</b>									
<b>Machined components business</b>	<b>62,195</b>	<b>59,830</b>	<b>122,025</b>	<b>60,309</b>	<b>59,191</b>	<b>119,500</b>	<b>-2.1%</b>	<b>118,650</b>	<b>100.7%</b>
Bearing-related products	51,188	48,925	100,113	50,058	49,942	100,000	-0.1%	98,800	101.2%
Other machinery components	11,006	10,905	21,911	10,251	9,249	19,500	-11.0%	19,850	98.2%
<b>Electronic devices and components business</b>	<b>73,978</b>	<b>82,325</b>	<b>156,303</b>	<b>76,940</b>	<b>75,560</b>	<b>152,500</b>	<b>-2.4%</b>	<b>169,350</b>	<b>90.1%</b>
Rotary components	35,917	40,523	76,440	38,933	39,067	78,000	+2.0%	93,450	83.5%
Other electronic devices	38,062	41,800	79,862	38,005	36,495	74,500	-6.7%	75,900	98.2%
<b>Consumer business and others</b>	<b>709</b>	<b>307</b>	<b>1,016</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>
<b>Total Net Sales</b>	<b>136,882</b>	<b>142,462</b>	<b>279,344</b>	<b>137,249</b>	<b>134,751</b>	<b>272,000</b>	<b>-2.6%</b>	<b>288,000</b>	<b>94.4%</b>
<b>[Operating Income]</b>									
<b>Machined components business</b>	12,564	9,571	22,135	9,163	9,687	18,850	-14.8%	22,000	85.7%
<b>Electronic devices and components business</b>	△74	△88	△162	1,013	1,637	2,650	—	2,000	132.5%
<b>Consumer business and others</b>	6	△6	0	—	—	—	—	—	—
<b>Total Operating Income</b>	<b>12,496</b>	<b>9,476</b>	<b>21,972</b>	<b>10,176</b>	<b>11,324</b>	<b>21,500</b>	<b>-2.1%</b>	<b>24,000</b>	<b>89.6%</b>

We adjusted our original forecast for rotary components downward. However, sales of spindle motors and fan motors increased substantially year on year. Especially, strong sales of fan motors are playing the role of an engine for improved performance in electronic devices and components business. In addition, earnings from spindle motors are remarkably increasing since October.

We made a downward adjustment for operating income from machined components business for the same reasons as those given for the first half results.

## Net Sales by Segment

(Billions of yen)



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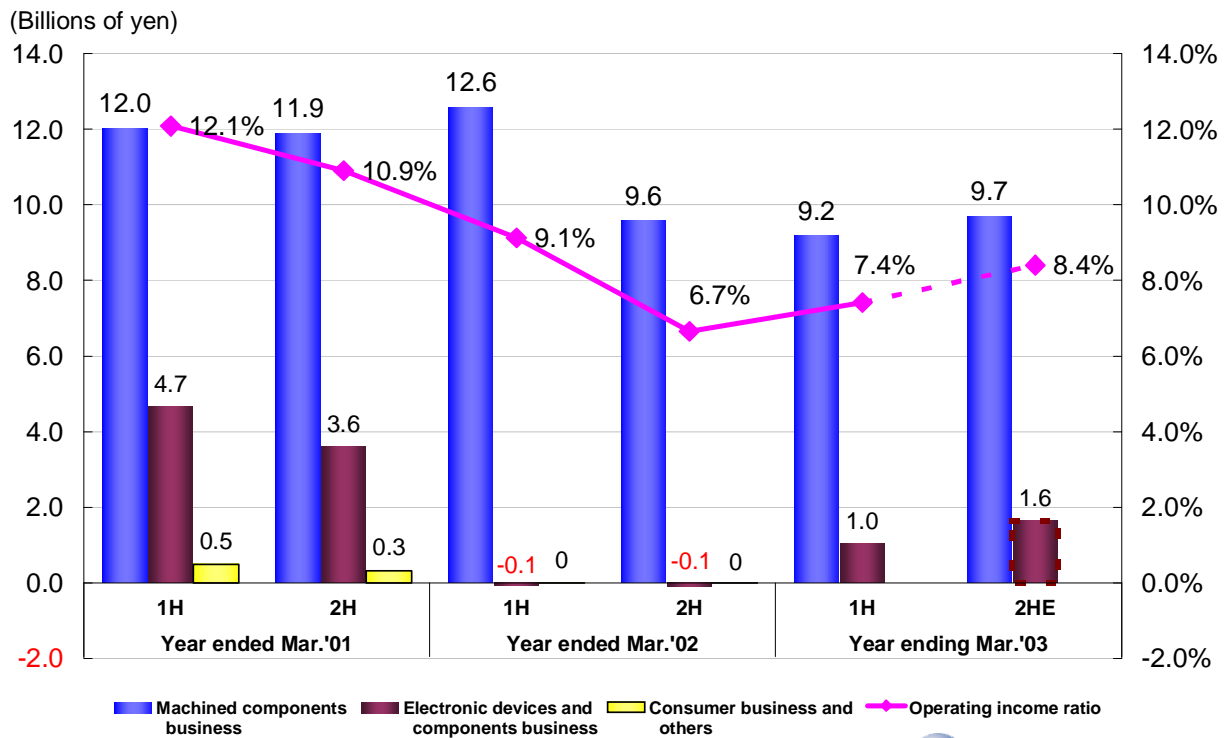
Our sales forecast that we revised downward are as shown on this page. However, sales of core products in October and November are very strong.

Sales quantity of ball bearings in October is improving close to 140 million pieces against 130 million pieces in the second quarter.

Sales of pivot assemblies and spindle motors are increasing 30% to 40% over those in the second quarter.

Sales of fan motors and keyboards also remain strong. We predict sales of core products in November will exceed those in October.

## Operating Income by Segment



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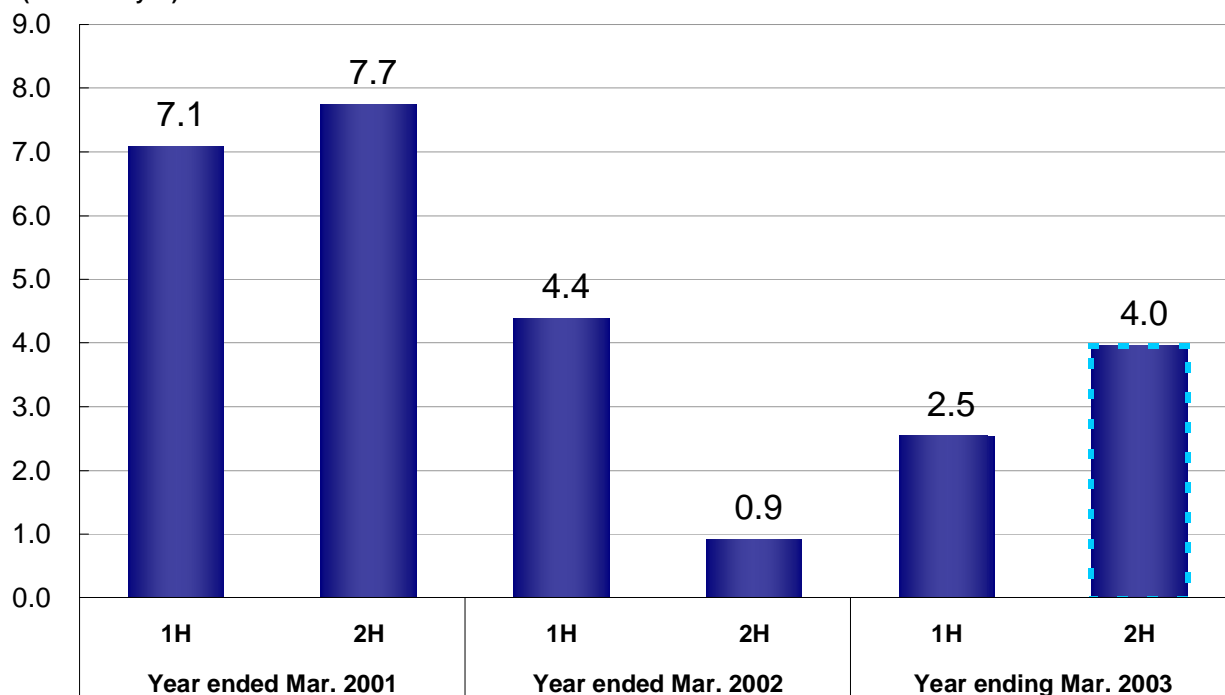
Operating income is expected to be better in the second half than in the first. We plan to improve operating income ratio to 8.4%. Given the October results, we fully expect to be able to achieve this.

Key points are 1) an increase in sales and earnings of pivot assemblies and spindle motors and 2) an increase in profit from keyboard business.

We will by all means improve operating income from the level in the second half last year.

## Net Income

(Billions of yen)



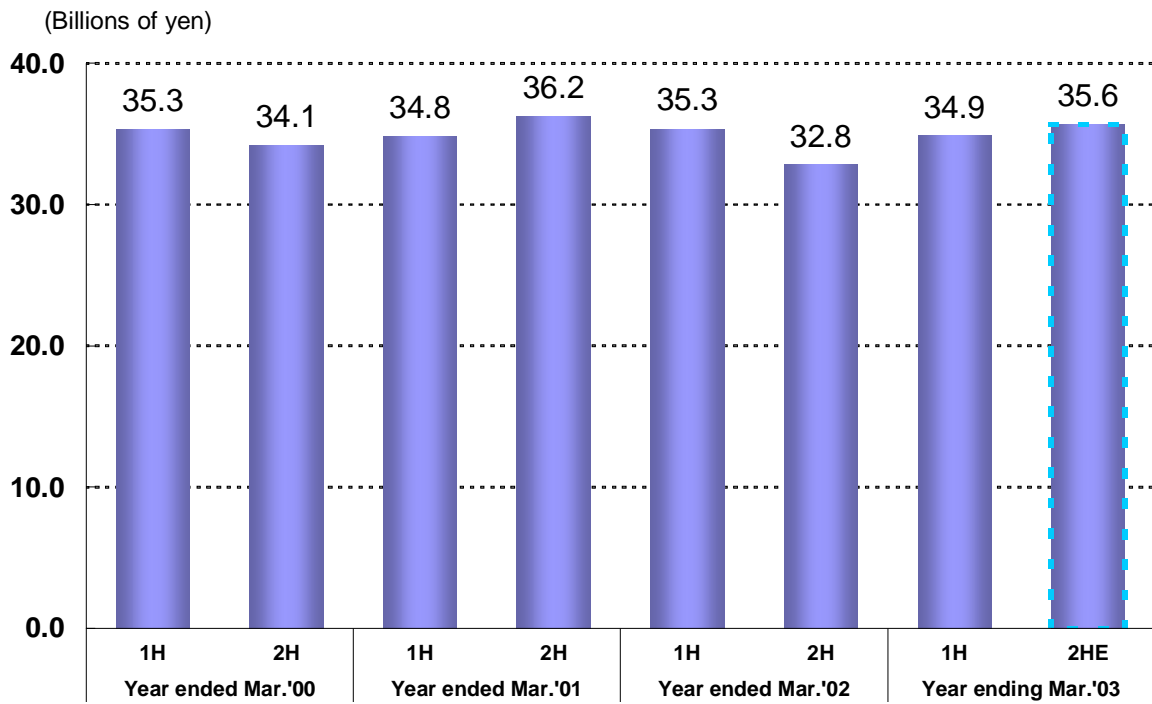
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Extraordinary losses have been included in the forecast for the second half. (N.B.) By increasing operating income and improving income tax payment, we plan to increase net income for the current term from the level in the second half of last year as shown in the bar graph above.

(N.B.) For extraordinary losses estimated in the second half, please see [Supplementary Explanation](#).

## Ball Bearings Sales Trend



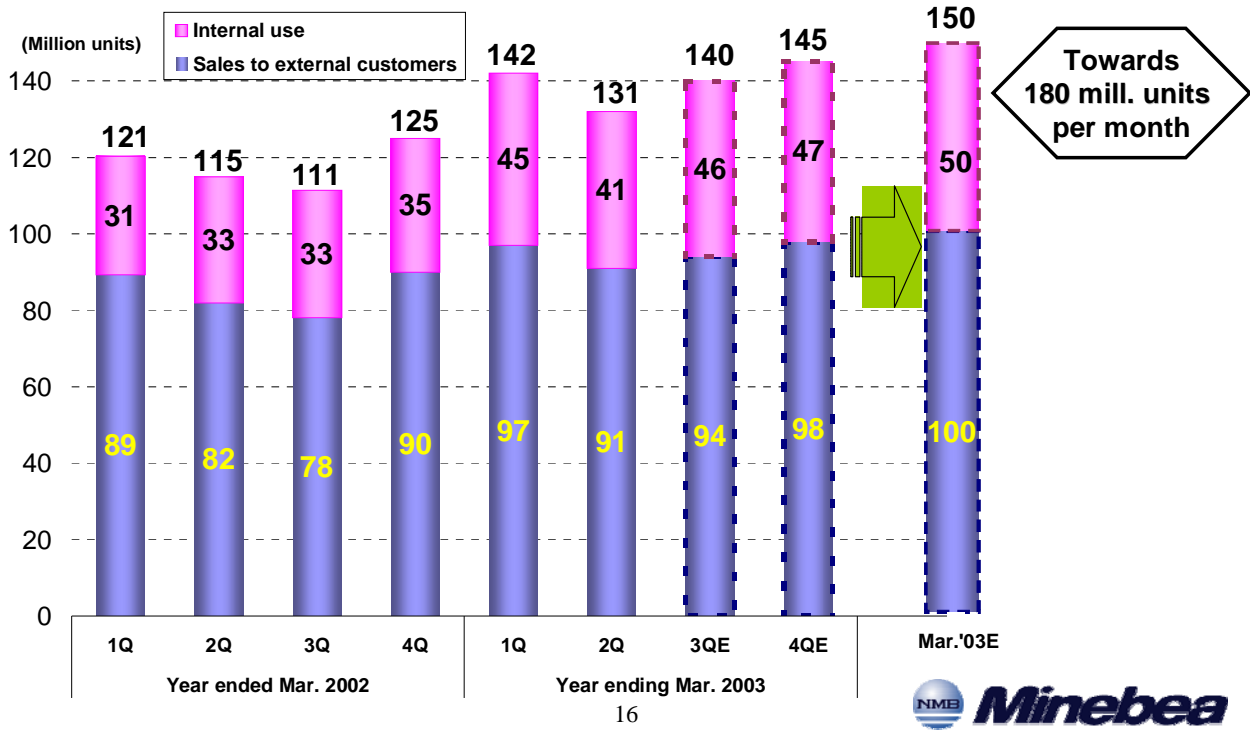
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For the second half, we plan to increase sales by 2% over those in the first half.



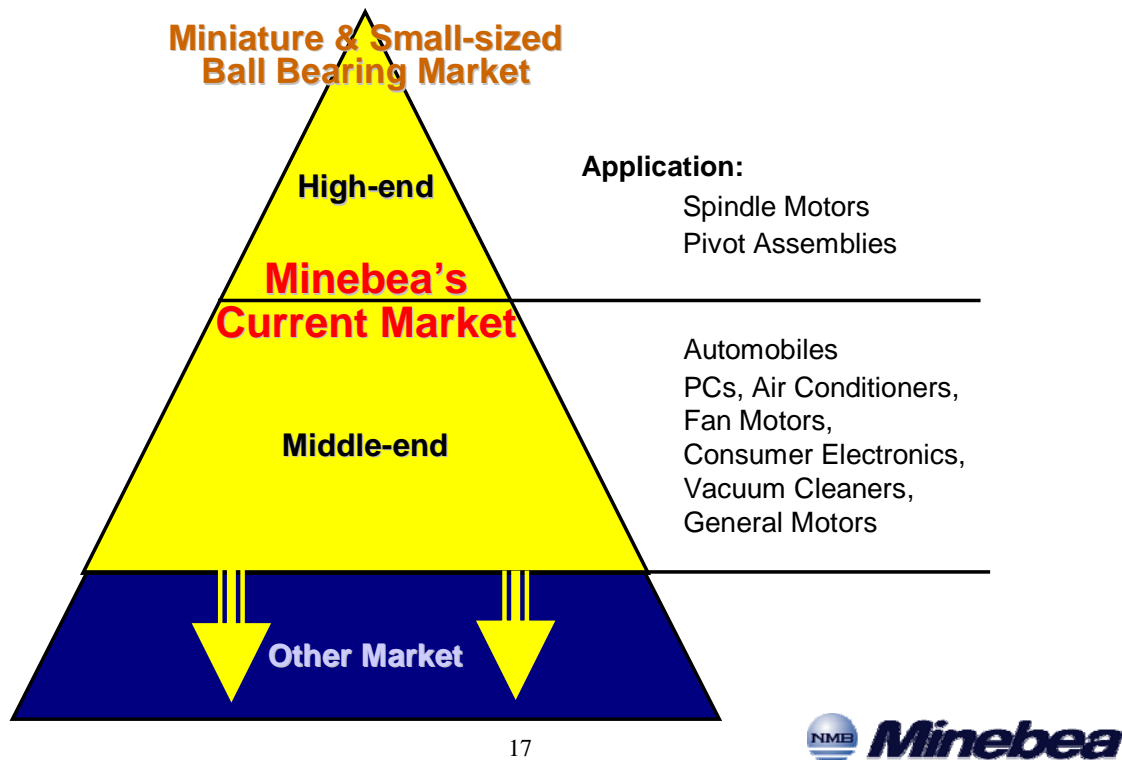
## Miniature and Small-sized Ball Bearings Sales (Monthly Average)



We are energetically promoting sales to achieve a monthly average of 143 million pieces in the second half and 150 million pieces in March 2003.

We expect ball bearings demand will continue to grow in the Chinese market and for applications such as home electric appliances, storage devices, small precision motors and motors for automobiles. We also expect other markets will grow at an accelerating rate.

## Ball Bearings Business Strategies

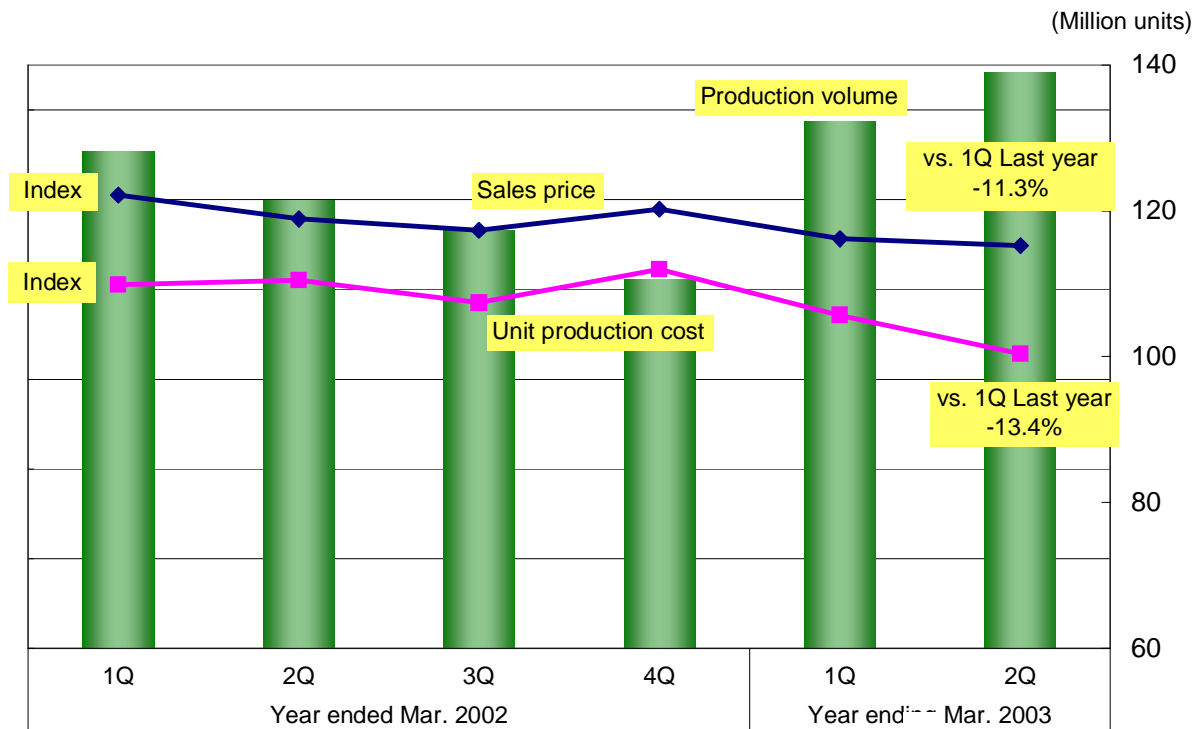


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Other markets are growing. And we have ascertained that substantial cost reduction is possible by improving production technology and increasing production volume. We have therefore decided to increase monthly production capacity with precise timing and with other growing markets in mind. We aim to increase monthly production from 150 million pieces to 180 million pieces. The monthly production increase and sales expansion by 30 million pieces is our foremost task to achieve in the second half through next year.

We plan to increase capacity by 30 million pieces by making the most use of our existing facilities without building any more factories. We feel proud that significantly less investment than in the past will have a positive and considerable effect on manufacturing costs. Having taken measures to improve production technology, we are sure to be able to increase production at the existing facilities.

## Ball Bearings Sales Price, Unit Production Cost, Production Volume



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Production increase should further reduce unit production cost.

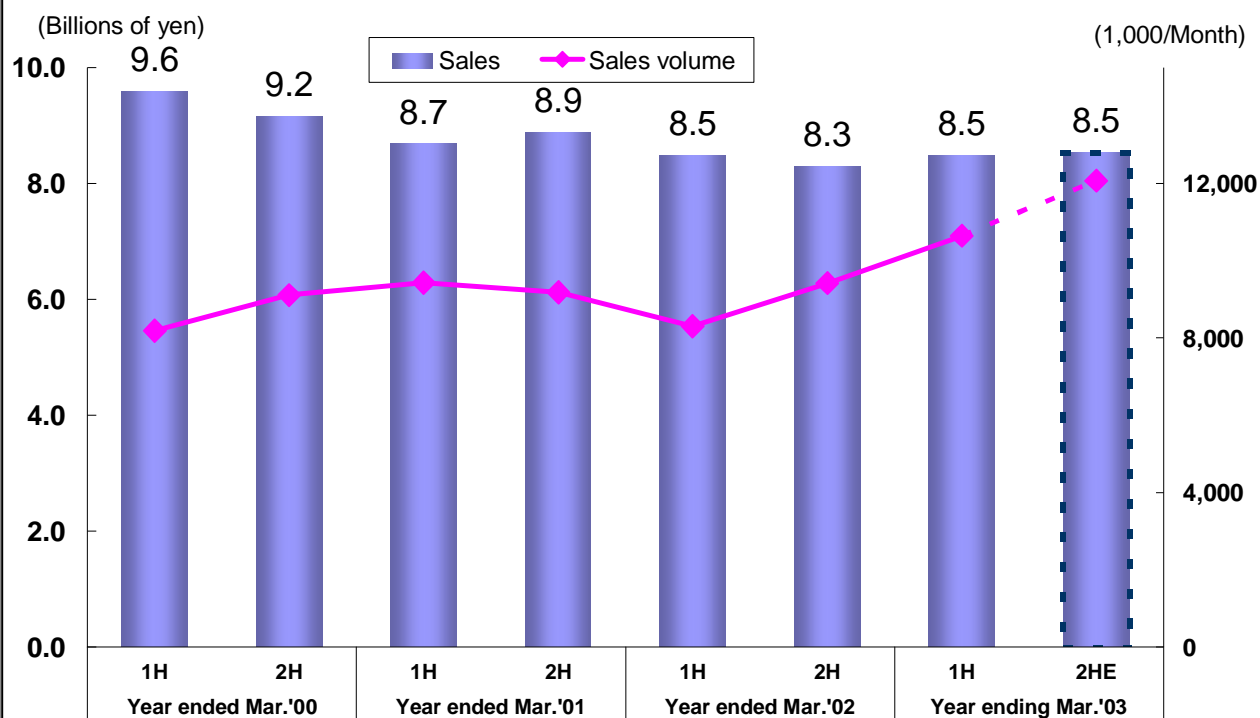
In January to March quarter of 2002, unit production cost was a little higher, owing to a substantial decline in production. Today we see positive effects of cost reduction measures that we took over the past two years.

As shown on the chart above, unit sales price decreased 11.3% in the past one year. However, operating income ratio improved since we reduced unit production cost by more than 13%.

Ball bearings, one of Minebea's core products, are our primary profit-generating product. We therefore intend to further improve our technologies, product quality and cost competitiveness in order to sharpen our competitive edge as the world's leading maker of miniature and small-sized bearings.

For the current term, we increased the overall capital expenditure forecast from the originally planned 17,600 million yen to 27,100 million yen to cover the investment for production increase of ball bearings.

## Pivot Assemblies Sales Trend



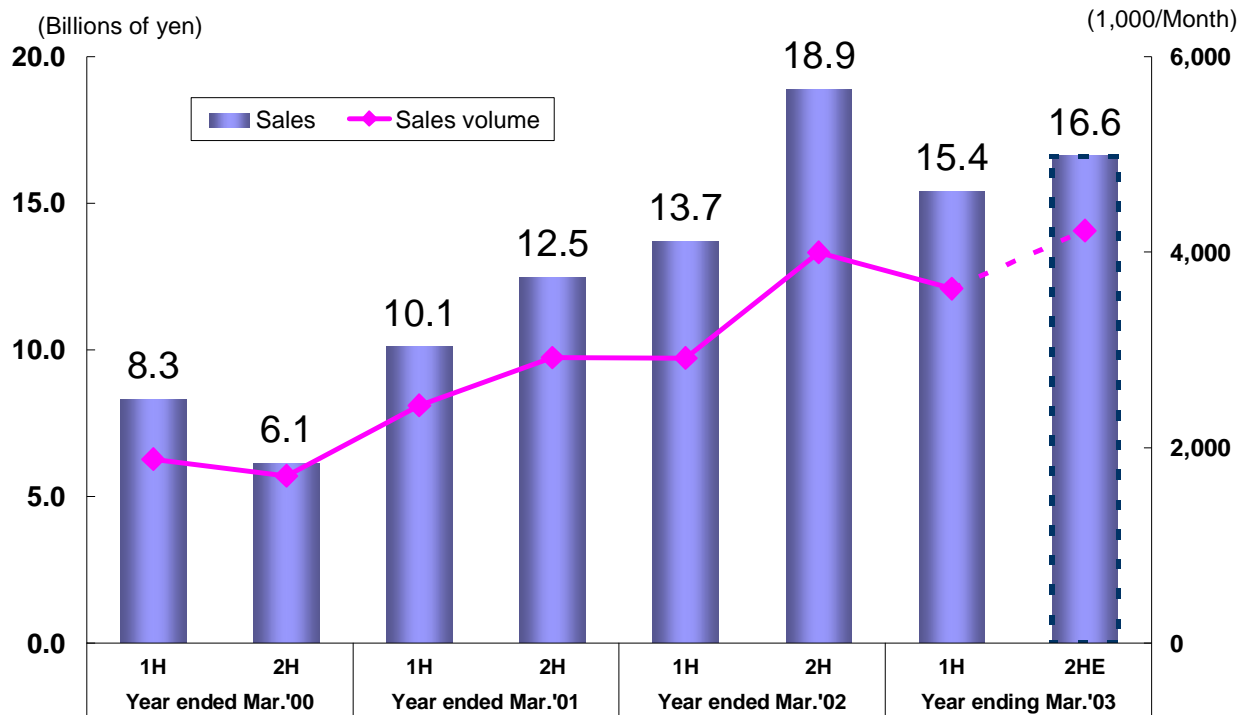
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Sales volume of pivot assemblies is growing remarkably. However, market price declined more than expected and capacity utilization remained low in the second quarter because of production adjustment. Consequently, this product adversely affected the entire machined components business.

Production and sales volume recovered from 10 million /11 million units in the second quarter to a 13 million level in October. In November, this is expected to increase further. In the second half, we expect merit of scale will bring about increased earnings, which will more than offset decline in sales price.

## HDD Spindle Motors Sales Trend



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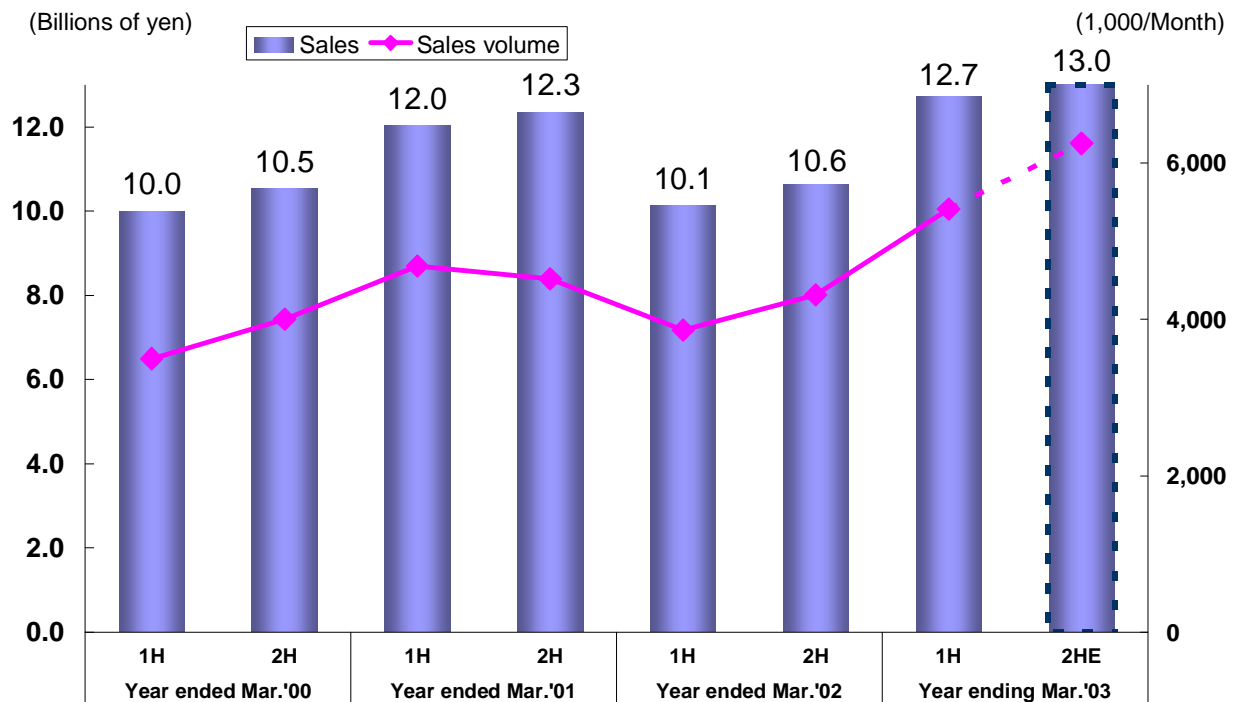


Inventory adjustment at our major customers was evident in June and continued throughout the second quarter. However, sales volume of spindle motors, spurred by launching of new FDB motors, is markedly increasing since October.

We originally planned monthly sales of 4.0 to 4.5 million units for the second half. Our most recent forecast is 4.5 million units for the third (October to December) quarter and more than 5.0 million for the fourth (January to March) quarter, and 70% to 80% of them will be FDB motors. We expect to recover our market share in the second half.

FDB motor business with Matsushita Motor Company is progressing as scheduled.

## Fan Motors Sales Trend



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Sales volume of fan motors is steadily growing and reached a record high at 6.0 million units per month in the second quarter. We estimate sales volume in the second half at 6.5 million units per month.

Sales for game application were especially strong in the second quarter. We expect Christmas-related demand will continue to grow until November.

We entered into a business tie-up for fan motor business with Matsushita Motor Company. We expect our fan motors will find a wider range of applications such as IT-related equipment and digital home appliances. Combination of our technologies and expertise in ball bearing type fan motors and Matsushita's technologies in sleeve type fan motors should enable us to capture new markets. This month, joint R&D will start at our Karuizawa factory.

## **Core Product Strategies**

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### **Ball Bearings:**

- Expand sales and increase production for early realization of 180 million units per month
- Target and expand sales in other market
- Continue to lower unit production cost and maintain high margin

### **Pivot Assemblies:**

- Expand sales and production

### **Spindle motors :**

- Ensure successful implementation of mass-production of new FDB models, and improve sales and earnings

### **Fan motors :**

- Ensure through win of new projects and expand sales and earnings
- Start joint product development with Matsushita Motors and consignment production

We are now well positioned to energetically expand our ball bearing sales in order to accomplish a monthly production of 180 million pieces.

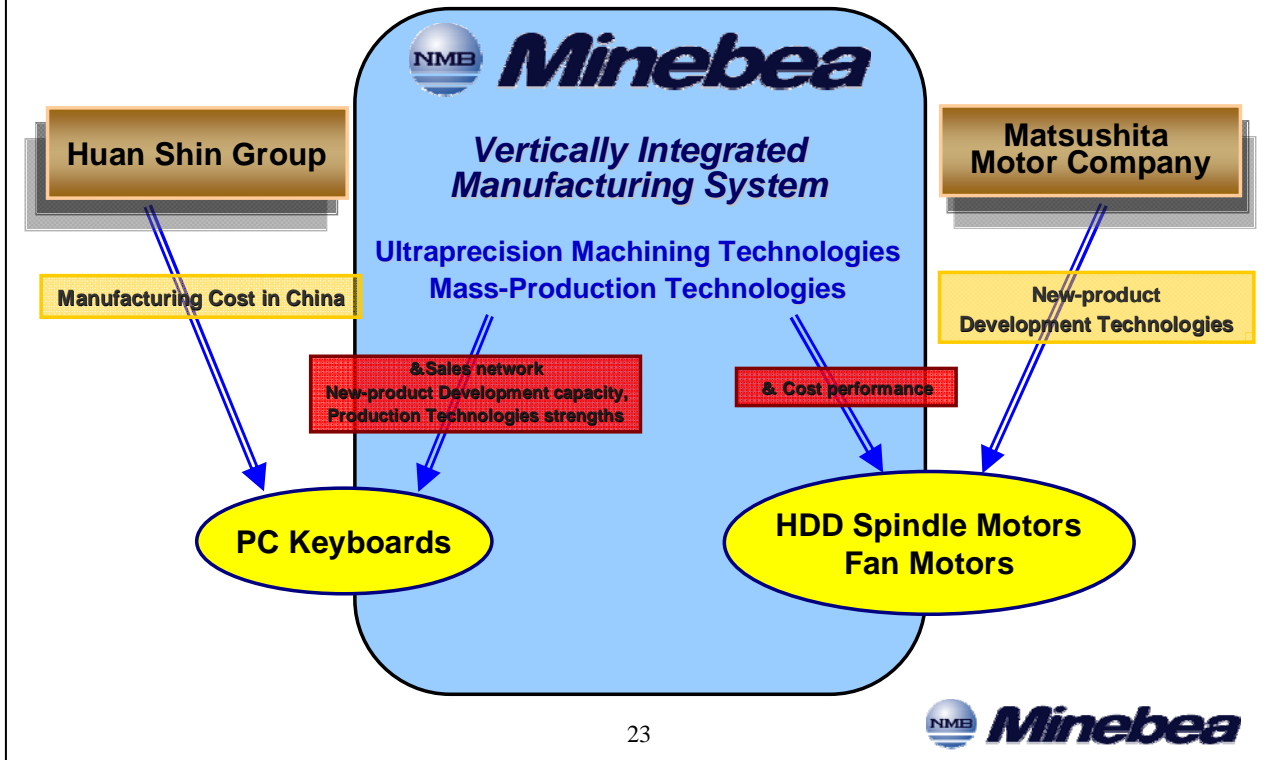
In expanding sales, we will take other markets into consideration. We will continue our efforts to further reduce unit production cost and to maintain high profit margins.

We aim to expand sales of pivot assemblies and increase profit through production hike.

We will ensure that mass-production of new FDB spindle motors get into gear and will achieve a market position as one of the major suppliers.

As for fan motors, we intend to capture new projects, increase production, and further improve earnings. We will also launch successfully joint product development with Matsushita Motor Company and consignment production.

## To be No.1 Precision Component Manufacturer



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We intend to accelerate our growth into the world's top manufacturer of comprehensive precision components and will ensure further improvement of our performance. To this end, we will look to business tie-up with other companies, while focusing on our core businesses where we have unrivalled strengths such as ultra-precision machining technology.



# **Business Results for the First Half of Fiscal Year ending March 31, 2003**

**Minebea Co., Ltd**

<http://www.minebea.co.jp/>

Any statements in the presentation which are not an historical fact are future projections made based on certain assumptions and our management's judgment drawn from currently available information.

Please note that actual performance may vary significantly from any particular projection, due to various factors.

Factors affecting our actual performance include: (i) changes in economic indicators surrounding us or demand trends; (ii) fluctuation of foreign exchange rates or interest rates; and (iii) our ability to continue R&D, manufacturing and marketing in a timely manner in the electronics business sector, where technological innovations are rapid and new products are launched continuously. However, this is not a complete list of the factors affecting actual performance.