



**Business Results for  
Fiscal Year ended March 31, 2002**

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President and  
Representative Director  
May 17, 2002**

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## **1. Consolidated Results for Fiscal Year ended March 31, 2002**

## **2. Mid-Term Management Plan**

I would first like to give a brief explanation on our results for the fiscal year to March 31, 2002, then explain our new mid-term management plan.

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**1. Consolidated Results for  
Fiscal Year ended March 31, 2002**

## Consolidated Results for Fiscal Year ended March 31, 2002

( Millions of yen)	Year ended Mar. '01	Year ended Mar. '02	Change yoy	Forecast announced on Nov. '01
<b>Net Sales</b>	287,045	279,344	-2.7%	260,000
<b>Operating Income</b>	32,977	21,972	-33.4%	21,700
<b>Ordinary Income</b>	24,726	15,995	-35.3%	15,000
<b>Net Income</b>	14,826	5,298	-64.3%	5,500

### 1. Last fiscal year's results

Comparing to the year earlier, earnings declined, however, net sales, operating income and ordinary income exceeded forecasts that we announced at the time of interim results announcement.

## Sales and Operating Income by Segment

Millions of yen	Year ended Mar.'01	Year to March 2002			Change yoy	Forecast announced on Nov.'01
		First half	Second half	Full year		
<b>[Net Sales]</b>						
<b>Machined components business</b>	<b>124,461</b>	<b>62,194</b>	<b>59,830</b>	<b>122,025</b>	<b>Δ2.0%</b>	<b>116,200</b>
Bearing related products	101,096	51,188	48,925	100,113	Δ1.0%	97,100
Other machinery components	23,365	11,006	10,905	21,911	Δ6.2%	19,100
<b>Electronics device and components business</b>	<b>151,910</b>	<b>73,979</b>	<b>82,325</b>	<b>156,303</b>	<b>+2.9%</b>	<b>143,000</b>
Rotary components	73,603	35,917	40,523	76,440	+3.9%	74,500
Other electronic devices	78,307	38,062	41,800	79,862	+2.0%	68,500
<b>Consumer business and others</b>	<b>10,674</b>	<b>709</b>	<b>307</b>	<b>1,016</b>	<b>Δ90.5%</b>	<b>800</b>
<b>Total</b>	<b>287,045</b>	<b>136,882</b>	<b>142,462</b>	<b>279,344</b>	<b>Δ2.7%</b>	<b>260,000</b>
<b>[Operating income]</b>						
<b>Machined components business</b>	<b>23,906</b>	<b>12,564</b>	<b>9,571</b>	<b>22,135</b>	<b>Δ7.4%</b>	<b>21,768</b>
<b>Electronics device and components business</b>	<b>8,259</b>	<b>Δ 74</b>	<b>Δ 88</b>	<b>Δ 162</b>	<b>-</b>	<b>Δ 74</b>
<b>Consumer business and others</b>	<b>812</b>	<b>6</b>	<b>Δ 6</b>	<b>0</b>	<b>-</b>	<b>6</b>
<b>Total</b>	<b>32,977</b>	<b>12,496</b>	<b>9,476</b>	<b>21,972</b>	<b>Δ33.4%</b>	<b>21,700</b>

※ Net Sales are external sales only

※ Main Products: Bearing related products: Ball Bearings, rod-end and spherical bearings, pivot assemblies

Other machinery components: Fasteners, wheels, defense-related special parts

Rotary components: Stepping motors, fan motors, spindle motors

Other electronic devices: PC keyboards, FDD subassemblies, MOD, switching power supplies, speakers

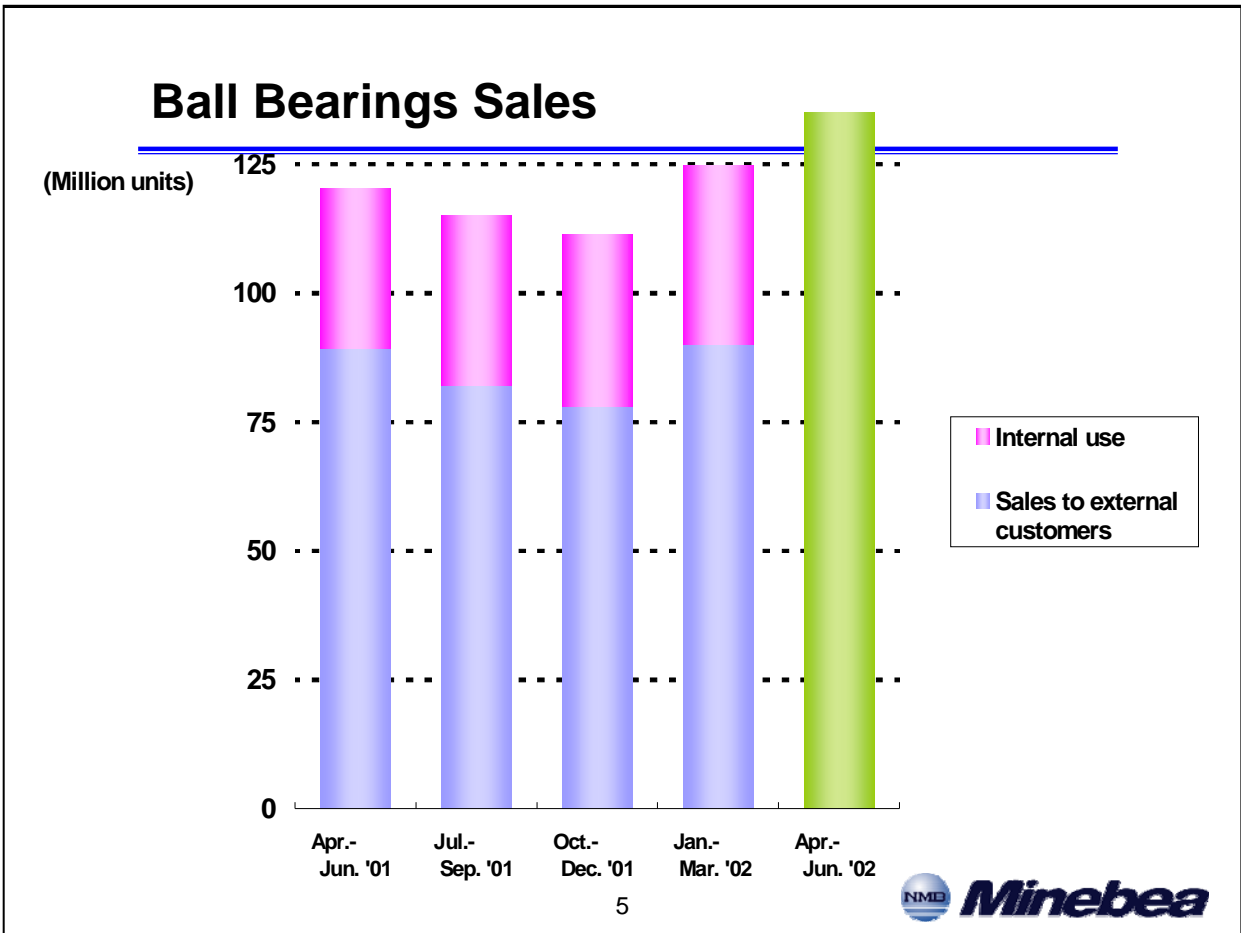
Net sales of machined components segment fell 2.0% year on year, however, it exceeded our previous forecast that we announced in November last year.

Operating income margin for the machined components segment was 17.0%, confirming the stability of earnings of machined components business, especially that of bearings operation.

Net sales of electronic device and components segment also exceeded the original forecast that we announced in last November, and increased 2.9% yoy.

This segment incurred an operating loss of 162 million. This is attributable to the fact that depressed demand caused earnings for stepping motors and fan motors to deteriorate, increased burden of front-loaded investment suppressed profitability of spindle motors business, and power electronics business did not turn profitable.

On the other hand, keyboard business recorded high level of sales and earnings.



### 2. Recent business trend

Sales of some products such as pivot assemblies, fan motors, stepping motors and MOD have been on recovery trend since the beginning of the calendar year, while demand for ball bearings has also been recovering rapidly in recent months, principally for those used in fan motors for PCs. With this, my feeling is that there will be a full-fledged recovery from the last few months of the first half of the current fiscal year.

In particular, total sales, including internal sales, of ball bearings recovered to 125 million units per month during January to March quarter from the level close to 110 million units per month in last October to December, and are expected to reach 135 million units per month in the current quarter from April to June.

\*MOD = Magnetic Optical Disk-drive (a mass storage removable disk drive)

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## 2. Mid-Term Management Plan

# Management Plan

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## Operating Environment

- **Users' Shift of Production to South East Asia and China**
- **Emergence of Chinese Market**
- **Industry Reorganization**

### **3. Mid-term management plan**

Over the past several years, we made forward-looking investment in core business while we withdrew from non-core business and non-profitable business, in response to rapid changes in the operating environment such as our users' shift of production to South East Asia and China, emergence of Chinese market, reorganization within industry. Based on the outcome of these measures, we have made a new mid-term management plan.



## **Mid-Term Sales and Earnings Plan**

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(Millions of yen)	<b>Year to Mar. '02</b>	<b>Year to Mar. '03 Plan</b>	<b>Year to Mar. '04 Plan</b>	<b>Year to Mar. '05 Plan</b>
<b>Sales</b>	279,344	288,000	316,800	348,000
<b>Operating Income</b>	21,972	24,000	33,000	37,000
<b>Ordinary Income</b>	15,995	18,500	28,000	33,500
<b>Net Income</b>	5,298	10,000	17,000	21,000

Outline of mid-term management plan are as shown in the table.

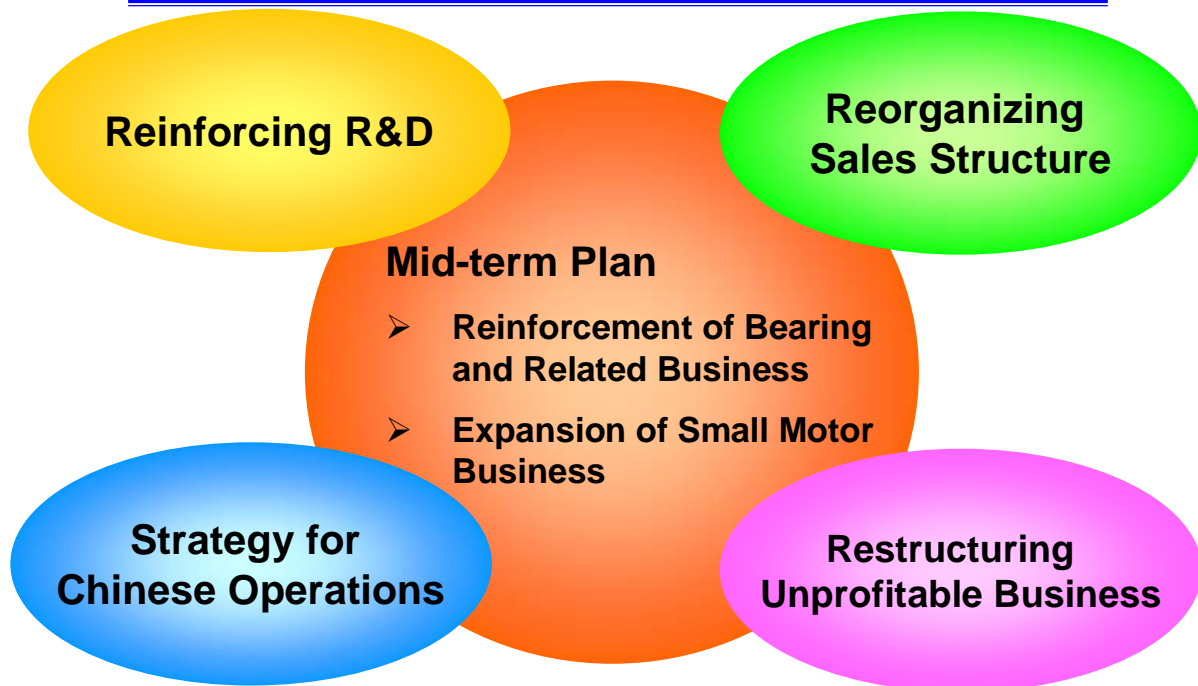
## Mid-Term Sales and Earnings Plan

(Millions of Yen)	Year to Mar.'01	Year to Mar.'02	Year to Mar.'03		Year to Mar.'04	Year to Mar.'05	
			First Half	Second Half	Full year		
<b>Net Sales</b>	<b>287,045</b>	<b>279,344</b>	<b>142,000</b>	<b>146,000</b>	<b>288,000</b>	<b>316,800</b>	<b>348,000</b>
Machined components business	124,461	122,025	59,450	59,200	118,650	124,250	131,650
Bearing related products	101,096	100,113	49,100	49,700	98,800	102,800	108,300
Other machinery components	23,365	21,911	10,350	9,500	19,850	21,450	23,350
Electronics devices and components business	151,910	156,303	82,550	86,800	169,350	192,550	216,350
Rotary components	73,603	76,440	45,300	48,150	93,450	109,300	128,450
Other electronic devices	78,307	79,862	37,250	38,650	75,900	83,250	87,900
Consumer business and others	10,674	1,016	—	—	—	—	—
<b>Operating Income</b>	<b>32,977</b>	<b>21,972</b>	<b>10,000</b>	<b>14,000</b>	<b>24,000</b>	<b>33,000</b>	<b>37,000</b>
Machined components business	23,906	22,135	9,800	12,200	22,000	25,250	28,000
Electronics devices and components business	8,259	△ 162	200	1,800	2,000	7,750	9,000
Consumer business and others	812	0	—	—	—	—	—
<b>Ordinary Income</b>	<b>24,726</b>	<b>15,995</b>	<b>7,300</b>	<b>11,200</b>	<b>18,500</b>	<b>28,000</b>	<b>33,500</b>
<b>Net Income before Tax</b>	<b>22,387</b>	<b>12,948</b>	<b>7,100</b>	<b>10,900</b>	<b>18,000</b>	<b>27,500</b>	<b>33,000</b>
<b>Net Income</b>	<b>14,826</b>	<b>5,298</b>	<b>3,600</b>	<b>6,400</b>	<b>10,000</b>	<b>17,000</b>	<b>21,000</b>
Depreciation (incl. intangible fixed assets)	22,149	24,385	—	—	25,000	25,000	25,600
Capital Expenditure	39,876	26,245	—	—	17,600	28,200	23,400
Net Interest-bearing Dept assums conversion of all CBs	173,228	168,720	—	—	144,000	128,000	64,000

Rotary components division should form the pillar of earnings growth. Earnings from bearings are expected to continue expanding while power electronics and electro-device businesses are expected to improve in earnings significantly. We would like to note that rotary components division is expected to exceed bearings and related products in sales by the fiscal year to March 2004.

## Management Strategy

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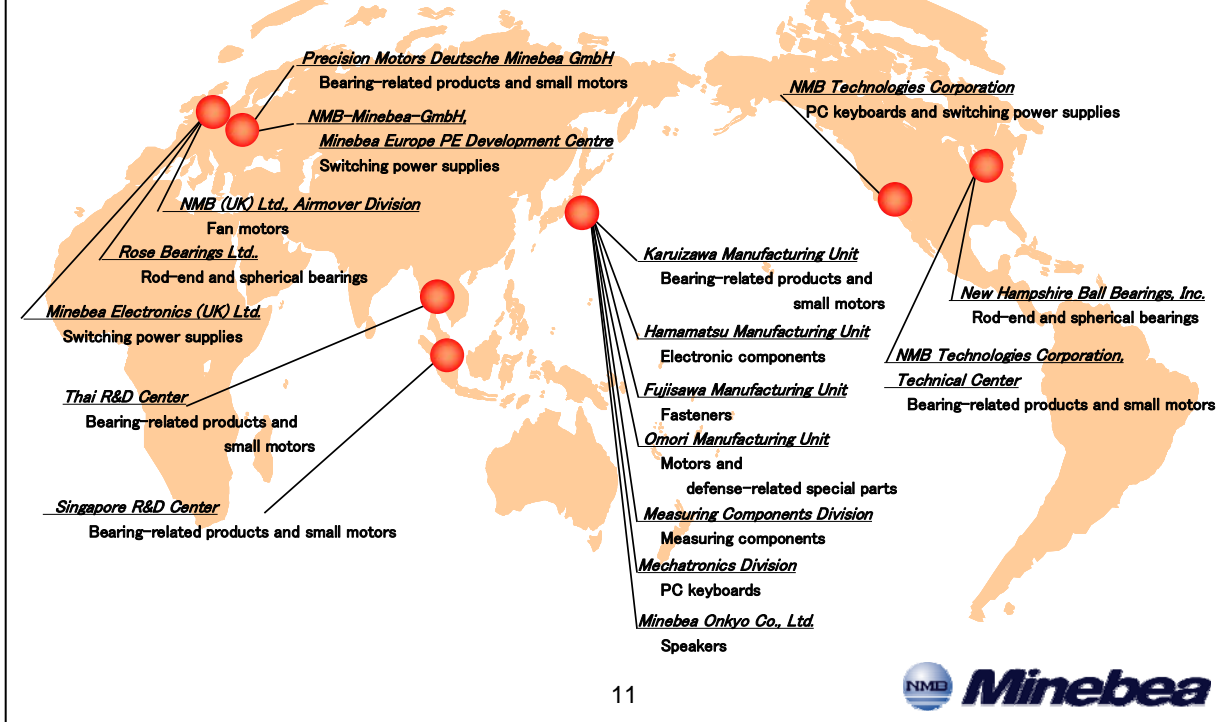
#### 4. Mid-term management directions

The overall strategy remains that we expand motor business while ball bearings form the core business. The following four management directions form the pillar of the strategy.

1. Reinforcing research and development
2. Strategy for Chinese operations
3. Reorganizing sales structure
4. Restructuring unprofitable businesses

# Reinforcing Research and Development

## Minebea's Global R&D Activities 17 locations in 6 countries



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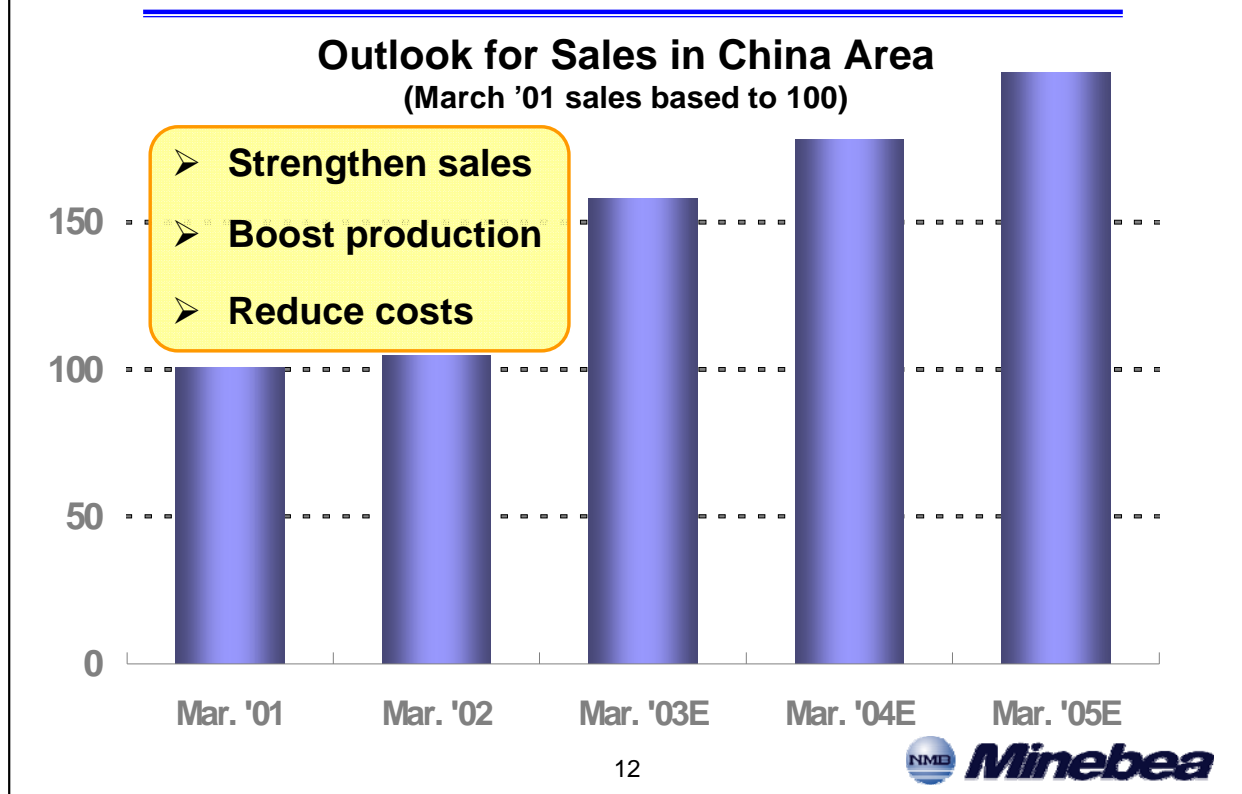
Minebea has made reinforcement of research and development our utmost priority since last fiscal year. We implemented measures to speed up reinforcement of R&D, to link up individual R&D activities and to build strong cooperation between R&D, sales, and manufacturing divisions. As a result, a thorough unified management of R&D activities have been established, and through contact between our technical teams and users, better organic management of our operations - from development, manufacturing to shipment - should be realized.

One example of this is the inauguration of R&D Headquarters a year ago. Research and development is now conducted at 17 locations world-wide and budget for R&D exceeds 10 billion, when development projects under the control of R&D Headquarters and those in general put together.

Recent outcome of research and development is seen in the areas of spindle motors, DC brushless motors including motors for automobile use, and fan motors. All of these are products that we categorize as growth areas.

Moreover, restructuring of power supplies business is also as a result of research and development efforts.

## Strategy for Chinese Operations



Last fiscal year, sales to Chinese area exceeded 10% of total company's sales. Sales are expected to increase further over the next three years. In terms of production, we established an operation in China before our competitors and have expanded the operation successfully.

The sales reorganization in April placed emphasis on further reinforcement of sales- marketing targeted towards the rapidly expanding Chinese market and customers, who are shifting mass production to China and other areas of Asia.

As for production, production of ball bearings in China is now close to capacity. By closely monitoring demand trend world-wide, we intend to expand production capacity significantly during this fiscal year or next fiscal year.

In fan motor operation, our internal target is to raise production to 7 million units per month during this fiscal year. Further, we intend to increase cost competitiveness by switching procurement of raw materials to local procurement; part of this effort includes establishment of IPO (International Procurement Office).

## Reorganizing Sales Structure

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### **Users' move to**

**Shorten lead time from product development to mass production  
Shift of mass production to Asia**



- **Reinforced sales in Asia region**
- **Established separate sales team for every major customer**
- **Reinforced sales in East Europe**
- **Inaugurated dedicated sales department for automobile business**
- **Promoted efficiency in domestic sales organization**

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In April, we implemented sales reorganization on world-wide scale. We reviewed our sales structure in order to achieve faster information flow and response and improvement in service quality for customers in anticipation of users' accelerating move to shorten lead time from product development to mass production and shift of mass production to Asia.

To reinforce sales in Asian region, we reviewed the previous structure, where Singapore Headquarters controlled most of Asian region, and we established Hong Kong Headquarters. South East Asian region is now controlled from Singapore, while Hong Kong, China, Taiwan and Korea are controlled from Hong Kong. In addition, we increased number of sales and sales engineers for technical service.

To deliver greater value to users, who are conducting business on a global basis, we established separate sales team for every major customer. In Japan we changed sales organization to place importance on users' new development projects, and in the US we reinforced teams that are in charge of development to mass production on user basis.

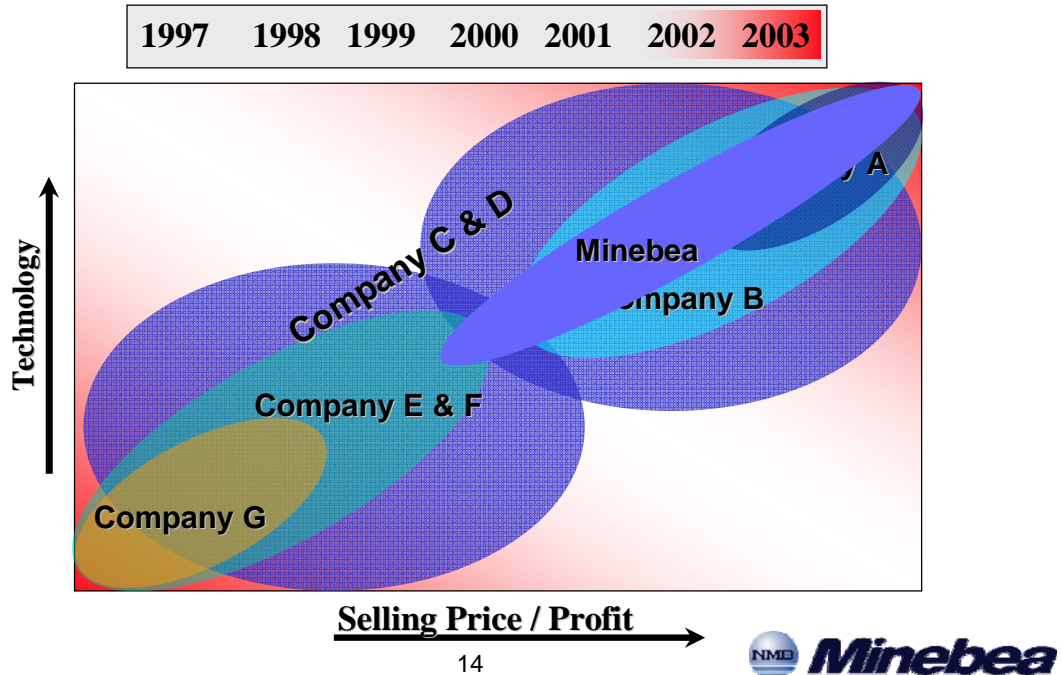
In Europe, we reinforced sales in East Europe to meet expected market expansion in the region.

We also inaugurated dedicated sales department for new product for automobile industry.

In Japan we raised operation efficiency by reducing the number of branches from three (Tokyo, Nagoya, Osaka) to two (Tokyo and Osaka). We have also introduced home offices and relocated sales members closer to users.

## Restructuring Unprofitable Business

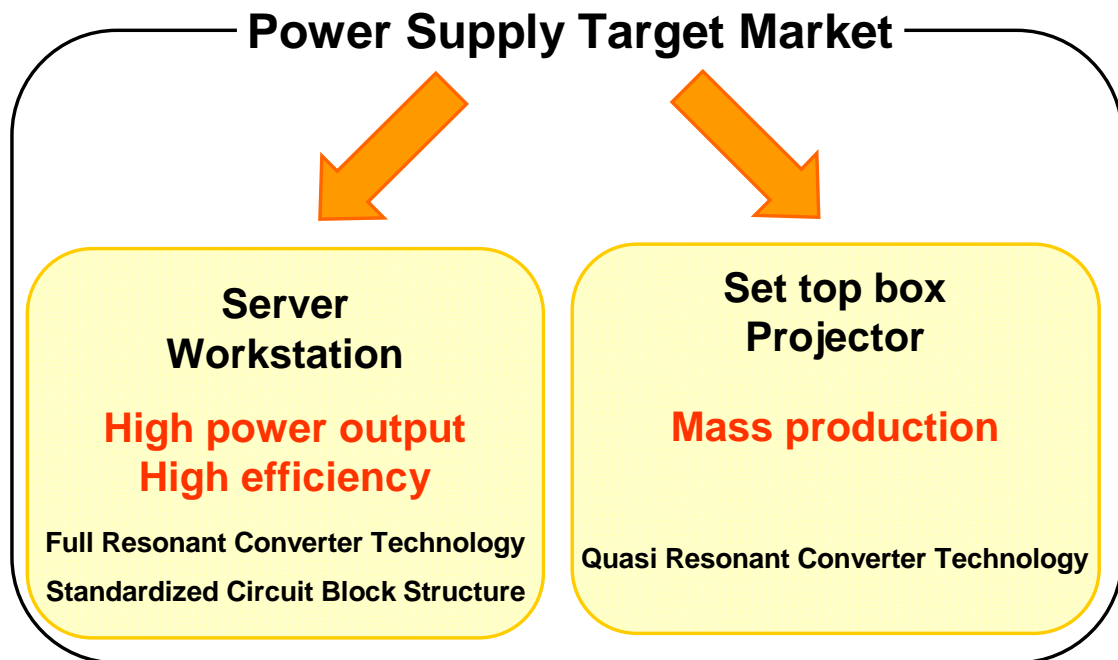
### Power Supply Market



Last fiscal year, we announced restructuring in four businesses. Power supplies business, which is the key of all restructuring businesses, its turnaround is now in sight.

Corporation between R&D teams in Japan, Europe and the US, and reinforcement of technology, we have succeeded in making a shift to higher end of the market, to be exact, power supplies for telecommunication equipment in Europe and for servers and workstations in the US. As a result, we are now positioned in the upper right hand corner of technology and value chart. Weight of sales of high technology and high end products should increase as in this chart in the next several years.

## Restructuring Unprofitable Business



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First, we developed technology for high output servers and workstations. We have built a range of products with output above 400W that are cost competitive and boast high efficiency, high power output and high reliability. High capacity in small space was made possible by Full Resonant Converter Technology which we developed at R&D center in the US and for which we obtained a patent. In the development of this Full Resonant Converter Technology, superior technology in magnets, which we enjoy in the market, was the critical factor in the development of components. Moreover, Standardized Circuit Block Structure enabled significant reduction in the number of designing processes, ie major reduction in development time and costs.

Second, we developed our unique Quasi Resonant Converter Technology (ORC) for mass-produced small power supplies. By this method, we were able to reduce the number of components and to strengthen competitiveness in small power supplies market, where set top boxes and projectors are expected to form growth segments.

We have built a foundation for a profitable power supplies operation, although it has taken time. All that remains for us to do is to expand sales in target markets, which are servers and workstations, set top boxes and projectors. For the power electronics division, whose operation mostly consists of power supplies business, we plan sales of 15 billion and to cut down losses in the current fiscal year. For next fiscal year, we plan sales of 19 billion and a profit.

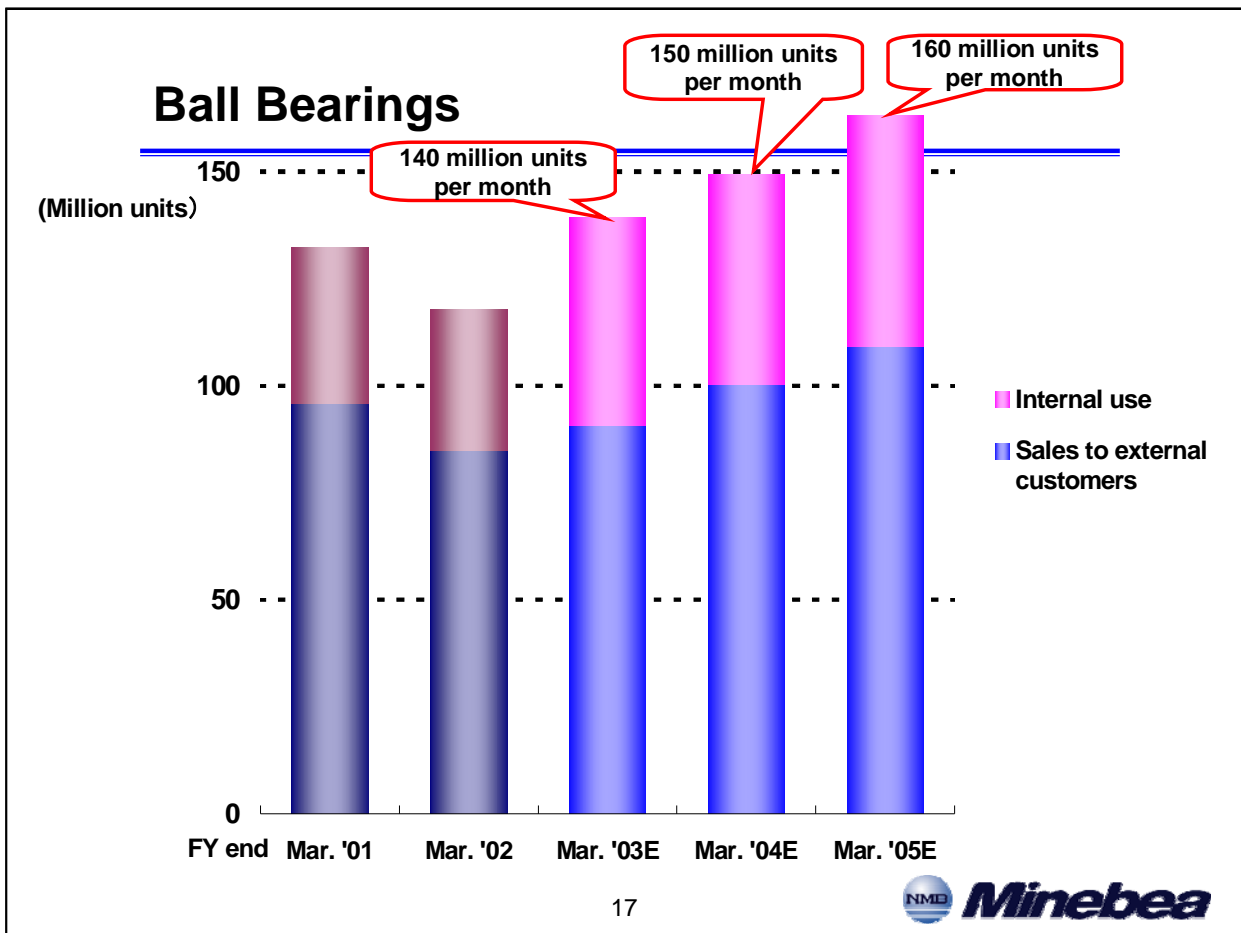


## **Five Products to Achieve Mid-Term Earnings Goals**

- 1. Ball Bearings**
- 2. Fan Motors**
- 3. Spindle Motors**
- 4. Motors and Sensors for Automobile Use**
- 5. Power Supplies**

### **5. Five products to achieve mid-term earnings plan**

Next I would like to explain five products, which are core products to accomplish mid term earnings plan.



Ball bearings are the greatest source of the company's earnings and cashflow. We intend to capture growing demand by continued quality improvement and costs reduction. Demand in China is expanding rapidly for use in home electrical appliances, especially for air conditioners. Applications of small precision motors, which use ball bearings, continue to expand as seen in areas such as digitization of home electronics and automobiles turning more electronically-control. Internal usage volume is also expected to increase with expansion of our motors business. We plan monthly sales and production of 140 million units for this fiscal year, however, sales already exceeded 145 million units in April. Therefore I have given manufacturing and sales divisions orders with higher target.

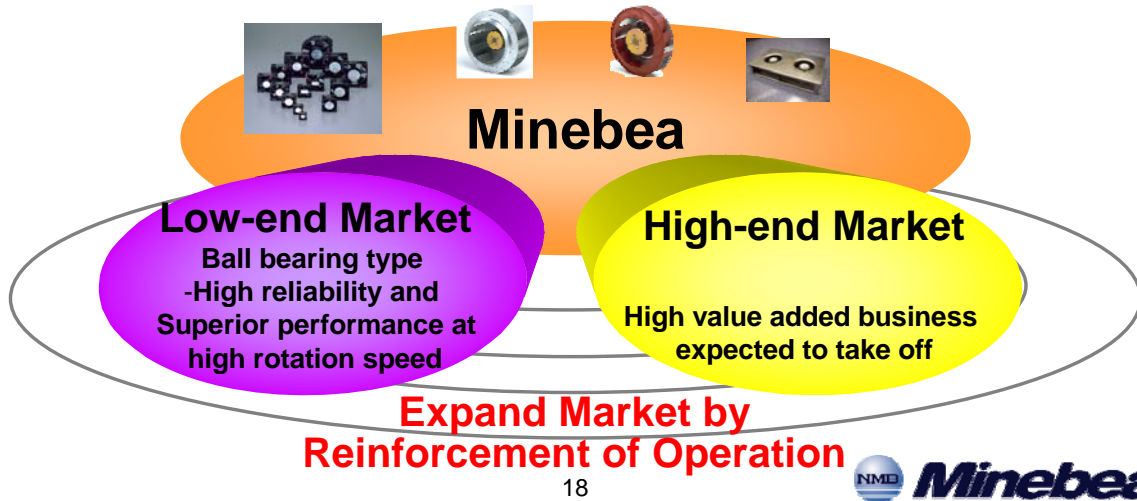
# Fan Motors

## ◆ Strategy

- Sales Expansion
- Cost Reduction
- Product Mix



Total annual sales to  
80 million units this fiscal year



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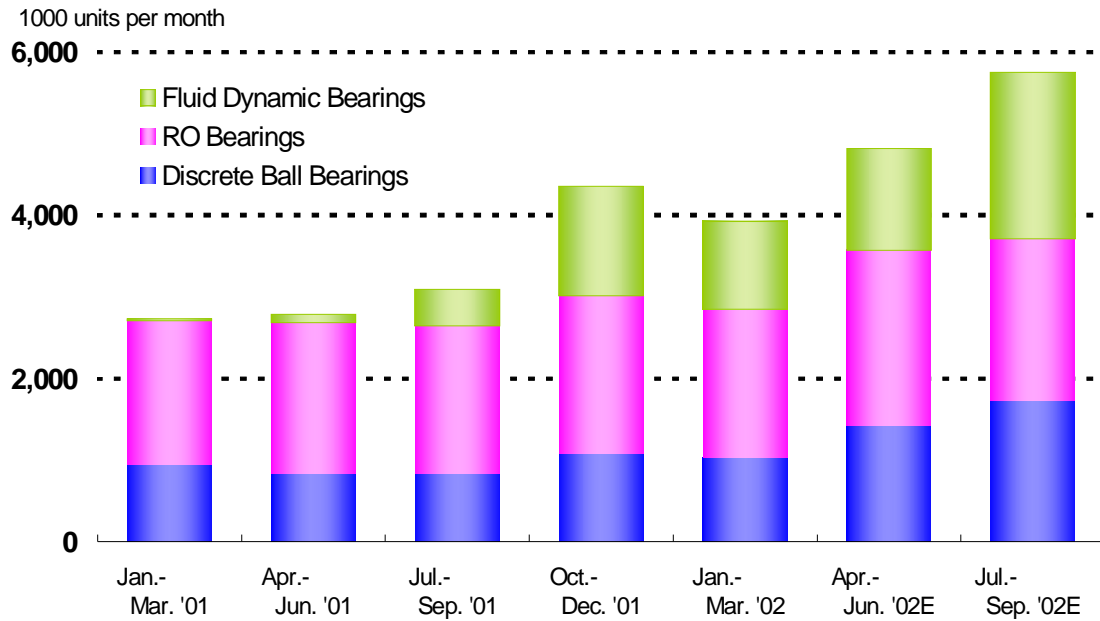
For fan motors, we plan to raise total annual sales to 80 million units this fiscal year and 100 million units in fiscal year 2004. The strategy for fan motors business consists of sales expansion, cost reduction and review of product mix. We plan to reinforce business in different methods for two different markets. Price decline in PC is causing fan motors for mass produced market to shift towards sleeve bearing type. However, we have decided to target low-end market with ball bearing type, which is superior in terms of high-speed rotation and reliability. Last fiscal year, we made an entry into fan motors for game consoles and CPU cooling fans. As a result, April sales of total fan motors reached 5 million units.

In addition, we plan to build up high end product business. This fiscal year, businesses for telecommunication equipment and servers, namely large-sized blowers, mixed flow fan motors, fan trays and fan motors with power supplies, are expected to take off. This fiscal year, we plan to improve profitability by changing product mix, as well as by leveraging on scale merit and cost cutting measures.

\*CPU = Central Processing Unit

# Spindle Motors

## Spindle Motors Production by Bearing Type



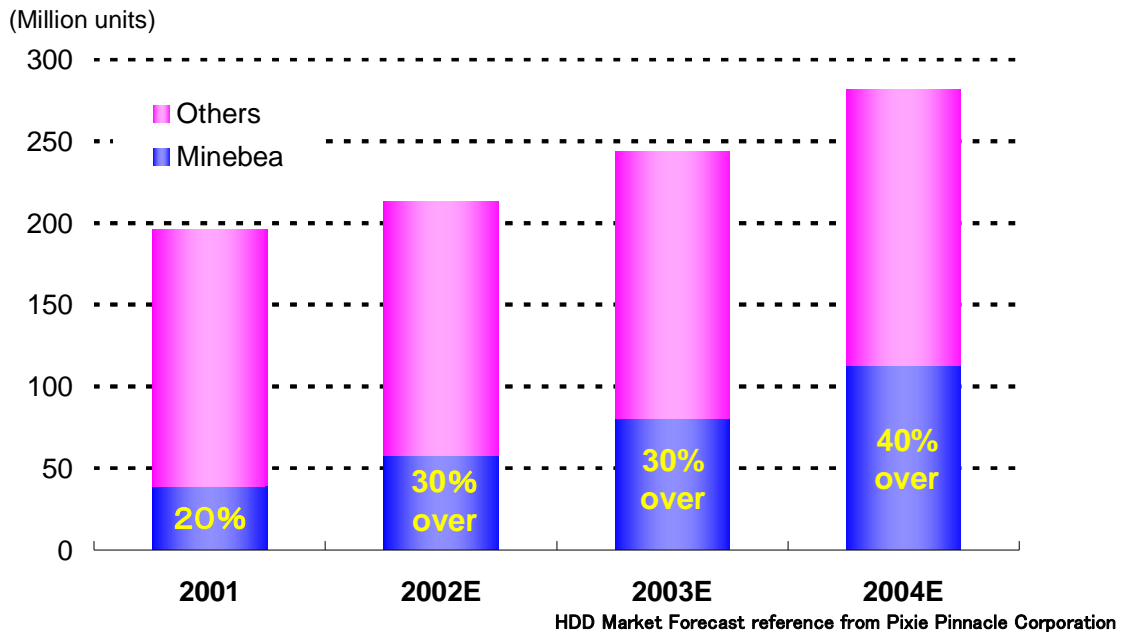
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Spindle motors are expected to form one of the profit-expanding pillars in mid-term management plan. We plan to expand sales, especially FDB motors, and raise market share. This fiscal year, shipments of FDB motors to customers other than Seagate Technology have begun. In the future, we expect FDB motors to replace RO type motors as development of FDB motors makes advances. However, for this fiscal year, RO bearing type is still highly evaluated for servers and workstations applications. As a result, our sales and production of spindle motors in April to June are expected to be 5 million units per month and 6 million units per month in July to September, and 7 million units per month now looks to be a realistic target for this fiscal year.

# Spindle Motors

## Minebea's Share in HDD Spindle Motor Market



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Our market share in spindle motors market is currently 23%. We plan to raise this to over 30% this fiscal year and target over 40% in fiscal year 2004.

We plan to expand sales of both FDB motors and ball bearing type motors, while we improve profitability by accomplishing scale merit and cost reduction, and we aim for operating profit margin of high single digit in fiscal year 2004.

Spindle motor business fully utilizes our ultra precision machining technologies and mass production technologies. Equipped with both, we believe we can make steady expansion in sales and earnings.

## Motors and Sensors for Automobile Use

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- **Motors for Dashboard Unit Meters**
- **Motors for Headlight Actuators**
- **Next Generation EPS Motors**
- **Motors for Adaptive Cruise Control Sensors**
- **Magnetic Clutch / Brake**
- **Motors for Electrical Mechanical Brake**
- **Torque Sensors**
- **Resolvers**



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Minebea's products for automobile application include motors and sensors as well as ball bearings, rod end bearings and other bearings, and fasteners. For motors and sensors, contracts for many new projects, which would form pillars of the company's future business, are being signed in succession.

We place emphasis on supplying motors and sensors in the form of controlling units not as stand-alone. As most of the new projects start in 2004, we expect the new businesses to take off from 2004 and earnings to take off in earnest from the following year.

Main products are in the above slide.

Restructuring of power supplies division is as I already explained.

# Business Results for Fiscal Year ended March 31, 2002

<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.

## 6. Summary

We intend to expand sales and earnings by utilizing our strength in ultra precision machining technologies and our position as an integrated manufacturer of electronic devices and components under a strategy to expand motors business while maintaining the ball bearings business as the core business.