



***Minebea***

**Business Results for  
the Third Quarter of Fiscal Year ending March 31, 2003**

**Minebea Co., Ltd.**

**Tsugio Yamamoto  
President and  
Representative Director  
February 7, 2003**

## Results for the Third quarter of Fiscal Year ending March 31, 2003

(Millions of yen)	Year ended	----- Year ending Mar. 2003 -----			Change	
	Mar. 2002	1Q	2Q	3Q	Q/Q	Y/Y
	3Q					
Net Sales	68,536	72,367	64,882	68,723	+0.3%	+5.9%
Operating Income	4,964	6,031	4,145	5,519	+11.2%	+33.1%
Ordinary Income	3,835	4,524	3,143	4,036	+5.2%	+28.4%
Income before Income Taxes	—	4,203	2,614	3,735	—	+42.9%
Net Income	—	1,903	640	1,889	—	+195.2%

**Improvement in business contents  
3Q sales and profit increased**

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Results for the third quarter of fiscal year ending March 31, 2003 showed growth both in sales and income, compared with the previous quarter and with the same period last year, and came close to the levels attained in the first quarter. Given the low-level results in the second quarter, we regard the improved results in the third quarter as quite natural.

In the somewhat improved PC and HDD markets, our key products such as pivot assemblies, spindle motors, fan motors, and keyboards recorded good results. In the bearings business, our continued efforts for cost reduction bore fruit and profitability improved. Even though we were unable to reach the performance level attained in the first quarter, we considerably improved our business structure.

## Net Sales and Operating Income by Segment

(Millions of yen)	Year ended Mar. 2002 3Q	--- Year ended Mar. 2003 ---			Change	
		1Q	2Q	3Q	qoq	yoy
<b>[Net Sales]</b>						
<b>Machined components business</b>	28,358	31,668	28,641	28,723	+1.3%	+0.3%
Bearing-related products	23,166	26,420	23,638	23,845	+2.9%	+0.9%
Other machinery components	5,190	5,249	5,002	4,879	-6.0%	-2.5%
<b>Electronic devices and components business</b>	39,879	40,699	36,241	40,000	+0.3%	+10.4%
Rotary components	19,435	20,793	18,140	20,521	+5.6%	+13.1%
Other electronic devices	20,444	19,908	18,097	19,480	-4.7%	+7.6%
<b>Consumer business and others</b>	300	—	—	—	—	—
<b>Total Net Sales</b>	<b>68,536</b>	<b>72,367</b>	<b>64,882</b>	<b>68,723</b>	<b>+0.3%</b>	<b>+5.9%</b>
<b>[Operating Income]</b>						
<b>Machined components business</b>	4,678	5,098	4,065	4,771	+2.0%	+17.4%
<b>Electronic devices and components business</b>	296	933	80	748	+152.7%	+835.0%
<b>Consumer business and others</b>	(9)	—	—	—	—	—
<b>Total Operating Income</b>	<b>4,964</b>	<b>6,031</b>	<b>4,145</b>	<b>5,519</b>	<b>+11.2%</b>	<b>+33.1%</b>

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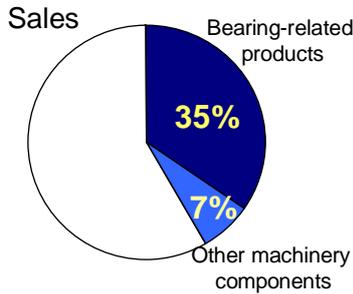


Net sales and operating income from both machined components business and electronic devices and components increased over the previous quarter. Details are given on the following pages.

# The Third Quarter of Fiscal Year ending March 2003

Figures are 3Q sales compared to 2Q sales

## Machined components business



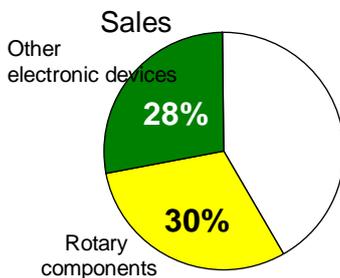
### Bearing-related products

Ball bearings: -1% qoq. 140 million pieces sale (incl. internal sales) in Nov. Slight decline in Dec. Profit margin raised.  
 Rod-end & spherical bearings: -7% qoq. Demand continued to stagnate.  
 Pivot assemblies: +16% qoq. Expanded market share. Profitability improving

### Rotary components:

Spindle motors: +35% qoq. FDB Motor business strong. Turned profitable in Nov.  
 Fan motors: +6% qoq. Record sales. Profit continued to be high.  
 Stepping motors: -6% qoq. Drop in sales

## Electronic devices and components business



### Other electronic devices:

PC keyboards: +24% qoq. Record sales. Profit continued to be high.  
 Electronic devices: -1% qoq. Flat sales and profit  
 Switching power supplies: +0% qoq, Flat sales and profit.  
 Speakers: -3% qoq, Flat sales and profit.

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In the machined components business, shipments of ball bearings, with sales to external customers and those for internal use put together, reached 140 million pieces in November. In December, they declined slightly because of holidays in America and Europe. In January, however, they exceeded 140 million pieces and profit margin improved.

As to pivot assemblies, we further expanded our already large market share. Shipments rose to 14 million to 15 million level per month, and our market share is increasing from about 60% in the past to nearly 80% most recently. Sales in the third quarter increased about 16% over the previous quarter.

In the rotary components segment, 3.5-inch FDB type spindle motors for HDDs showed good results. Sales rose as high as 35% over the previous quarter, owing partly to production hike by main users. In November last, spindle motor business turned profitable with monthly production of 4.5 million to 5.0 million units. With price fluctuations, we expect to face severe market conditions again in January to March quarter. Since we have improved productivity and expect a monthly shipment of 6.0 million units in April to June quarter, spindle motor business will return to profitability.

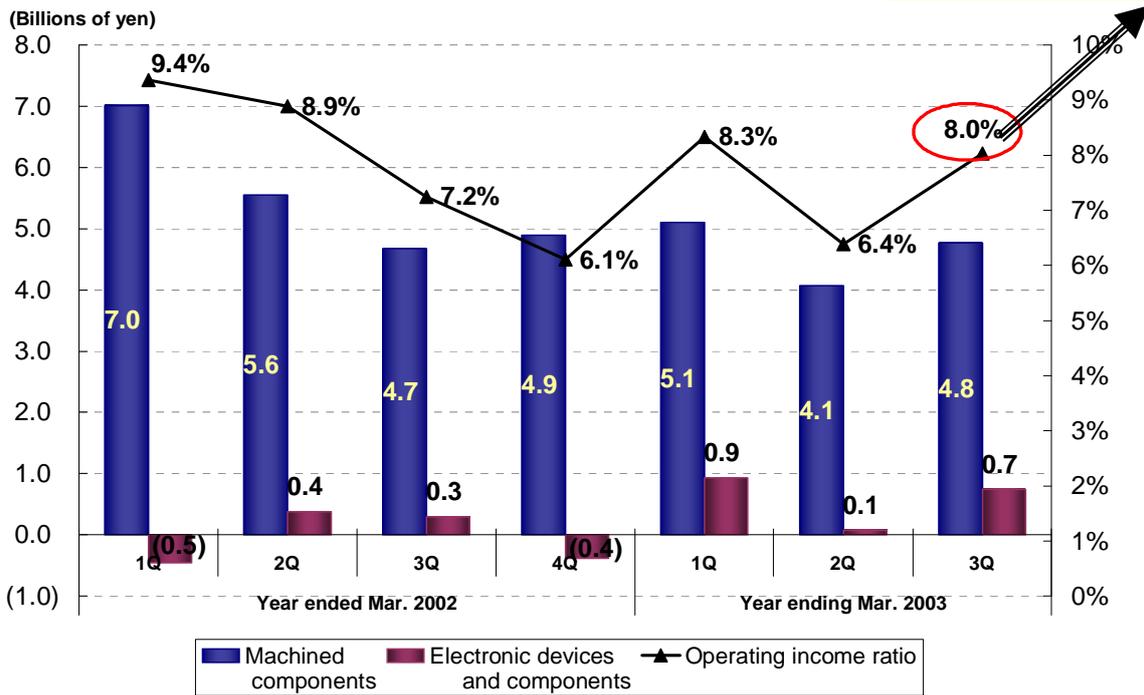
Fan motor business has been showing extremely good results to date. In the third quarter, sales reached a record-high level on a quarterly basis. Income has been staying at an extremely high level.

The business of keyboards in other electronic devices category has also been showing good performance with a high level of income.

On the other hand, income from electronic devices, power electronic devices, and speakers has leveled out. In the next fiscal year, we plan to take effective measures by product to ensure better income.

# Operating Income

Double digit margin  
in next fiscal year



**Machined components segment operating profit improved to 16.6%**  
**Profitability improved for electronic devices and components segment**

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We aim to improve operating income from the level in the third quarter of fiscal year ended March 31, 2002. Operating income in the second quarter of the current fiscal year turned out disappointing. In the third quarter, however, operating income ratio returned to 8% level as shown by the above bar chart.

Operating income ratio of machined components increased from 14.2% in the second quarter to 16.6% in the third quarter. Electronic devices and components segment also showed better operating income ratio than in the previous quarter. In the next fiscal year, we intend to pursue, as our primary goal, increased income from spindle motor business and to achieve a double-digit operating income ratio.

# Sales by User Industry & by Region

3Q sales, compared to 2Q sales

## Sales by User Industry

	Automobile	Aerospace	Home electronics	Office automation	PC and PC related equipment	Motor	Others	Total
% of Sales	6.9%	9.2%	9.2%	9.0%	47.5%	5.6%	12.6%	100.0%
Change qoq	-0.3%	+11.3%	-8.3%	-10.1%	+18.6%	+6.7%	-9.3%	+5.9%

## Sales by Region

	Japan	Asia (ex-Japan)	North and South America	Europe	Total
% of Sales	26.0%	40.8%	20.8%	12.4%	100.0%
Change qoq	-6.9%	+17.2%	+1.5%	+10.8%	+5.9%

**PC related sales increased**  
**– spindle motors, keyboards, pivot assemblies, fan motors sales strong**  
**Asia sales increased – led by sales in China area**

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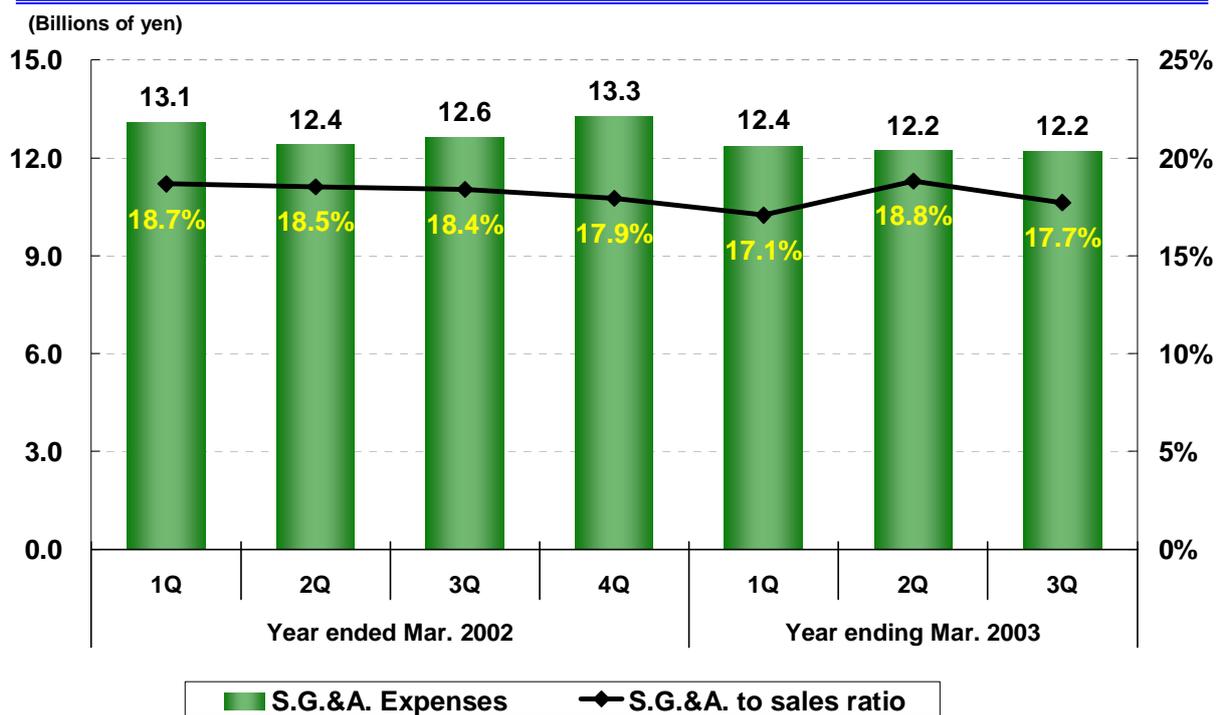
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Compared with the previous quarter, sales for PCs and PC-related equipment largely increased. We expanded sales of bearings, spindle motors, pivot assemblies, fan motors, and keyboards.

Sales in Asia considerably increased, and this is particularly true of China. We will redouble our efforts for sales expansion in China to take advantage of the fast growing Chinese market.

# S.G. & A. Expenses



**Continues to reduce S.G. & A.**

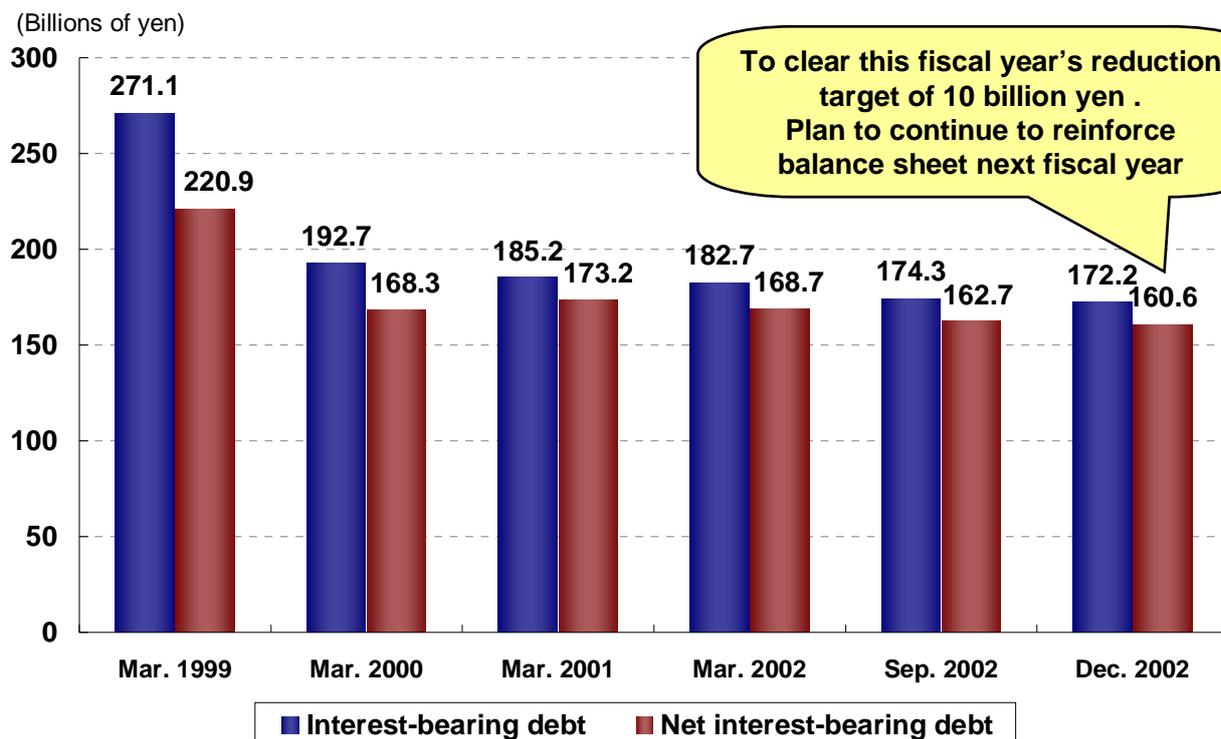
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S.G.&A. to sales ratio fell to 17.7% in the third quarter. We will stay alert and continue our cost-reduction efforts.

## Interest-bearing Debt



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Although we reduced our interest-bearing debt further during the third quarter, the current balance of our interest-bearing debt is not something to be content with. We expect to be able to achieve this fiscal year's debt-reduction target of ¥10 billion.

We intend to continue reducing interest-bearing debt, using net cash produced by operating activities as a source of funds. In the current fiscal year, we have maintained our policy of minimizing capital investments. In the next fiscal year as well, we will continue to minimize capital investments in order to enhance our financial soundness.

## The Outlook for the Forth Quarter of Fiscal Year ending March 2003

- **Market condition in the forth quarter**
  - Recovery in demand of ball bearings for air conditioner
  - Post-Christmas weakness seems limited
  - HDD Market relatively firm
  - Concern for economic outlook
- **No change in forecasts for the full year**

Key divisions are

  - Ball bearings
  - Spindle motors
  - Keyboards
  - Fan motors

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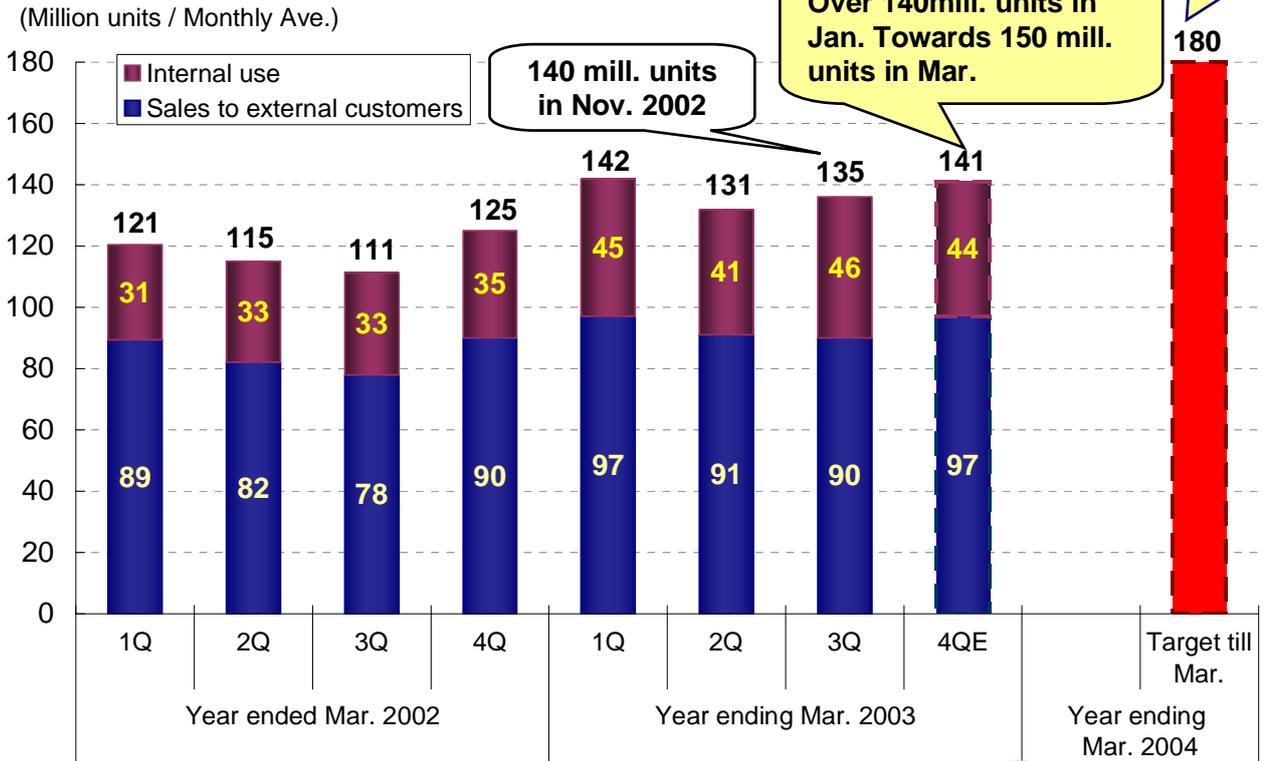
An application for air conditioners is considered a seasonal factor associated with demand for ball bearings. With demand for ball bearings for use in air conditioners expected to be on a seasonally upward trend, we believe the entire demand for ball bearings will improve in the fourth quarter.

Given that post-Christmas weakness seems limited among makers of PCs and home electrical appliances and that the HDD market is relatively firm, we anticipate no sharp decline in the fourth-quarter sales of spindle motors, pivot assemblies, fan motors, and PC keyboards.

However, the presently tense international situation is causing us concern in the fourth quarter business. Even in this climate, we will stick to the second-half performance forecasts that we announced in November last. Our mainstay products such as ball bearings, spindle motors, fan motors, and PC keyboards hold the key to achieving our targets for the second half. We intend to expand sales of these products further in order to make up for sales declines of other products.

# Miniature and Small-sized Ball Bearings Shipments

Target 180 mill. units per month within next FY



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January shipments including those for internal use exceeded 140 million pieces. In February, we are determined to continue our efforts to increase shipments in order to achieve our primary target of 150 million pieces in March, which we consider is the first step toward accomplishing target shipments of 180 million pieces per month in March 2004.

# Ball bearings Production Plan

Realization of 180 mill. units per month by the end of 2003

- Drastic reduction in investment from the original plan

⇒ 5 billion yen (1/6 of requirement compared to the past)

Machinery and equipment minimum new installation

Factory space no increase

Operators and staff no increase, rather seek to reduce further

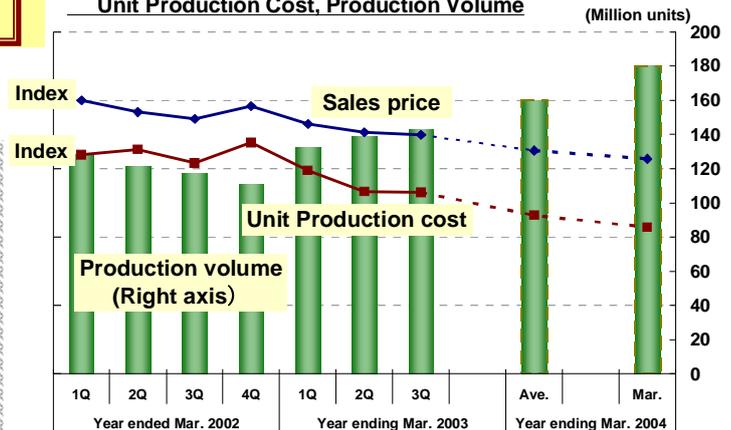
Increasing production volume and improving productivity at the same with the sales expansion should enable drastic reduction in unit production cost leading to a flat or even a rise in margin.

## New production system

### Productivity enhancement measures

- Improvement of yield
- Cycle time cutdown
- Reduction in the cost of disposable materials
- Reduction in the cost of secondary materials
- Reduction in the cost of and increase local procurement of raw materials and machinery

Ball Bearings Sales Price, Unit Production Cost, Production Volume



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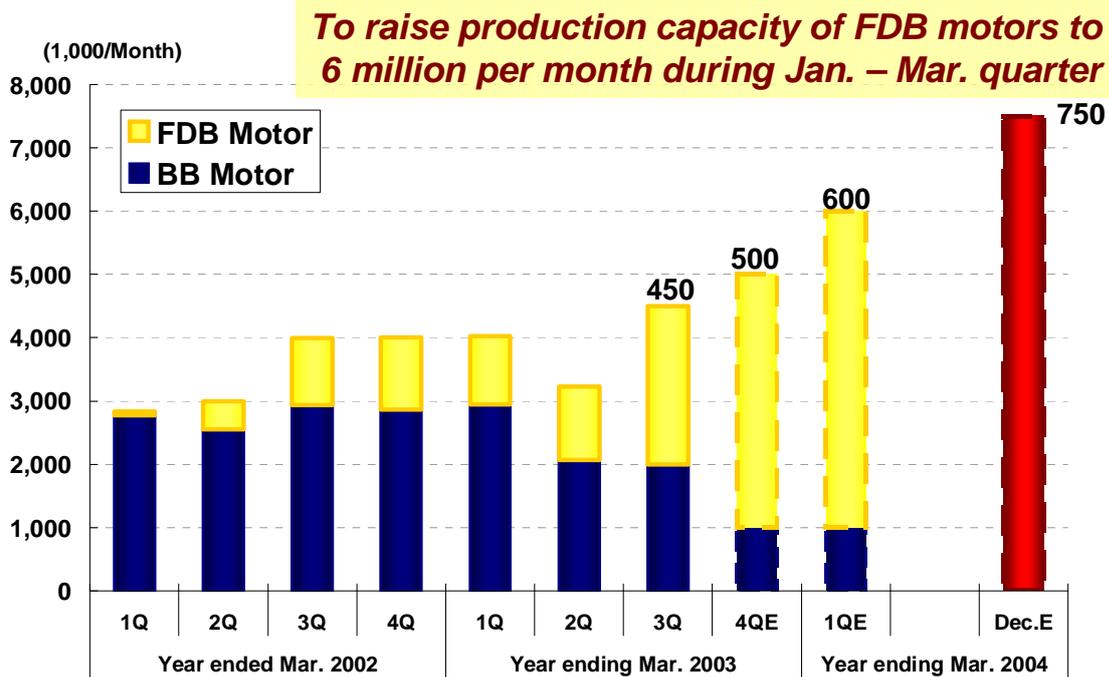


In carrying out our plan for production increase, where we establish, by the end of 2003, a production system with capacity of 180 million pieces per month, we find it possible to drastically reduce investment from the originally planned level. Based on the three basic principles-machinery and equipment, factory space, and workforce-we completely reviewed our plan for production hike. We initially estimated that production increase by 30 million pieces per month would require capital investment of at least ¥30 billion. However, our review of the original plan showed we would somehow be able to manage with ¥5 billion, 1/6 of the initial estimate.

The remarkable improvement in productivity is based on production technologies that Minebea has cultivated through its ball bearing operations over the years. It is made possible through unrelenting efforts for thorough reduction of factory overhead by producing in-house relatively expensive factory supplies such as expendable tools, grindstones, and turning tools.

The principal aim in raising our production capacity to 180 million pieces per month is to attain strong price competitiveness that will enable us to further expand our currently 60% market share of miniature and small-sized ball bearings. At the same time, we believe that price competitiveness achieved through reduction of manufacturing costs will enable us to successfully cope with competition in markets in general.

## HDD Spindle Motors Sales Trend



*Ultra precision machining technologies is the key*

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In anticipation of shipments in April to June quarter, we are presently increasing our FDB motor production capacity to 5 million units per month. Moreover, since we have inquiries from existing customers for more than 5 million units and also we need to fill prospective orders from new customers, we plan to further expand FDB motor production capacity from 5 million units to 6 million units per month within January to March quarter.

By the end of this year, we expect to be able to achieve spindle motor production of 7.5 million units per month.

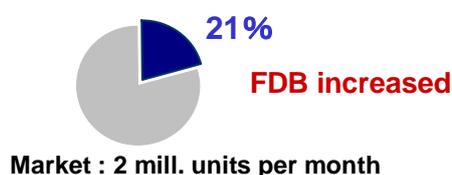
# HDD Spindle Motors Business and Strategy

Market share & size: Oct. – Dec. 2002

## 3.5 inch Desk top



## High-end Server



## Under 2.5 inch



**Built profitable base with 3.5inch low end business only.**  
**Increasing 3.5inch business in line with users' adoption of FDB motors**  
**Next targets are high-end and under 2.5inch**  
**Production of up to 10 million per month is possible in the existing factory space**



**Expect to turn profitable during Apr to Jun 2003 quarter, towards greater profitability**

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At present, we enjoy 25% market share of spindle motors for 3.5-inch HDDs for desktop PCs. As a result of our rapid transition of HDD spindle motor technology to FDB type, our market share of FDB motors for 3.5-inch HDDs for desktop PCs is increasing close to 50%. We will continue to promote FDB type motors to expand our share in this market.

Competition is more intense in the market of spindle motors for 3.5-inch HDDs for desktop PCs than in the market of those for 3.5-inch high-end HDDs for PC servers and for 2.5-inch HDDs. In this highly competitive market, we are successfully laying the foundation for profitable business. Our next target is spindle motors for 3.5-inch high-end HDDs for PC servers and those for 2.5-inch or smaller HDDs.

Our market share of spindle motors for 3.5-inch high-end HDDs for PC servers is presently about 21% and shipments during October to December quarter amounted to about 0.4 million units per month. Transition to FDB type motors being fast promoted, current shipments are about 0.5 million units.

Our market share of spindle motors for 2.5-inch or smaller HDDs, for which we produce only ball bearing type, is presently 10%. We intend to promote transition of our technologies toward FDB type in order to enter the market of FDB type motors for 2.5-inch or smaller HDDs.

Under the agreement with Matsushita Motor Company, we presently supply a large quantity of components for FDB motors for 2.5-inch HDDs. In the next fiscal year, we plan to start supplying finished FDB motors for 2.5-inch HDDs. In expectation of active entry by leading HDD makers into the 2.5-inch HDD market, we will continuously develop our own original model and maintain closer relations with our customers in order to make our entry into the market of FDB motors for 2.5-inch HDDs.

In April to June 2003 quarter, we will strive to achieve a monthly shipment of 6 million units in pursuit of greater profitability.

## **Outlook for Other Products in the Forth Quarter of Fiscal Year ending March 2003**

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- **Pivot Assemblies**
  - 15 mill. pcs. per month in Jan. – Mar. 2003 ( +50% yoy), to reach 70 – 80% of global market share
  - Profit margin improving
- **Fan Motors**
  - Expand market share for CPU cooling fans, Target over 6 mill. pcs. per month in Jan. – Mar. 2003
  - Started preparation to begin mass production of jointly developed products with Matsushita Motor Company
- **PC keyboards**
  - January shipments exceeded forecasts and reached 2.3 million
  - However, 4Q sales expected to fall slightly due to seasonal effect
- **Electronic devices**
  - Light devices to be the next core business
  - New order intake for backlight products is progressing favorably
  - Target 7 billion yen in sales next fiscal year

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Shipments of pivot assemblies are expected to increase 50% year on year to a level of 15 million pieces per month in January to March quarter. An increase on shipments is improving profit margin.

Although shipments of fan motors for use in game consoles are negatively affected by seasonal production cutbacks in January to March quarter, we expect to be able to maintain a level of 6 million units per month. The joint production with Matsushita Motor Company is progressing smoothly and mass production of jointly developed products will start in April 2003.

Minebea's fan motors use ball bearings, while those of Matsushita Motor Company mainly use metal bearings or hydro-wave bearings that float shafts by oil pressure. The jointly developed products incorporate advantages of both of these types. This has generated a synergistic effect and helped produce high-performance products that exceed in quality the conventional types of fan motors of both companies. Moreover, we have reduced manufacturing costs of the newly developed products. We believe jointly developed products that come into mass production in the future will greatly contribute to our business in and after the next fiscal year.

In electronic devices, lighting devices business focuses on backlight products for PDAs and cellular phones, which have been highly rated by major users in Japan. We presently manufacture about 0.6 million pieces of lighting devices per month. Expecting a new order for 3 million pieces in the middle of this year, we are preparing to double our current production capacity of 2 million pieces per month. We will strive to meet customers' needs and to develop this business to be a new pillar of our operations.

# Business in China

**China is a market with the greatest growth potential  
To be as large manufacturing base as Thailand in the future**

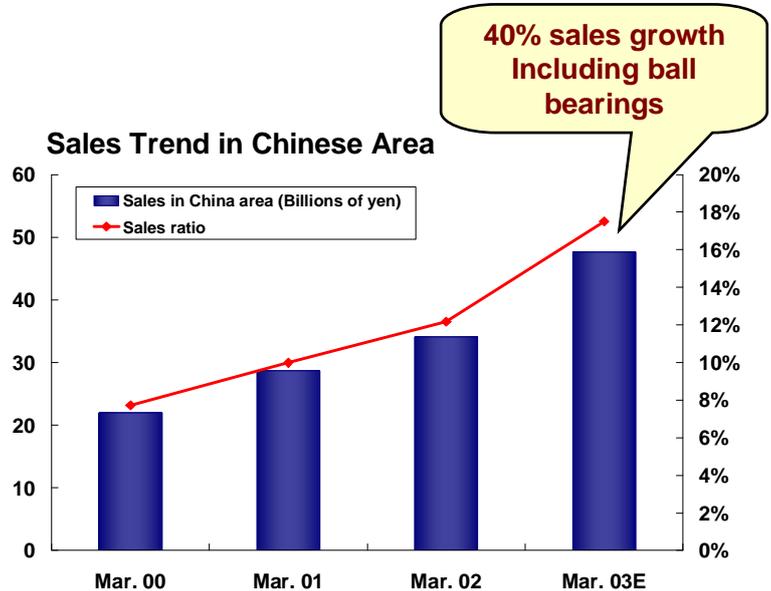
## Priority subjects

### Sales

- Increase sales in Chinese domestic market
  - New sales organization in force

### Manufacturing

- Further reduction in manufacturing costs
  - Promote local procurement of raw materials and secondary materials
- ⇒ **Multiply out successful cases in other regions**
- To effectively use cost competitiveness in China through joint ventures
  - Keyboards joint venture



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We began sales activities in China in 1991 and established a manufacturing base in the outskirts of Shanghai in 1994. Through this year's review of our sales organization, we have divided Asia into the Southeast Asian region and the East Asian region in order to cope with the rapidly growing Chinese market. China, Korea, and Taiwan form the East Asian region. We have established sales companies in Hong Kong, Shanghai, and Shenzhen, thereby forming a sales network. With headquarters in Hong Kong, Shenzhen controls the southern part of China and Shanghai controls the eastern and northern parts, while Hong Kong controls Taiwan and Korea.

The U.S. PC makers and HDD makers have almost completely shifted their production to Southeast Asia and further to China. In response to this, not only our sales members stationed in China engage in sales activities, but also the U.S. sales staff newly stationed in China perform sales activities, coordinating with end users in the U.S. and maintaining human relations with them. This is our first attempt and has produced excellent results.

China is a market with the greatest growth potential. It is quite natural that we should have a production base in a country with such a market potential. We aim to expand our manufacturing plants in China into a production base as large as the one in Thailand. We presently produce bearings, fan motors, and measuring equipment in China and enjoy advantages of local on-site production with reduced costs.

With regard to raw materials for bearings, we have spent about seven years in joint development of steel bars with Bao Steel Group No.5 Steel Co., Ltd. (Shanghai No.5 Steel) and have finally succeeded in producing steel bars that completely meet our requirements. Our Shanghai Plant is now quickly switching its supply source of steel bars to Shanghai No.5 Steel. We are also promoting local procurement of other materials for bearings.

These achievements in China will be put to practical use at our manufacturing bases in Southeast Asia, Thailand, and other areas in the world.

In order to take advantage of cost competitiveness in China, we also established a keyboard manufacturing joint venture in Shanghai. We plan to start with production of general-purpose keyboards and to eventually shift the current keyboard production in Thailand entirely to China.

## Summary

Extensive improvement in business structure during 3Q

- Record sales or improving profitability for core products
- Improvement in productivity through reinforcement of parts divisions
- Capacity expansion with less investment

⇒ Target to grow profit in next Fiscal Year

**Dynamic parts division forms the base for all divisions**

**Promote productivity enhancement  
in all product divisions as in ball bearings division**

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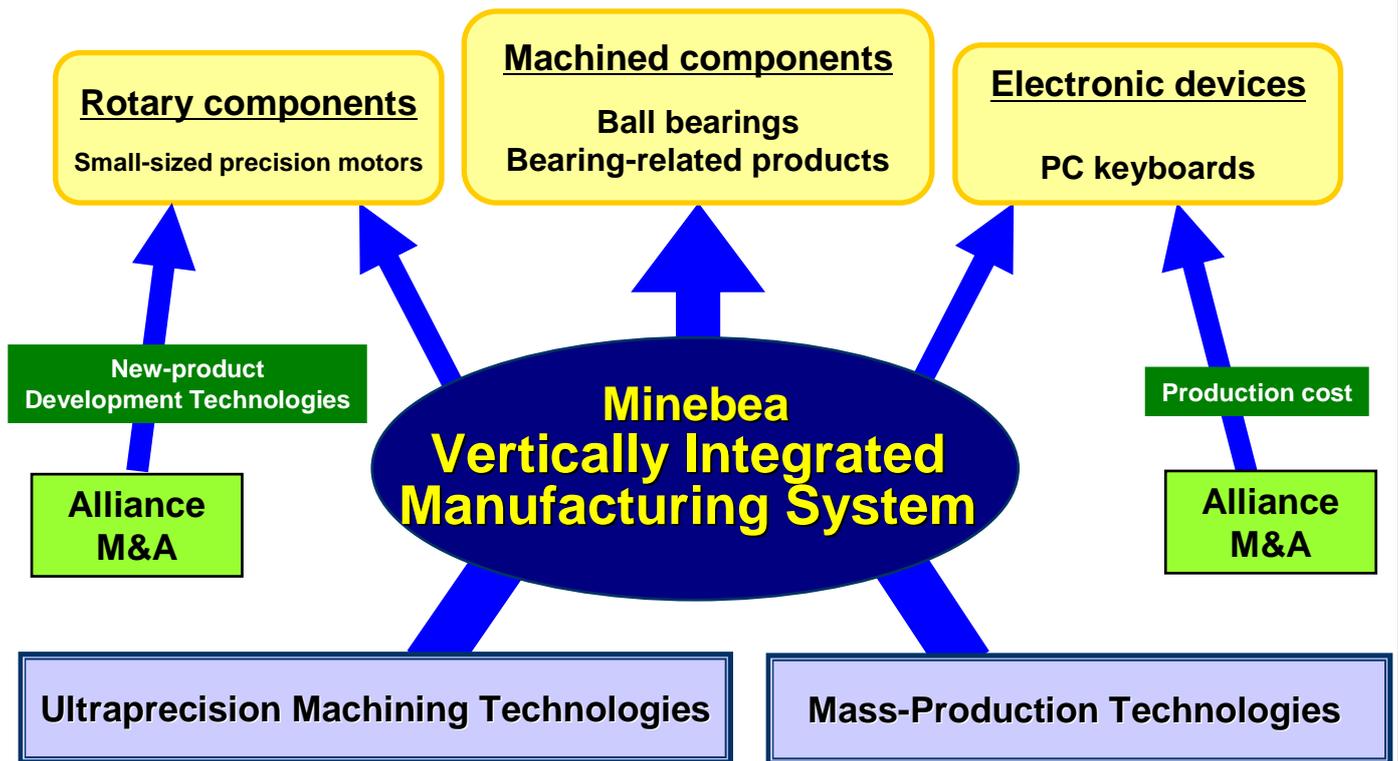


An extensive improvement in business structure during the third quarter does mean success in reducing costs. Success in cost reduction unquestionably means that accumulation of production technology has permeated among product divisions other than ball bearing division.

Shipments of mainstay products reached record-high levels, and profitability improved. Reinforcement of parts divisions has underpinned cost reduction and raised productivity. Moreover, we have expanded production capacity with less investment at each product division.

With basic business strengths in place, we strive to achieve a steady growth in income in and after the next fiscal year.

# To be No. 1 Precision Component Manufacturer



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Based on our vertically integrated manufacturing system, we supply primarily bearings, machined components, rotary components, and electronic devices. With regard to rotary components and electronic devices, we aim to enhance our competitive edge and to expand our operations and increase income by making up for what we lack through alliance and M&A.

# **Business Results for the Third Quarter 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.

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