

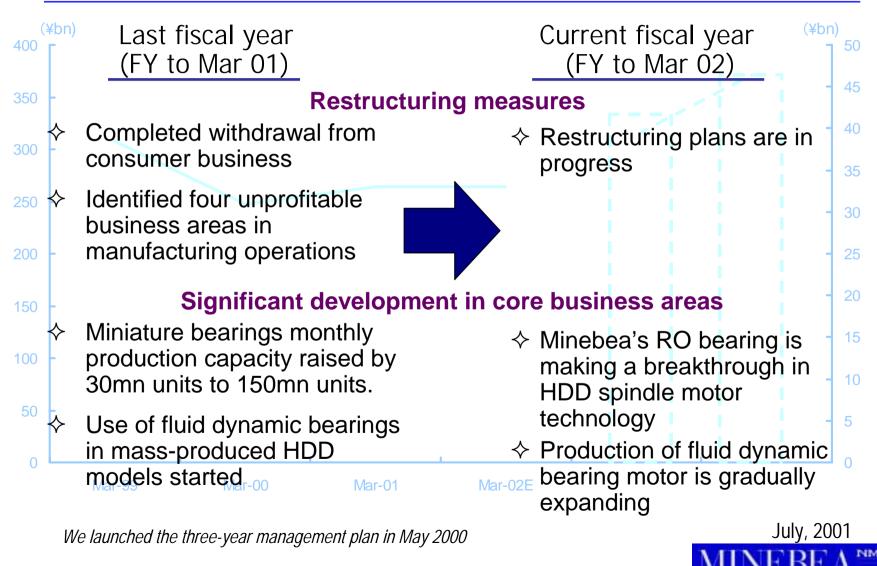
# Investor Meeting in US July 2001

### **Tsugio Yamamoto**

**President and Representative Director** 

Minebea Co., Ltd.

### Second Year of the Three-Year Management Plan



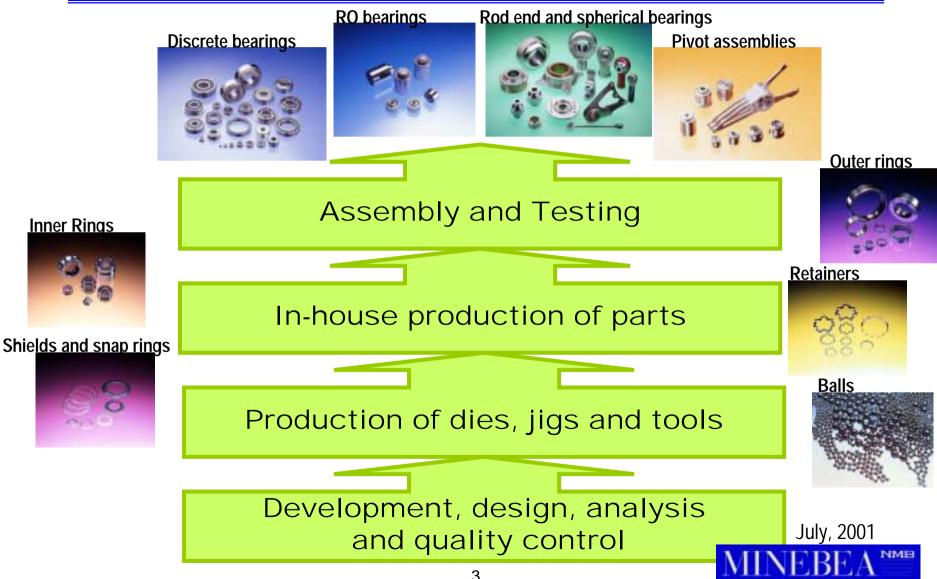
# Three Basic Management Directions to become a High-Growth, Highly Profitable Company

- 1. To increase production of most profitable mainstay bearings and bearing-related products;
- 2. To expand small motors and other rotary components business to a scale similar to bearing operation; and
- 3. To raise the weight of high-value-added products in main product categories.

Realization

### Minebea's Basis of Strength "Ultra-Precision Machining Technologies" "Mass Production Technologies" July, 2001

### Vertically Integrated Manufacturing System in Bearings Operation



### Fluid Dynamic Bearing ~ Cross Section and Components

Groove

In a fluid dynamic bearing, the ball function is replaced with a thin layer of lubricant. Special grooves in the metal bearing parts generate a hydrodynamic force that stabilizes the rotation and provides the vibration damping. Minebea's fluid dynamic bearings bring together Seagate Technology's design and development capabilities and Minebea's ultra-precision machining and mass production technologies.

#### **Grooved Counterplate**

Sleeve

July, 2001

Shaft

Thrustplate

#### Minebea Begins Mass-Production of Spindle Motors with High-Precision RO bearings for use in 20GB/Platter Large-Storage Capacity 2.5-inch HDDs

<Extract from Press Release of June 26, 2001>

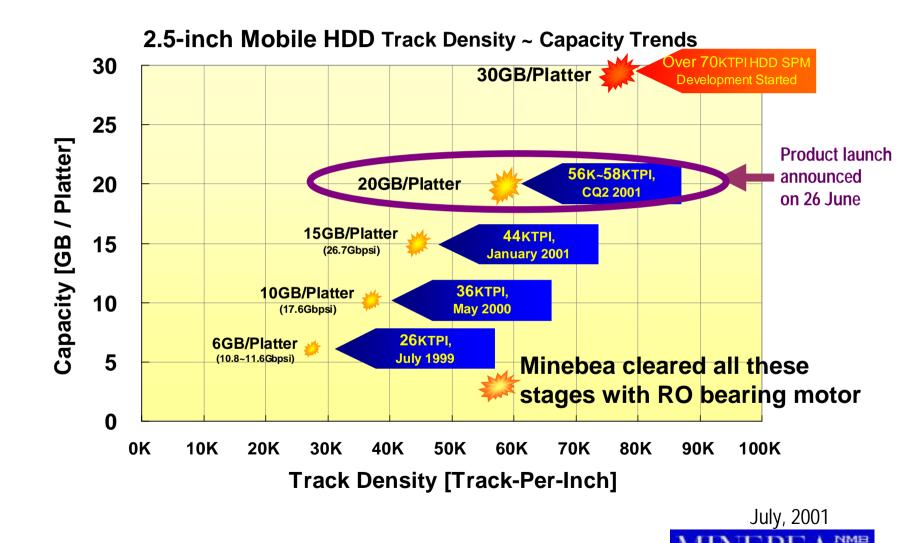
Minebea has launched mass-production of spindle motors that use high-precision RO bearings for 20GB/Platter large-storage capacity 2.5-inch HDDs.

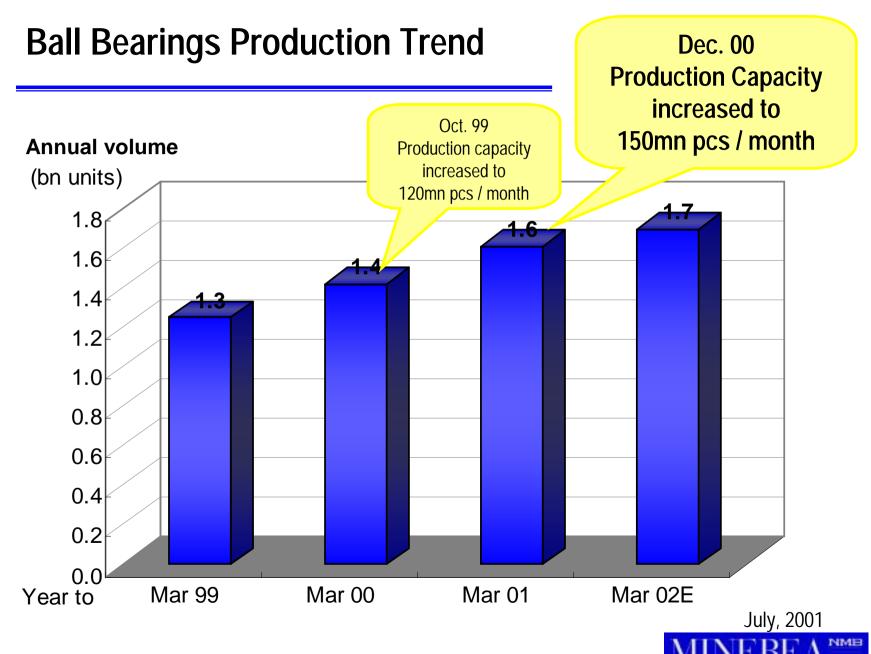
Combining the functions of two ball bearings in one, RO bearings, which minimize non repeatable run-out (NRRO) and misalignment, have advantages in reliability and rotational accuracy and facilitate more compact design of motors.

2.5-inch HDD spindle motors that Minebea has started mass-production use a new type of RO bearings in that inner ring rigidity, raceway accuracy, ball sphericity, and surface roughness are greatly improved, thereby enhancing reliability, NRRO, and sound level.

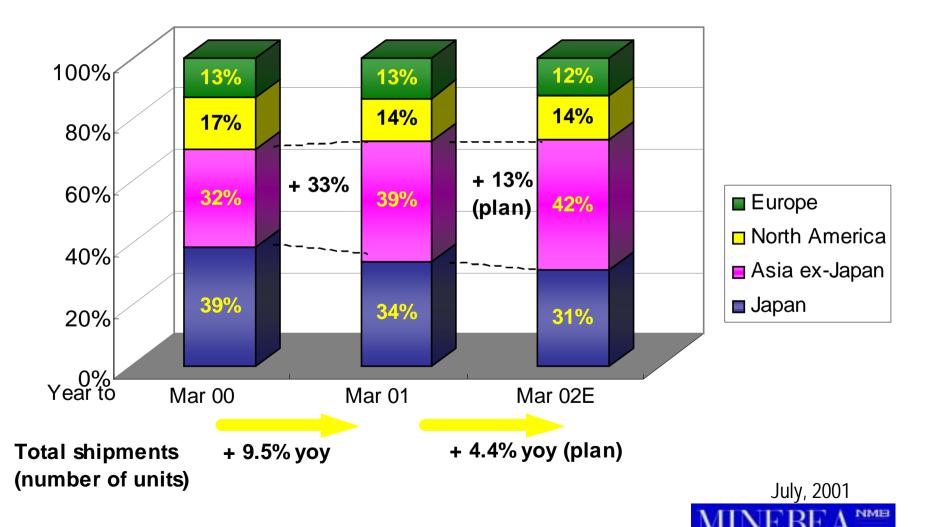
RO bearings presently fitted in spindle motors for large-storage capacity 3.5-inch HDDs use ceramic balls made in-house. Minebea is planning to use ceramic balls in RO bearings for use 2.5-inch HDD spindle motors in order to further improve reliability, NRRO, and sound level.

### **HDD Spindle Motor Performance Trend**

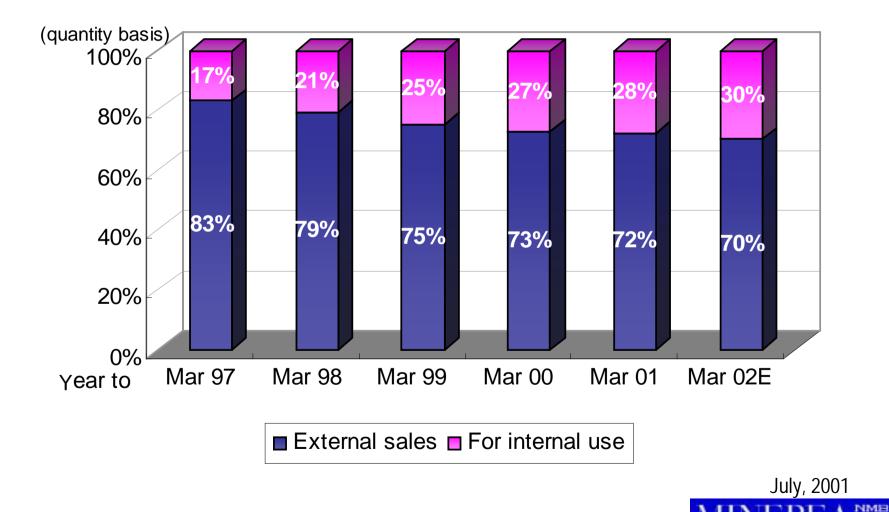


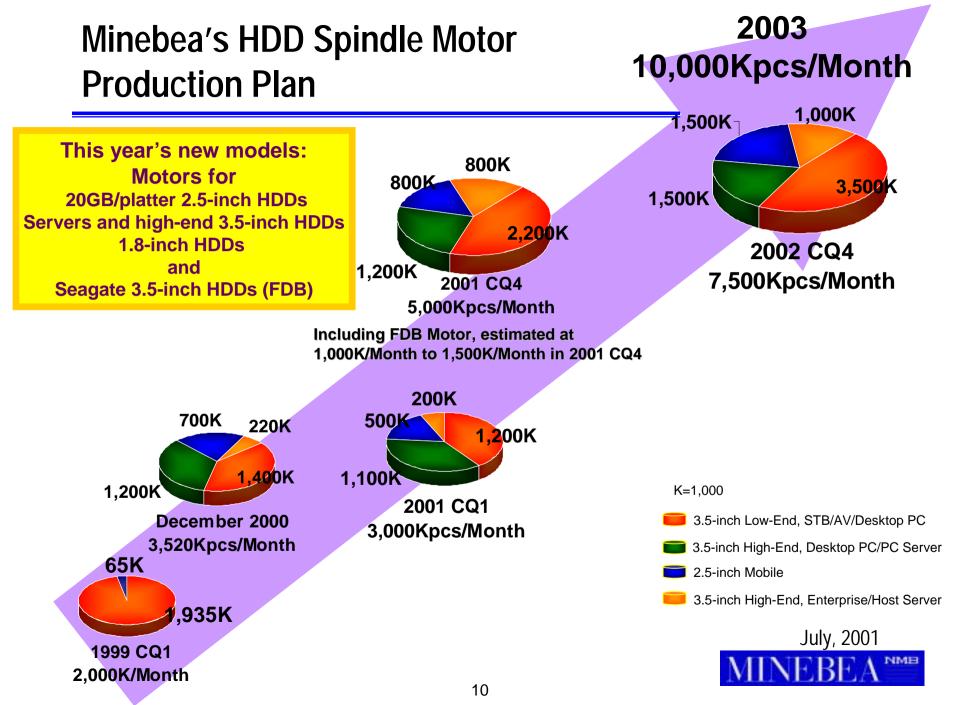


### **Ball Bearings Sales by Region**



### **Ball Bearings for Internal Use**

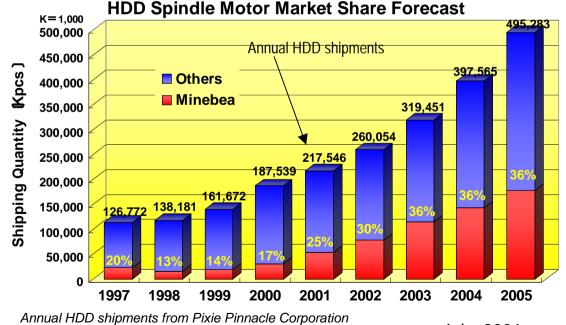




### Minebea's Share in the HDD Spindle Motor Market

- Minebea's spindle motors with RO bearings are being selected as the leading choice for high-end HDD models.
- Production of FDB requires very high precision machining technologies.
- Most HDD makers adopt

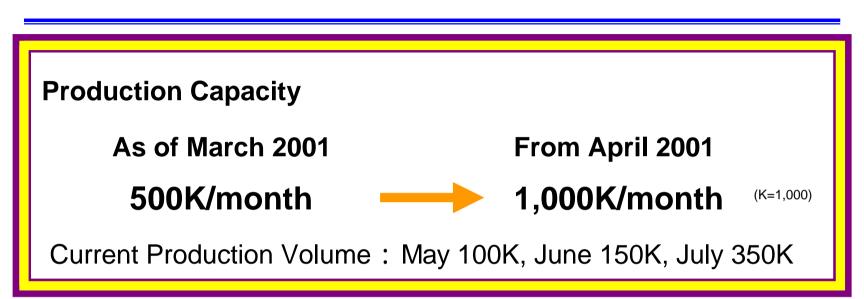
two vendor policy.



- ✓ Reliability
- ✓ Performance 20GB/platter 2.5-inch HDD (RO Bearings)
- ✓ 1.8-inch or smaller HDDs
- ✓ Load carrying capacity



### Fluid Dynamic Bearings Business



Currently, our FDB motor production is for Seagate Technology only. However, we will be able to start to ship sample products to other HDD makers from November.

Accumulated Capex as of March 2001: ¥ 5bn (Machinery and equipment ¥ 2bn: Eactory building ¥ 3br

(Machinery and equipment ¥ 2bn; Factory building ¥ 3bn) Completed a new plant for fluid dynamic bearings and HDD spindle motors in Thailand – has HDD spindle motor production capacity of 6 million units when filled with machinery and equipment. \_\_\_\_\_\_July, 2001



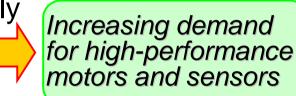
### **Rotary Components for Automotive Use**





#### Trend in the automotive industry

- Environmentally friendly
- Safety
- Comfort





(C)



# Minebea's rotary components for automotive use

- ➢ Motors for EPS (a)
- Dashboard unit motors (b)
- Headlight actuators (c)
- > V/R resolvers (d)



### Outlook for Fiscal Year ending March 31, 2002

(billions of yen)	Forecast for Year ending March 2002(*)	Change yoy	Target in the Three-year management plan
Net sales	300	+ 4.5%	332
Operating income	33	+ 0.1%	39
Ordinary income	25	+1.1%	32
Net income	15	+1.2%	20

\* We have assumed 5-8% global PC shipments growth and 16% HDD shipments growth.



### Sales and Operating Income Forecast by Segment

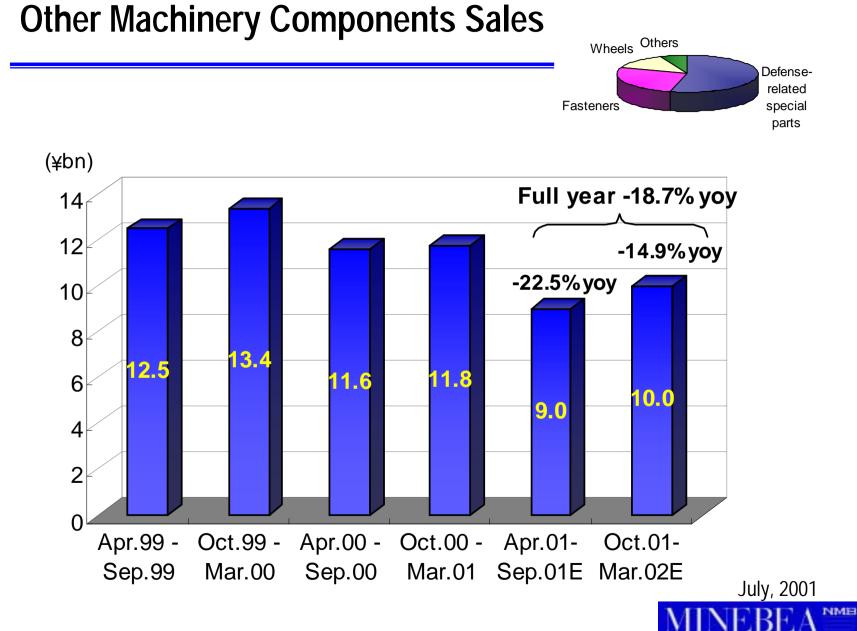
		Year to March 2002						
	Full year		First Half		Second Half		Original target in	
(Ybn)	forecast	chg. yoy	forecast	chg. yoy	forecast	chg. yoy	Three-year plan	
Sales								
Machined components	124.0	-0.4%	59.0	-3.2%	65.0	2.3%	132.7	
Bearing-related products	105.0	3.9%	50.0	1.3%	55.0	6.3%	104.8	
Other machinery components	19.0	-18.7%	9.0	-22.5%	10.0	-14.9%	27.9	
Electronic devices and components	176.0	15.9%	81.0	7.3%	95.0	24.3%	186.0	
Rotary components	90.0	22.3%	40.0	12.3%	50.0	31.7%	91.0	
Other electronic devices	86.0	9.8%	41.0	2.9%	45.0	17.0%	95.0	
Consumer business and others	-		-	-	-	-	13.3	
Total	300.0	4.5%	140.0	-1.5%	160.0	10.4%	332.0	
Operating Income		- 1						
Machined components	23.8	-0.4%	11.27	-6.2%	12.53	5.4%		
Electronic devices and components	9.2	11.4%	3.23	-30.8%	5.97	66.3%		
Consumer business and others	-		-	-	-	-		
Total	33.0	0.1%	14.5	-15.6%	18.5	17.1%	39.0	

Division	Main products	
Bearing-related products	Ball bearings, rod-end and spherical bearings, fluid dynamic bearings, pivot assemblies	
Other machinery components	Fasteners, wheels, defense-related special parts	L
Rotary components	Stepping motors, fan motors, spindle motors	L
Other electronic devices	PC keyboards, FDD subassemblies, MOD, switching power supplies, speakers	
Consumer business and others	Import and sale of furniture (Actus) - the business sold in February 2001	1

July, 2001

NME





### Restructuring Plans in Other Machinery Components Division

### > Wheels

- Decided to withdraw from business and to close Kyoto plant.
- Complete exit from the business will be in November.
- $\diamond$  Sales to fall to 1/3 of last year's level.

### Fasteners

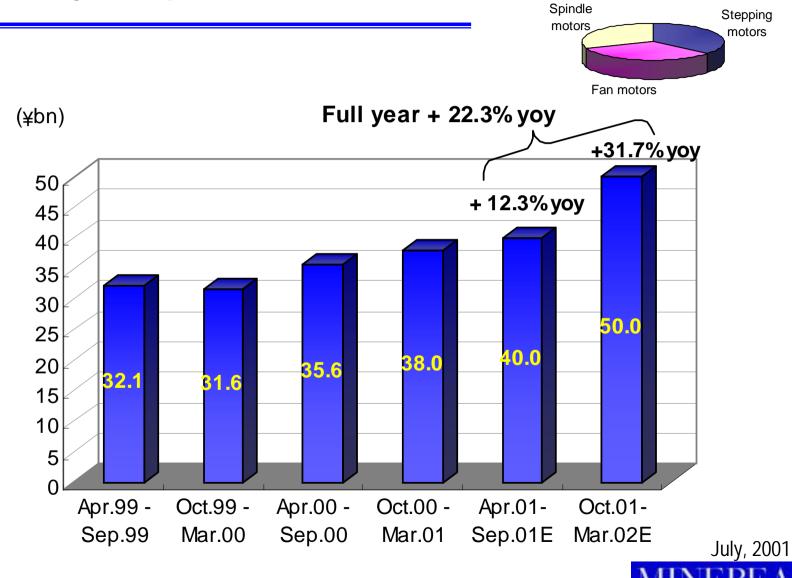
Fundamental restructuring of personnel and organizational structure is underway.

- $\diamond$  Product line-up is under review.
- $\diamond$  Aiming to turn profitable next fiscal year.

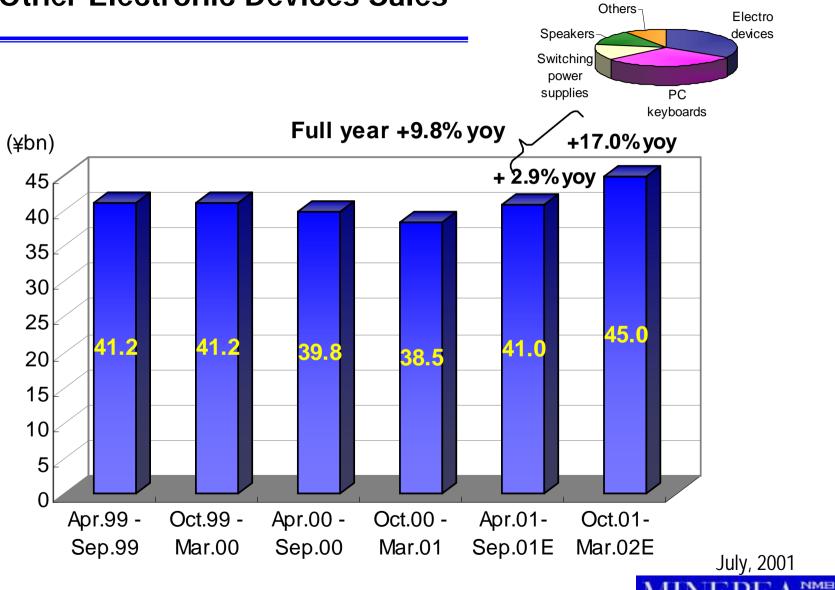


NME

### **Rotary Components Sales**



### **Other Electronic Devices Sales**



### This Year's Restructuring Plans in Other Electronic Devices Division

### Switching power supplies

Scaling back and integrating development and manufacturing operations in North America, and development division in Europe.

 $\diamond$ Need to boost sales by at least 30-40%.

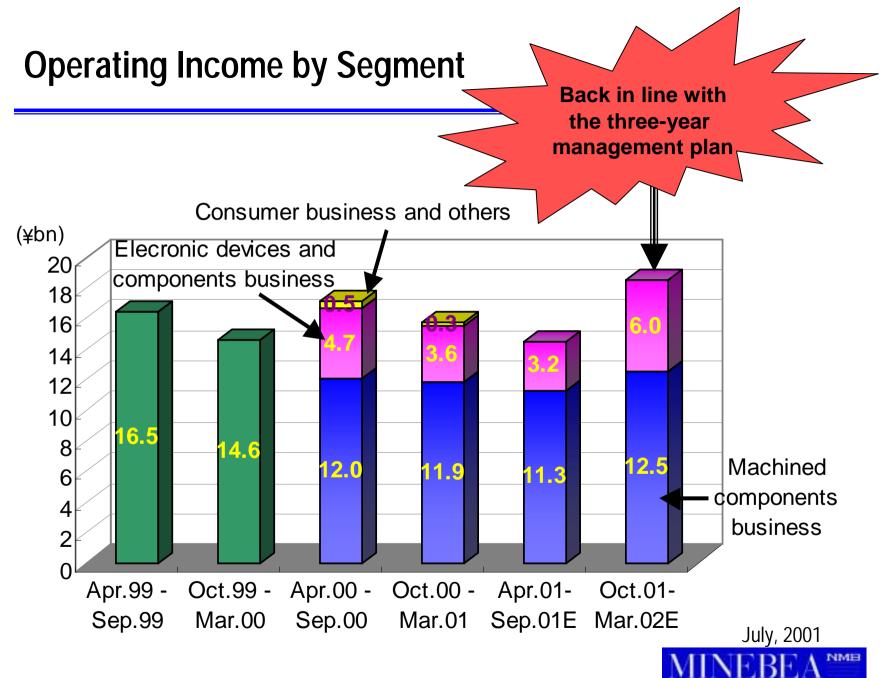
♦ Aiming to turn profitable on a monthly basis by March 2002.

### Speakers

Transferring manufacturing operation of speaker boxes from Taiwan to Malaysia, the world's center of AV manufacturers.

 $\diamond$  Shifting focus to high-end models.

 $\diamond$  Expect to break-even for the full year.





- Continue to implement and execute restructuring plans in unprofitable business areas.
- Accomplish the three management directions by enhancing:

"Ultra-Precision Machining Technologies"

and "Mass-Production Technologies"

### High-Growth, Highly Profitable Company



## **MINEBEA** Investor Meeting in US July 2001

### Thank you.

Please visit our web site at

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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