



Annual Report 2004 Tosoh Corporation

## **Tosoh Corporate Profile**

Tosoh Corporation evolved from humble beginnings in 1935 as a domestic producer of caustic soda and soda ash. The Japanese characters for Tosoh, in fact, are an abbreviation for oriental soda. Today, the Company is a multinational corporation that generates an array of products to suit modern lifestyles and that contribute to the development of cutting-edge products and technologies.

The Tosoh Group comprises 140 companies and more than 50 of those firms are located outside Japan. Together, Group companies employ a multiethnic workforce of over 9,000 people and generate net sales of ¥484.4 billion (US\$4.6 billion).

Tosoh is a global supplier of inorganic chemicals, petrochemicals, and specialty materials. As a result, the Group's customers include the semiconductor, pharmaceutical, health care and food, and many other industries that produce items used daily by consumers.

The following features distinguish the Tosoh Group from its competitors:

- Japan's largest Vinyl Isocyanate Chain operations, which produce caustic soda, vinyl chloride monomer (VCM), polyvinyl chloride (PVC) resins, methylene diphenyl diisocyanate (MDI), and other isocyanates
- integrated Vinyl Isocyanate Chain petrochemical operations, which supply such commodities as ethylene and polymers, including numerous grades of polyethylene, and precursors for a wide range of organic intermediates
- the world's largest production capacity for high-purity zirconia powders and electrolytic manganese dioxide
- status as a top global producer of quartz products, sputtering targets, and sophisticated diagnostic systems

Several rounds of bolstering operations, moreover, have reinforced and reinvigorated the Tosoh Group. The Group is poised to take advantage of the growth in global demand for its commodity materials, especially in Asia, and to leverage its strengths in specialty products to develop promising niche markets into substantial businesses. Tosoh is raising its profile in its markets to reflect its myriad contributions to contemporary living – as a supplier of the building blocks of industry and of cutting-edge technologies for enhanced lifestyles. Tosoh truly has the right chemistry for success.

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## **Financial Highlights**

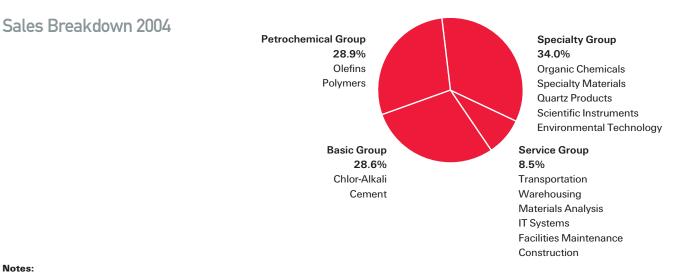
### Tosoh Corporation and Its Consolidated Subsidiaries

Years ended March 31,

	Millions of Yen					U.S. Dollars (1)	
	2004	2003	2002	2001	2000	1999	2004
Summary of Operations:							
Net Sales	¥ 484,389	¥ 471,921	¥ 427,487	¥ 426,174	¥ 374,182	¥ 340,229	\$ 4,583,111
Operating income	30,055	28,048	15,631	27,565	27,330	7,438	284,369
Net income	7,297	4,809	459	9,392	6,019	533	69,042
Net income per share (2)	11.96	7.87	0.77	15.62	10.02	0.89	0.11
Financial Position at Year-End:							
Total assets	¥ 549,213	¥ 545,697	¥ 572,146	¥534,605	¥ 527,989	¥ 527,176	\$ 5,196,452
Short-term bank loans							
and long-term debt	289,097	298,886	332,120	325,774	331,180	355,141	2,735,330
Total shareholders' equity	99,238	92,795	90,557	91,195	91,886	89,283	938,954
General:							
Capital expenditures	¥ 21,305	¥ 12,127	¥ 16,820	¥ 18,700	¥ 27,600	¥ 34,851	\$ 201,580
Depreciation and amortization	23,968	25,255	25,392	24,772	24,854	22,613	226,776
Cash dividends per share (2)	5.00	5.00	5.00	5.00	5.00	3.00	0.05
Common stock process (2)							
High	424	425	400	650	531	280	4.01
Low	238	211	195	265	210	148	2.25
Year-end close	415	242	387	305	501	219	3.93
Number of employees	9,196	9,167	9,404	8,097	7,914	8,080	

1. For reference purposes, U.S. dollar amounts are translated from yen at the rate of ¥105.69 = US\$1, the exchange rate in effect on March 31, 2004.

2. Per share figures and common stock prices are in yen and U.S. dollars.



#### Notes:

Tosoh Corporation's fiscal year runs from April 1 to March 31 of the following year. Throughout this report, reference to fiscal year 2004 and fiscal 2004 specifies the period from April 1, 2003, to March 31, 2004.

In this report, Tosoh and the Company refer to Tosoh Corporation and its consolidated companies in general. Definitions for the Company and the Companies as used in the consolidated financial statements can be found on page 38.

#### **Disclaimer on Forward-Looking Statements**

This annual report contains statements that address such key issues as Tosoh Corporation's current expectations based on reasonable assumptions. Current plans, estimates, beliefs, and other statements that are not historical facts are forward-looking statements. Such statements should be carefully considered, and it should be understood that many factors could cause forecasts and actual results to differ from these statements. These factors may include, but are not limited to, price fluctuations; currency fluctuations; development and personnel costs; physical and environmental risks; changes in the business climate; and legislative, fiscal, and other regulatory measures.

Thousands of



Madoka Tashiro Chairman & CEO

Takashi Tsuchiya President

## Message to Shareholders

The fiscal year ended March 31, 2004, proved to be a long-awaited turning point for the Tosoh Group. I am pleased to report that, in spite of the loss incurred by the unscheduled and extended stoppage of the Yokkaichi Complex, Tosoh posted record consolidated sales and operational profits. We also made progress in our strategies to boost the competitiveness of our three core businesses.

Hard work over a considerable stretch of time was rewarded with results that have put new wind in the sails of the Tosoh Group. Combined with the overall vitality of major economies around the world, this new mood has us thinking of more-aggressive development strategies to solidify our hard-earned gains in structural strength and competitiveness. Tosoh, as always, remains committed to its vision of an evolving corporation with the right chemistry.

#### **Market Conditions in Fiscal 2004**

Positive factors outweighed the negative during fiscal 2004. On the domestic front, the Japanese economy finally started to see some progress at the end of 14 years of economic setbacks. Economic growth came in at 2.7% for calendar year 2003, while the gross domestic product (GDP) was up 5.6% in the first quarter of calendar year 2004. This long-awaited improvement in Japan's economy, combined with expanding demand from Asian markets, particularly China, boosted sales of commodity chemicals in our Petrochemical and Basic groups. In addition, recoveries in IT industries bumped up sales of many of our specialty products. We also reaped the benefits from price hikes abroad on several of our key chemical products during the fiscal year, including ethylene amines, vinyl chloride monomer (VCM), polyvinyl chloride (PVC) resins, and polyethylene. Domestic increases tended to lag behind those abroad, and the price adjustment to absorb the raw materials and energy costs for PVC and polyethylene was only partially implemented in Japan toward the end of the fiscal year.

Against the backdrop of these gains, we continued to struggle with rising feedstock prices and the appreciation of the yen. Naphtha prices rose from approximately ¥24,000 to ¥25,500, and the Japanese yen appreciated from ¥120 to ¥107 against the U.S. dollar. Freight costs also rose significantly during fiscal 2004, tripling the cost of moving coal and salt, two items crucial to the manufacture of our products.

We saw lots of peaks and valleys during the fiscal year, including the stoppage at our Yokkaichi's ethylene plant, which eroded the profits from our Petrochemical and Basic groups. Caustic soda and vinyl chloride monomer (VCM) were among the items whose production declined because of the stoppage at the Yokkaichi plant, but their shipments remained at the previous year's levels because of full production

In fiscal 2004, the hard work put in over a considerable stretch of time was rewarded with results that have put new wind in the sails of the Tosoh Group. at the Nanyo Complex. The overseas market for caustic soda improved during the fiscal year, with prices rising for shipments to alumina producers in Australia in particular. Domestic prices for caustic soda, however, remained low until the last quarter, when a price increase was implemented.

Our Specialty Group gained momentum throughout the year, with recoveries in many markets leading to higher shipments. Our ethylene amines continued to ride the wave of demand from Asia, and the rebounding IT industries helped our specialty and electronic materials post gains. We also made headway in several respects with our scientific instruments segment, including entering the new field of genetic diagnosis.

Thanks to groupwide improvements, we registered record sales and operational profits in fiscal 2004 despite pressure on profitability from rising raw material and freight costs and the ethylene plant stoppage at the start of the year. Our ongoing cost-cutting and restructuring programs were a key factor in our ability to withstand the year's challenges. Our consolidated net sales increased ¥12.5 billion, to ¥484.4 billion. Operating income rose ¥2.0 billion, to ¥30.1 billion, and net income gained ¥2.5 billion, to ¥7.3 billion. Adopting a new accounting standard for the impairment of fixed assets in fiscal 2004 rather than in the year ahead, resulted in a ¥10.8 billion decrease in pretax net profits compared with what would have been recorded under the previous accounting policy.

#### A Shift to More Aggressive Corporate Development

There is no denying that we have been through a rough patch. Since the bursting of the economic bubble in Japan, we have experienced a vicious and protracted cycle of domestic deflation, augmented by intensified competition domestically and globally, that has forced us onto the defensive. Restructuring, cost reductions, and focused development have enabled us to fight our way back to financial health, and we are now achieving dynamic performance in regard to net sales and operating income.

As Japan emerges from its lengthy economic stagnation, we believe that the time has come to expand. Operational and financial improvements have created a resurgence of energy within the Company, which we will harness to meet the challenges of the next phase of development and take us to higher levels of sales and profitability. We will remain focused on qualitative rather than quantitative growth and on strategies that will strengthen the Tosoh Group as a whole.

We have three primary objectives. It is our aim to strengthen the Group's structure to attain stable profitability and financial health, to reinforce and expand our business on a global scale, and to broaden the business scope of the Group. Achieving "integrated competitiveness" based on superior technology and a robust business infrastructure is the concept guiding our efforts. This underlines our intention to establish a regional presence for commodities as well as a global presence for specialties.

This concept and our aims find different expression in the businesses of our core Petrochemical, Basic, and Specialty groups, but the goals of expanded scale and greater profitability are the same.

#### **Basic Group - Vinyl Isocyanate Chain**

For the past few years, we have been steadily strengthening our chlor-alkali and vinyl chloride operations to meet accelerating demand in Asia. Our latest investment in this business follows a previous round from 1994 to 1999 that focused on upgrading and modernizing our main production facilities. The goal today is to ride a wave of expansion in Asia, seizing business opportunities when and where they arise.

To that purpose, we increased our stake in Nippon Polyurethane Industry Co., Ltd. (NPU), a major producer of methylene diphenyl diisocyanate (MDI) plus other isocyanates and a subsidiary of Hodogaya Chemical Co., Ltd., a Tosoh Group company. Our aim is to more fully integrate NPU's isocyanate chain operations with our vinyl chain operations. This will facilitate advantageous cost synergies and solidify our strategic position in Asian growth markets for these product lines.

In May 2003, we announced an investment of ¥17 billion to construct aniline production facilities with a capacity of 150,000 tons at our Nanyo Complex, which is scheduled for completion in 2005. Aniline is a chief feedstock for MDI and is used extensively in the rapidly growing polyurethane industry. This new capacity will enable NPU to source aniline internally. Earlier, we announced an investment of ¥5 billion to build production facilities in the Nanyo Complex for carbon monoxide, which is another raw material for isocyanates. Construction is slated for completion in 2004. The cheaper carbon monoxide that these new facilities will produce will boost NPU's cost-competitiveness. With new and established facilities, we expect to have a fully integrated production system for MDI with an annual production capacity of 200,000 metric tons within two years.

Our efforts to more fully integrate our vinyl and isocyanate chain operations also promise cost

We believe the time has come to go on the offensive. We are strong operationally and financially, and there is a new energy in the Company born of our successes and of our confidence in the future. competitiveness. Our vinyl chain operations supply chlorine for the production of isocyanates, while the hydrogen chloride produced in our isocyanate chain operations can be applied by our vinyl chain operations to produce vinyl chloride monomer (VCM).

As for the vinyl chain side of operations, we decided to increase the production capacity of chlor-alkali and VCM to catch up with rapidly increasing demand for VCM in Asia. We are expanding our caustic soda capacity by 130,000 tons to 1.2 million tons a year as of June 2004, and our VCM capacity by 400,000 tons to 1.5 million tons a year by the end of 2005. The total project is estimated at ¥20 billion. The added electrolysis capacity also increases our chlorine production, which is essential for many other downstream processes.

Among our downstream products, we are expanding our PVC resin operations in anticipation of swelling Asian demand. In February 2004, we reached an agreement with Mitsubishi Corporation to acquire a further 30% stake in Philippine Resins Industries, Inc. (PRII), the top Philippine PVC manufacturer, raising our ownership to 80%. In May 2004, our efforts to remove a bottleneck in that company's operations raised its capacity to 100,000 tons annually.

Moreover, our designs to build a PVC plant in Guangzhou, China, will add further capacity to our PVC production capabilities. Our Guangzhou plant is anticipated to become operational in 2006 and will make us the first Japanese producer of PVC in the Chinese market. Initially, the VCM feedstock for this facility will come from Japan.

Collectively, our acquisition and construction of production facilities have the common goal of maintaining our position as a major supplier of chlor-alkali and vinyl chloride products in the high-growth markets of Asia.

#### Petrochemicals Group - Reexamining Our Cracker Strategies

Our core petrochemical business is based on our naphtha cracker operations at Yokkaichi, which provide the feedstock for an array of downstream petrochemical products. Worldwide events compel us to re-examine our utilization of those operations.

An increase in natural gas crackers in the Middle East that produce ethylene, but not propylene, will inevitably effect our markets in the not too distant future. Additionally, China's rapid emergence, along with ongoing conflicts in the Middle East, has resulted in shifting market conditions.

For this and other reasons, restructuring is ongoing in the petrochemical industry in Japan, with the price of each fraction changing relative to fluctuations in supply and demand. Tosoh is taking a closer look at maximizing the profitability of its naphtha cracker operations in view of its overall operations, including its vinyl chain and polyethylene operations.

As part of that strategy, we have constructed a new plant to make tertiary butyl alcohol (TBA) from the relatively underutilized C4 fraction produced in the cracking process. Our investment for this new plant, and the port facilities at Yokkaichi, will total ¥2.5 billion.

#### Specialty Group – Achieving Critical Mass

The operations of our Specialty Group differ from those of our Petrochemical and Basic groups. Our Specialty Group comprises high-margin products and materials strongly positioned in niche markets because of our proprietary technology. Its focus is on expanding these niche markets into substantial businesses. By remaining vigilant of changing markets and focusing our capital investments on emerging technologies, we are intent on staying in the forefront.

In striving to advance more of our niche market products toward critical mass, we continue to harvest proprietary technologies in the ongoing search to expand scope and generate new advances. Notably, our Scientific Instruments Division took its first step into the world of genetic diagnosis during the fiscal year under review. We have strong expectations that our other specialty businesses will evolve to the same stage.

All of our Specialty Group products have application in high-tech fields, including our specialty and electronic materials, which are significantly dependent on cycles in IT markets. To reduce their exposure to these cycles, the divisions responsible for generating these materials have made progress in developing products for other markets and in increasing their production of consumables.

Finally, it is worthwhile to outline our recent efforts in China. After careful deliberation, we have decided that localized operations are a necessary part of our strategies in this market. In addition to our ongoing project to build a PVC plant in Guangzhou, Tosoh and several subsidiaries have recently set up operations in China. Tosoh established a wholly owned trading company in Shanghai in April 2004, while

We are expanding our PVC resin operations in anticipation of swelling Asian demand, while also expanding the scale and domain of our Specialty Group's highmargin niche markets. NPU, Tosoh Logistics Corporation and Organo Corporation also started up subsidiaries in April. A Tosoh affiliate, Lonseal Corporation, likewise opened a representative office in China in April 2004.

#### **Corporate Citizenship**

Being a good corporate citizen supports our global vision, and our commitment extends to corporate governance, environmental preservation, and the health and safety of our employees and of society in general. Centered on our Compliance Committee and a network of compliance officers who monitor our business activities, we have established an organization that is charged with making employees aware of the laws, regulations, and guidelines related to our businesses while we monitor and audit our compliance activities. We are confident that this organization is making major contributions to Tosoh and that it will continue to do so on an even greater scale.

Since 1995, Tosoh has been a member of the Japan Responsible Care Council, which is the local chapter of the voluntary environmental action movement in the global chemical industry. Guided by this organization and our internal environmental plan, we aim to exceed industry and national standards for environmental protection and health and safety while working with the communities in which we operate to raise awareness of those issues.

Our growing eco-businesses are also contributing to environmental preservation and safety while evolving into highly viable businesses. Our subsidiary Organo Corporation is a recognized leader in the development of advanced water purification technologies and systems, and we have thriving businesses in wastewater purification, soil and groundwater remediation, and environmental analysis built upon our proprietary technologies.

We've also had recent successes in the commercialization of environmental-related products and materials, including those for cleaning the exhaust systems of automobiles and amine-free and metal-free catalysts to reduce volatile organic compounds (VOCs) when forming plastics. We are working broadly to develop products that will contribute to a brighter future for the generations to follow.

#### Outlook

Despite improved business conditions, we still have some difficult issues to deal with in the fiscal year ahead. High prices persist for feedstock, particularly for naphtha and salt and for the coal used to fuel our in-house electric power generation. Compounding this problem, freight costs for these raw materials have spiked. Because we have already cut most of the fat from our cost structure, we are hard pressed to come up with ways to balance profitability and competitiveness in our markets. Although passing price increases on to our customers is not inconceivable, it is a delicate process that requires accurate timing, especially in competitive and volatile markets.

The strong yen is another concern. Obviously, we cannot predict in what direction global currency markets will swing, but we do know that further appreciation of the yen will hurt our competitiveness.

Nevertheless, we believe that positive factors clearly outweigh the negative. Sales volumes are rising in Japanese markets. Robust demand continues in key areas for us in Asian markets, and the U.S. economy remains strong. Our three core businesses are showing positive indicators, and the strategies and capital investments of the past few years are making us stronger.

On the eve of Tosoh's 70th anniversary, it is fitting that we reflect on the Company's past when considering the many issues we face. Our Company reveals a history of overcoming crisis and of venturing into new business with a pioneering spirit. There have been resounding successes in the face of seemingly insurmountable odds and valuable lessons learned from failure. Our past directs our present and has propelled us from a single, midsized company in the 1970s into the global operations we are today. We are proud that the spirit and resolve of our predecessors is indelibly etched onto our corporate DNA, and intend to pass that heritage along to those who succeed us. We have full confidence that we are achieving the right chemistry and that the best is yet to come.

Marile Sachio

May 2004 Madoka Tashiro Chairman and CEO

Our growing ecobusinesses are contributing to environmental preservation and safety while evolving into highly viable businesses.

### **Corporate Governance**

Against the backdrop of expanding global markets and cross-border business there is a growing need for a formal structure to ensure that our company complies with local and international laws and global standards in business practices. While an informal structure has always existed for these purposes, it has been found lacking in terms of managing the risks to which improper conduct exposes our company and has been replaced with a structure that provides greater reliability. Our efforts target the employees of the parent company and of Tosoh Information Systems Co., Ltd., Tosoh General Services Co., Ltd., Tosoh Analysis and Research Center Co., Ltd., and Tosoh Plant Services Corporation, but we expect to eventually bring all the companies in the Group under a universal system.

As one of the driving forces of our corporate governance organization, the Compliance Committee is responsible for creating and improving the compliance system, establishing principles of conduct, and monitoring the system. A Compliance Committee Promotion Team provides feedback to the committee and acts on the committee's instructions, and a network of compliance officers in each division, department and facility further enforces compliance.

Since awareness is one of the chief tools for preventing infractions, the Compliance Committee has listed the main areas of concern for the Company, outlined the laws and external and internal regulations to be followed, provided guidance manuals where possible, and clearly determined those responsible for maintaining compliance with specific laws, regulations, and business practices.

Fair business practices regarding purchasing and selling, for example, fall under the Anti-Trust Law of Japan as well as Tosoh's internal Anti-Trust Compliance, Purchase and Sale Management, and Quality Control regulations. An *Anti-Trust Compliance Manual* is available to guide the actions of employees. Finally, the Anti-Trust Compliance Committee, the Legal and Patent department and the Environment, Safety, and Quality Control department are charged with overseeing compliance on the fair business issue.

Environmental preservation falls under a host of conservation and anti-pollution laws as well as the regulations set internally by the Responsible Care Council and under our quality control system. It falls, moreover, under the purview of the Environment, Safety, and Quality Control and the Corporate Strategy and Planning departments.

The driving force of our corporate governance organization is the Compliance Committee, which is responsible for creating and improving the compliance system, establishing principles of conduct, and monitoring the system.



Based on a medium- to long-term perspective, the Tosoh Group is working toward a corporate structure that can achieve stable and high income levels, supporting its goal of becoming a truly international competitor.

The corporate image that the Group is striving for can be described by the following three objectives:

- evolving to react effectively to a dynamic operating environment
- exhibiting broad earning power
- realizing employees' full potential in contributing to operations

Initiatives in fulfillment of these aims are helping the Tosoh Group to achieve the right chemistry for success.

# Tosoh's Global Network



### Japan

Tosoh Corporation Headquarters: Tokyo

Manufacturing: Nanyo Complex, Yokkaichi Complex

Research & Development Facilities: Tokyo Research Laboratory, Nanyo Research Laboratory, Yokkaichi Research Laboratory, Nanyo Technology Center

Sales Offices: Osaka Branch, Nagoya Branch, Fukuoka Branch, Sendai Branch, Yamaguchi Branch

### Asia

Mabuhay Vinyl Corporation, Makati City, Philippines Caustic soda and chlorine derivatives

Philippine Resins Industries, Inc., Makati City, Philippines PVC resins

**P.T. Standard Toyo Polymer**, Jakarta, Indonesia PVC resins

P.T. Satomo Indovyl Polymer, Jakarta, Indonesia PVC resins

**Tosoh Polyvin Corporation**, Lipa City, Batangas, Philippines PVC compounds

**Tosoh Quartz Co., Ltd.**, Tainan, Taiwan Fabricated quartzware

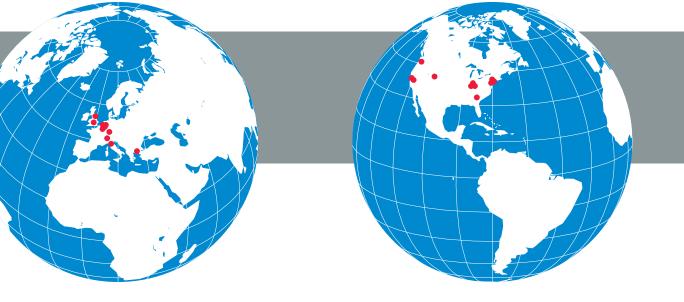
Tosoh (Shanghai) Co., Ltd., Shanghai, China Regional sales, marketing and business development center: Electronic materials, packed columns for high-performance liquid chromatography, separation media, and fine chemicals

**Tosoh Singapore, Pte., Ltd.**, Singapore Regional sales, marketing and business development center: Fine chemicals, thin film deposition materials, and fabricated quartzware

**Tosoh SMD Korea, Ltd.**, Kyungki-Do, Korea Thin film deposition materials

**Tosoh SMD Taiwan Co., Ltd.**, Hsin Chu, Taiwan Thin film deposition materials





### Europe

**Tosoh Europe B.V.**, Amsterdam, Netherlands European sales, marketing and business development center: Ethylene amines, polyurethane catalysts, zirconia ceramics, zeolites, chloroprene rubber, CSM and fine chemicals

**Delamine B.V.**, Amersfoort, Netherlands Ethylene amines and other fine chemicals

Holland Sweetener Company V.O.F., Geleen, Netherlands Aspartame

Tosoh Bioscience, A.G., Littau-Luzern, Switzerland

Clinical diagnostic systems and reagents

Tosoh Bioscience GmbH, Stuttgart, Germany Packed columns for high-performance liquid chromatography and separation media

**Tosoh Bioscience N.V.** (Regional Headquarters), Tessenderlo, Belgium Clinical diagnostic systems and reagents

**Tosoh Bioscience Srl.**, Torino, Italy Clinical diagnostic systems and reagents

**Tosoh Bioscience U.K.**, Worcestershire, U.K. Clinical diagnostic systems and reagents

**Tosoh Hellas A.I.C.**, Thessaloníki, Greece Electrolytic manganese dioxide

**Tosoh Quartz Ltd.**, Durham, U.K. Fabricated quartzware and silica glass materials

### **United States**

**Tosoh America, Inc.**, Grove City, Ohio U.S. subsidiary holding company and regional headquarters

Tosoh USA, Inc., Grove City, Ohio

U.S. sales, marketing and business development center: Ethylene amines, polyurethane catalysts, organic intermediates, zeolites, CSM and fine chemicals

**General Chemical (Soda Ash) Partners**, Parsippany, New Jersey Soda products

Holland Sweetener North America, Inc., Atlanta, Georgia Aspartame

**Tosoh Bioscience, Inc.**, San Francisco, California Clinical diagnostic systems and reagents

**Tosoh Bioscience LLC**, Montgomeryville, Pennsylvania Packed columns for high-performance liquid chromatography and separation media

**Tosoh Quartz, Inc.**, Portland, Oregon Fabricated guartzware

Tosoh SET, Inc., Dublin, California PVD and CVD shield refurbishment and process kit management

Tosoh SGM USA, Inc., Flemington, New Jersey Silica glass materials

**Tosoh SMD, Inc.**, Grove City, Ohio Thin film deposition materials

## Tosoh Groups, Divisions, Principal Subsidiaries and Affiliates, and Major Products and Services

Group	Petrochemical Group	
Division	Olefins	Polymers
Principal Subsidiaries and Affiliates	Demestic Dipon Styrene Monomer Co., Ltd.	<section-header><section-header><section-header><text><text><text></text></text></text></section-header></section-header></section-header>
Major Products and Services	Ethylene Propylene Cumene (raw material for intermediates used in production of phenol and epoxy resins) Styrene monomer Aromatic hydrocarbons (benzene, toluene, xylene) C4 fraction (raw material for intermediates used in synthetic rubber production, such as butadiene)	Polyethylene grades (HDPE, LDPE, LLDPE, ULDPE) Adhesive polymers C9 hydrocarbon resins Ethylene vinyl acetate (EVA) copolymers Polyphenylene sulfide (PPS ) resins PVC paste Synthetic rubber

### **Basic Group**





#### Domestic

Hodogaya Chemical Co., Ltd. (fine chemicals, agrochemicals, dyes) Lonseal Corporation (plastic products) Minami Kyushu Chemical Industry Co., Ltd. (fertilizers) Nippon Polyurethane Industry Co., Ltd. (urethane products) Plas-Tech Corporation (PVC compounds) Rinkagaku Kogyo Co., Ltd. (phosphorous compounds) Taihei Chemicals Limited (PVC films, sheets, nitro-cellulose) Taiyo Vinyl Corporation (PVC resins) Toei Kasei Co., Ltd. (PVC films, sheets) Tohoku Tosoh Chemical Co., Ltd. (chlorinated chemicals) Tokuyama Sekisui Co., Ltd. (PVC resins)

#### International

General Chemical (Soda Ash) Partners (U.S.: soda products) Mabuhay Vinyl Corporation (Philippines: caustic soda and chlorine derivatives)

Philippine Resins Industries, Inc. (Philippines: PVC resins) P.T. Satomo Indovyl Polymer (Indonesia: PVC resins) P.T. Standard Toyo Polymer (Indonesia: PVC resins) Tosoh Polyvin Corporation (Philippines: PVC compounds)

Vinyl chloride monomer (VCM) PVC resins Caustic soda Calcium hypochlorite Chlorine Inorganic chemicals Soda ash Sodium bicarbonate Cement

Tosoh Groups, Divisions, Principal Subsidiaries and Affiliates, and Major Products and Services

## **Specialty Group**



### Organic Chemicals

#### Domestic

**Tosoh Finechem Corporation** (fine chemicals, custom synthesis) Tosoh F-Tech, Inc. (fluorochemicals) Tosoh Organic Chemical Co., Ltd. (organic intermediates)

#### International

Delamine B.V. (Netherlands: ethylene amines, fine chemicals) Holland Sweetener Company (Netherlands, U.S.: aspartame)

### Specialty Materials

#### **Domestic**

Tosoh Silica Corporation (rubber and plastic silica filler) Tosoh Ceramics Co., Ltd. (zirconia ceramic products) Tosoh Hyuga Corporation (EMD) Tosoh Zeolum, Inc. (zeolites)

#### International

Tosoh Hellas A.I.C. (Greece: EMD)



Materials

**Domestic** Tosoh Quartz Corporation (fabricated quartzware) Tosoh SGM Corp. (silica glass materials) Tosoh Speciality Materials Corp.

(thin film deposition materials)

#### International

Tosoh Quartz (U.S., U.K., Taiwan: fabricated quartzware) Tosoh SET, Inc. (U.S.: physical vapor deposition (PVD) and chemical vapor deposition (CVD) shield refurbishment services) Tosoh SMD (U.S., Taiwan, S. Korea: thin film deposition materials) Tosoh SGM USA, Inc. (U.S.: silica glass)

Ethylene amines and derivatives Intermediates for organic synthesis Flame-retardant materials Bromine Solvents Aspartame Fluorinated and brominated compounds Polyurethane catalysts

Electrolytic manganese dioxide (EMD) Zeolites (adsorption agents, molecular sieves)

Zirconia products (powders, ceramics, grinding media)

Silica glass (quartz) materials, including various types of natural, synthetic, fused, machined, and fabricated quartzware Thin film deposition materials Shielding services





High-performance liquid chromatography (HPLC) systems and packing materials, enzyme immunoassay systems, ion chromatography systems, glycohemoglobin analyzers Water purification and treatment system engineering

Land survey, reclamation and technological consulting services

Research & development Administration and security services Transportation, warehousing and related services Information services Instrumentation, plant engineering and maintenance 13

## **Petrochemical Group**

Petrochemical Group consolidated net sales rose 2.2%, to ¥139.8 billion, with operating income falling 54%, to ¥3.0 billion.

Ethylene Propylene Cumene Styrene monomer Aromatic hydrocarbons Benzene Toluene Xylene C4 fraction

# Olefins

#### FY 2004 Review: Olefins

The stoppage of the ethylene plant at the Yokkaichi Complex for two months in fiscal 2004 because of high-pressure gas-safety certification problems had a substantial impact on the profitability of olefin and other products. Only by acquiring products externally was the Company able to cover its supply shortages, maintain its sales volumes, and protect its market share. On the other hand, demand was strong for a range of petrochemical derivatives in the fiscal year under review. Overseas markets continued to expand for styrene monomer and cumene.

#### Strategy & Outlook: Olefins

Weak demand and oversupply remain major issues in the petrochemical industry in Japan. Over the years, Tosoh has coped with this situation by boosting its competitiveness. It has done so largely by sharing production with neighboring petrochemical operations in the Yokkaichi area, which maximizes resources, minimizes distribution costs, and reduces a range of operating risks.

Optimizing yields is another strategy that has been stressed in recent years through the pursuit of greater naphtha cracker output. We completed a new plant at the Yokkaichi Complex to produce tertiary butyl alcohol (TBA), a raw material for methyl methacrylate (MMA), in May 2004, following the end of the fiscal year under review. TBA will be extracted from the spent C4 fraction left over after extracting butadiene, expanding our product portfolio and making even better use of our resources.

We are experiencing increased competition in our markets from the products of overseas plants, such as ethane-based ethylene and its derivatives from production plants in the Middle East and new, large-scale petroleum plants in China. Nonetheless, we expect that demand will remain strong for our products from the expanding economies of Asia, especially China. We will continue to improve our competitiveness and profitability domestically and overseas through a range of strategies while expanding into new areas of growth potential.

#### FY 2004 Review: Polymers

The major impact of the stoppage of our Yokkaichi Complex ethylene plant was substantially lower shipments of general-purpose polymers despite strong demand during fiscal 2004, particularly from the automobile industry. This problem was compounded by high prices for raw materials. And though exports of chloroprene rubber, Melthene<sup>®</sup>, and some other products expanded during the year because of strong demand in Asian markets, a drop in polyethylene amid the plant stoppage resulted in a decrease in overall exports for the division.

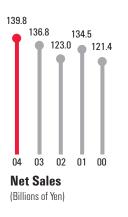
#### Strategy & Outlook: Polymers

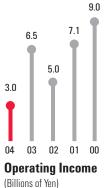
Our polymer operations comprise two major product categories: polyethylene and functional polymers. As a whole, polymer operations are responsible for derivative petrochemical products, with a special emphasis on high-polymerization products, such as plastics and rubbers.

Our polyethylene lineup includes a high proportion of very marketable specialty-type products, such as ethylene vinyl acetate (EVA) and low-density polyethylene (LDPE). Such products as linear low-density polyethylene (LLDPE) and high-density polyethylene (HDPE), however, are rapidly losing their competitiveness amid the start up of large-scale overseas plants.

Our functional polymers fare better. This is because our functional polymers serve stable niche markets that have a limited number of suppliers globally. Our diverse portfolio of products notwithstanding, we

Despite increased competition, we expect that olefin demand will remain strong in the expanding economies of Asia.





Polyethylene grades HDPE LDPE LLDPE ULDPE Adhesive polymers C9 hydrocarbon resins Ethylene vinyl acetate (EVA) copolymers Polyphenylene sulfide (PPS) resins PVC paste Synthetic rubbers



# Polymers

have yet to achieve a sufficient cross-market development of products in related markets.

The market for general-purpose polymers is mature. In response to overcapacity, declining domestic demand, and low-price imports of bulk products, we have initiated an array of strategies to improve the competitiveness of our polymers. These strategies span implementing thorough cost reductions to boost cost-competitiveness, developing high-margin grades and improving the quality of products to command better prices and to increase profitability, restructuring or eliminating unprofitable product lines, and inventing polymers to open new markets.

In tandem with these strategies, we are developing niche markets for functional polymers that have strong growth potential, limited numbers of producers globally, and in which we hold a leading share. Some examples include chloroprene rubber, EVA copolymer resins with 30% or more vinyl acetate, the adhesive polymer Melthene, and our engineering plastic PPS (polyphenylene sulfide) resin. Our strategy specifically for our line of higher-value-added functional polymers is to differentiate those products from their competitors by focusing on developing our adhesive-related business.

We do not expect large gains in the markets of Japan, the United States, and Europe in the next fiscal year. Sales in those markets will remain approximately the same or rise slightly. However, we anticipate further growth in Asian markets outside Japan, spurred by robust demand for adhesive, housing material, and industrial products. But supply will be extremely tight because of shortages in electric power and raw materials.

Major new plants for general-purpose polymers are scheduled to come onstream in Asia commencing in the fiscal year ending in March 2006. We nevertheless believe that strong demand will continue to balance the growth in supply. To keep our business growing in Asia, we are promoting the development of specialty and highly functional polymers.

#### **Highlight - Ethylene Operations**

Integrated Vinyl Chain and petrochemical operations make Tosoh unique within the Japanese chemical industry. Tosoh's position as both a purchaser and producer of ethylene helps reduce its exposure to extreme operating conditions. The Company's total operational demand for ethylene approaches a million tons a year, while the annual production capacity of the Yokkaichi Complex's naphtha cracker is 500,000 tons.

The Company's Vinyl Chain operations absorb 500,000 tons of ethylene annually. And the Company utilizes another 300,000 tons of ethylene a year in developing a more self-reliant polymer business in the production of various polyethylene grades. For information and sales networking advantages, our ethylene product portfolio also includes chloroprene rubbers, CSM, PPS, C9 hydrocarbon resins, and PVC paste.

We have initiated a wide array of strategies aimed at improving competitiveness and at developing niche markets for functional polymers.

### **Basic Group**

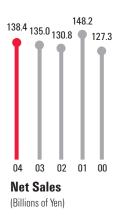
*Basic Group consolidated sales advanced 2.5%, to ¥138.4 billion, with operating income rising 56.4% to ¥8.9 billion.* 

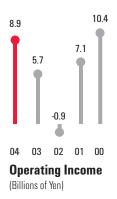
Vinyl chloride monomer (VCM) PVC resins Caustic soda Calcium hypochlorite Chlorine Inorganic chemicals Soda ash Sodium bicarbonate

## Chlor-Alkali

#### FY2004 Review: Chlor-Alkali

Tosoh's overriding strategy is to solidify its position as one of Asia's most competitive suppliers.





China was once more the main driver of growth for chlor-alkali products during the fiscal year under review. Exports of VCM to that market again rose sharply. Despite lower overall production at the Yokkaichi Complex because of the ethylene plant stoppage, the Company maintained total shipment levels of chlorine and caustic soda through full production at the Nanyo Complex. Although caustic soda sales were firm, thanks particularly to rising export volumes and prices, the market for caustic soda softened during the fiscal year in reaction to signs of excess supply. The trend to rising costs continued, with higher prices for naphtha and such raw materials as salt putting pressure on earnings.

#### Strategy & Outlook: Chlor-Alkali

Tosoh's overriding strategy for its Basic Group is to strengthen and broaden the scope of its Vinyl Chain operations. In this way, Tosoh hopes to solidify its position as one of Asia's most competitive suppliers of VCM and as Japan's largest supplier of VCM and caustic soda. Competitors in other Asian countries are rapidly gaining strength, so it is essential that Tosoh stays ahead of the field and maintains its advantages. Some of these advantages include the integrated nature of its Vinyl Chain operations at the Nanyo Complex, its economies of scale, its cost advantages resulting from its position as Japan's largest buyer of the vinyl feedstock ethylene, and its constant upgrading of its cost-competitiveness.

The Company took further steps during the fiscal year under review to enhance its Vinyl Chain Operations. Tosoh announced plans to build aniline production facilities with a capacity of 150,000 tons to supply Nippon Polyurethane Industry (NPU) with this MDI feedstock.

NPU is the leading domestic supplier of isocyanate, an important raw material in the manufacture of polyurethane derivatives and related intermediates for which demand in Asia is expected to balloon. NPU's other parent company, Hodogaya Chemical Co., Ltd., is a Tosoh Group company and Tosoh recently strategically increased its stake in NPU to 35% to exploit the symbiotic relationship between its Vinyl Chain and isocyanate operations.

To further utilize these synergies, Tosoh is building carbon monoxide production facilities at the Nanyo Complex. These facilities will reduce the cost of NPU's products by switching their production from a coke-based to a naphtha-based process. The carbon monoxide plant is scheduled to come onstream in June 2004, while the aniline plant will start up in March 2005.

#### Highlight - Vinyl Chain Operations: The Heart of Tosoh's Chemical Operations

Vinyl Chain refers to an integrated sequence of manufacturing operations that produce several key vinylrelated chemicals from the basic commodities salt and ethylene. Salt is electrolyzed to yield chlorine and caustic soda. The chlorine reacts with ethylene to produce ethylene dichloride (EDC), and the balance is used to manufacture other chlorine derivatives. We convert EDC – which can be combined with caustic soda to produce ethylene amines, another major Tosoh product – to VCM by means of a proprietary oxychlorination process. Some of the VCM is converted into various PVC resins, and the rest is sold to other downstream manufacturers.

Tosoh has recently expanded its Vinyl Chain operations by supplying chlorine to NPU for the production of isocyanate and urethane products. During these downstream processes, NPU produces hydrogen chloride, which is pumped back to the Nanyo Complex for the process of converting EDC to VCM. Tosoh's strategy is to expand the scope of its Vinyl Isocyanate Chain operations to take advantage of various synergies and to establish comprehensive downstream and upstream operations to maintain its position as a leader in VCM production in the Asian market. To enable further expansion of our production of strategic products, we are proceeding with an obligatory three-year environmental assessment study. This study will prepare the way for the construction of a new electric power plant to boost our electrolysis capacity in particular. The new power plant could be commissioned as early as 2008.

The Tosoh Group has several chlor-alkali-related companies in the Philippines and Indonesia. Recent equity increases in Philippine Resins Industries, Inc. (PRII) were executed to provide a stronger management role and maintain a dominant position in the chlor-alkali market in Asia.

In our Vinyl Chain operations, chlorine produced by the electrolysis of salt is in much greater demand

## Cement

than caustic soda, hence poor caustic soda sales has always held our Vinyl Chain operations back. To boost caustic soda sales, we have established long-term business relationships with major purchasers in Asia and Oceania.

Among the major uses of caustic soda is in the production of alumina, and fortunately demand has been rising steadily from Australian alumina producers in recent years and prices have rebounded from a low experienced in 2002. Consequently, we expanded our electrolysis facilities at a cost of ¥6 billion, increasing our caustic soda capacity 130,000 tons to 1.2 million tons a year as of June 2004. Domestically, we are focusing on maintaining our market share while working to improve the market and raise prices. China, meanwhile, is expected to maintain strong economic growth through the Shanghai Expo in 2010. Tosoh is positioning itself in the world's largest market and established a wholly owned subsidiary in China in April 2004.

The Company has also announced plans to establish an integrated production system for polyvinyl chloride among factories in Japan and China. This sees us building a 600,000-ton plant for VCM at the Nanyo Complex that will begin operations in early 2006. The added VCM capacity will allow Tosoh to supply a new PVC resin plant in Guangzhou, China, that is being set up as a joint venture to supply PVC to the local market. The PVC production facility in China is scheduled to come onstream in 2006.

Overall, we aim to maximize our profitability by achieving full production levels at our electrolysis and VCM facilities and are considering expanding the capacity of those facilities. We also are taking an aggressive stance in other areas. We are reviewing our strategies for such other products as phosphoric acid, sodium sulfate decahydrate, and sodium bicarbonate with a view to increasing their profitability.

#### FY2004 Review: Cement

Business conditions remained challenging in Japan's cement industry during fiscal 2004, but several encouraging signs emerged. Public-sector demand underwent another significant drop against five consecutive years of cuts in public works' budgets. But private-sector demand appears to have bottomed out.

Exports remained the most active segment of the cement market, with demand from China the brightest star among generally strong exports to Southeast Asia. Even the domestic market exhibited more resiliencies in fiscal 2004 as the price hikes negotiated in fall 2002 continued to hold. However, the agreement under which Tosoh manufactures approximately 1.7 million tons of cement annually on a consignment basis for Taiheiyo Cement, Japan's principal cement firm, has been an important lifeline for Tosoh's cement operations during this long period of market deterioration.

#### Strategy & Outlook: Cement

The competitiveness of our cement manufacturing operations at the Nanyo Complex hinges on taking advantage of available resources. The facilities boast natural deepwater port facilities and a cheap, on-site power source. We also reuse as raw materials the 170,000 tons of coal ash produced yearly by our power plant boilers and unneutralized gypsum, slag, sludge, and scrap tires from external sources. Our facilities also daily consume approximately 14 tons of refuse-derived fuel (RDF), a solid fuel produced at a nearby municipal RDF plant.

In fiscal 2005, we expect domestic demand trends to be mixed. Private-sector demand should improve slightly, but public-sector demand continues to slide under the ongoing policy of cutting public works' investment by 3% annually. Exports, by contrast, will remain strong. Since our entire cement output is consigned for sale to Taiheiyo Cement, we forecast stable sales regardless of market conditions. In the medium and long term, we are seeking to further reduce the costs of our cement operations and to boost our industrial waste recycling efforts.

In the short term, we forecast stable cement sales. In the medium and long term, we are seeking to further reduce costs and to boost our industrial waste recycling efforts.

## **Specialty Group**

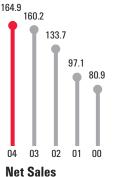
Specialty Group consolidated net sales rose 2.9%, to ¥164.9 billion. The group's operating income edged forward 17.7%, to ¥15.8 billion.

Ethylene amines and derivatives Intermediates for organic synthesis Flame-retardant materials Bromine Solvents Aspartame Fluorinated and brominated compounds Polyurethane catalysts

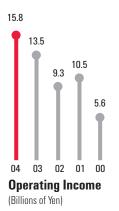
# **Organic Chemicals**

FY 2004 Review: Organic Chemicals

Strategically, our focus is on increasing profitability, not only by lowering costs but also by expanding operations and developing new areas.



(Billions of Yen)



Our major organic chemical products are ethylene amines and derivatives, organic intermediates, and bromine and brominated compounds – markets for which Tosoh is strongly positioned. In fiscal 2004, sales were favorable for a wide range of our products, with particularly strong sales of ethylene amines, chelates for heavy metals, and high-performance cleaning solutions. Because exports account for approximately 50% of our organic chemical sales, the yen's appreciation during the fiscal year reduced the value of exports in yen terms. But this difference was largely offset by price and quantity increases.

#### Strategy & Outlook: Organic Chemicals

#### **Ethylene Amines and Derivatives**

Tosoh is Asia's only major manufacturer of ethylene amines and their derivatives and has been steadily expanding its operations. In 1998, we increased capacity at the Nanyo Complex to enable us to compete with overseas manufacturers. Our preceding involvement in Delamine B.V., our 50-50 joint venture with Dutch firm Akzo Nobel, has turned us into a major provider of organic chemicals worldwide.

Infrastructure and technical prowess underlie the quality of our ethylene amines and their derivatives. They also grant us the cost-competitiveness that arises from our chlor-alkali operations and the superior product and application development capabilities that enable us to serve specific customer needs.

Tosoh is aggressive in marketing ethylene amines and their derivatives. Its promotions include developing markets for polyurethane catalysts, peripheral materials, and new amine derivatives and building sales of its chelates for heavy metals.

Concern over amine emissions, especially in Europe and the United States, is accompanied by growing demand for substitutes for the amine-based catalysts used by the automobile and other sectors that deposit amines in resins. To meet that demand, Tosoh has produced an alternative, amine emission-free catalyst. We also have developed a metal-free catalyst as a substitute in the manufacture of slab stock foam and other products to respond to the environmental issues surrounding amine emissions.

Continued progress by Asian economies bodes well for organic chemical products. Ethylene amines and their derivatives, such as epoxy hardeners, paper viscosity boosters, chelates, and pharmaceutical and agricultural chemical intermediates, have application in a wide range of fields. Our market development is focused on but not limited to Asia. Chelates for heavy metals in particular are experiencing steady growth in demand in line with rising awareness of environmental issues globally. Applications for organic chemicals have broadened to include pharmaceuticals, agricultural chemicals, electronic materials, and others. We anticipate benefiting from growing demand for increasingly sophisticated products as technologies advance globally.

#### **Bromine and Brominated Derivatives**

In bromine and brominated derivatives, we are utilizing our edge as the sole manufacturer of brominerelated products in Japan to steadily expand operations throughout Asia. These operations center on a manufacturing system that produces bromine from seawater used to cool the electric power generators at our power plant. In this way, an integrated system is fully utilized in the production of bromine that in turn serves as the base for products ranging from flame retardants to organic intermediates sold around the world.

#### **Organic Intermediates**

Our organic intermediates operations boast strong competitive advantages generated from cutting-edge chemical technologies further enhanced through technological synergies. Tosoh cooperates with three wholly owned subsidiaries, each possessing advanced technology in a specific field. Tosoh Organic Chemical contributes expertise in bromination and chlorination, Tosoh Finechem specializes in low-temperature and organo-metallic synthesis, and Tosoh F-TECH is a leader in fluorination. We are using our joint strengths to develop a custom synthesis business for pharmaceutical and medical research and to focus our development capabilities on advanced organic intermediates and specialty fine chemicals for

Electrolytic manganese dioxide (EMD) Zeolites (adsorption agents, molecular sieves) Zirconia products (powders, ceramics, grinding media)

# **Specialty Materials**

the high-growth pharmaceutical and electronic materials fields.

Our goal is to increase our profitability, by lowering our costs, by expanding our operations into profitable areas, and by developing new, high-margin segments into which to shift our product mix. An example of this strategy is the reinforcement and expansion of our organic intermediates business. We converted Tosoh Finechem and Tosoh F-TECH into wholly owned subsidiaries to maximize synergies in our organic intermediates operations and to target such high-margin markets as resist monomers and pharmaceutical intermediates. Another example is our development of a new catalyst for urethane foaming.

#### FY 2004 Review: Specialty Materials

The core products of the Specialty Materials Division comprise EMD, ceramics, and zeolite now that sputtering targets are included under the newly formed Electronic Materials Division. Excess supply in the EMD global market since a peak in demand in 1999 has hampered performance over the past few years, but the exit from the market of one company in Europe has helped to rebalance demand and supply.

Following a sharp downturn in 2001, the IT industry was clearly on the rebound during the fiscal year under review. Although nothing like the peak experience during the bubble period, steady and determined sales activities and application development have been successful in reestablishing business growth. In addition, we have developed products for high-growth segments in non-IT fields, such as zirconia ceramics for use in fuel cells and sensors for automobiles, high-silica zeolites for automobile exhaust systems, and higher-performance lithium manganate for battery materials.

Our EMD market has suffered from excess supply since the special peak in demand experienced as a result of the Y2K issue in 1999. We are, however, finally seeing some weeding out of capacity in the industry with the liquidation of one manufacturer in Europe and a halt in production by another manufacturer in the United States. Although this turn in events did not significantly influence our fiscal 2004 performance, we expect to see benefits emerging in the medium term, starting with the fiscal year ahead. Ceramics saw gains over the previous fiscal year, and zeolite sales increased because of the success of our high-silica zeolite product for the exhaust systems of automobiles. Steady expansion of our markets is improving our profit structure. Our high-silica zeolite especially is emerging as a stable foundation for profit growth.

#### Strategy & Outlook: Specialty Materials

The exit of one company from the EMD market in Europe and the slower growth in capacity by major EMD producers in China because of the scarcity there of electric power have brought some balance back to EMD supply and demand. In particular, the liquidation of a major producer in Europe has left Tosoh the sole manufacturer in that region. EMD manufacturers look to a market recovery now that conditions of oversupply have eased. In our ceramics business we expect more growth in the next fiscal year. Not only will we see gains in optical communications markets but also for industrial parts and new applications.

Successes notwithstanding, our products face excess global supply. In a bid to strengthen our profitability and competitiveness, we are reducing costs, achieving optimum use of our production facilities and resources, and developing markets for high-margin products. Our goals are to extend the domains of our product groups and to become a comprehensive specialty materials division with stable profitability. We plan to avoid overcrowded market segments, to focus our marketing instead on specialty areas, and to ramp up our research and development and technological services. To strengthen profitability and competitiveness, we are reducing costs, achieving optimum use of our production facilities and resources, and developing markets for high-margin products.

## Specialty Group

#### FY 2004 Review: Electronic Materials

Effective June 27, 2003, Tosoh combined its quartz, fabricated quartzware, sputtering target, and industry service operations into the Electronic Materials Division. The core businesses of the new division are quartz and thin film materials for the global semiconductor and flat-panel display markets. Through this amalgamation, Tosoh plans to further strengthen its position in these important high-tech, high-growth fields and will aim to develop electronic materials into a core business.

Performance was strong during the division's first year of existence thanks to the growing popularity of flat-screen televisions and digital home appliances, which boosted sales in the division's major markets.

Silica glass (quartz) materials Fabricated quartzware Fused quartzware Machined quartzware Natural quartzware Synthetic quartzware Sputtering targets Shielding services

# **Electronic Materials**

Especially in the latter half of the fiscal year under review, demand rose sharply for thin film materials and quartz products, supporting gains in sales and profits.

#### Strategy & Outlook: Electronic Materials

The Electronic Materials Division boasts an organization with truly global coverage. It features manufacturing and marketing bases in Japan, Taiwan, South Korea, Europe, and the United States.

The division offers a broad lineup of electronic materials essential to the manufacture and development of state-of-the-art products in the semiconductor and flat-panel display markets. Its technological capabilities are supported by full access to the wide range of inorganic, organic, and other technologies of the Tosoh Group.

The division is concentrating on growth areas and cutting-edge technologies within those fields. Some of the products for which our market shares are increasing are sputtering targets for semiconductors and flat-panel displays.

For the longer term, we plan to aggressively invest in high-growth fields and to expand our business based on the development of technologies for the next-generation products of manufacturers, such as the 65-nano- and 45-nano-level IC chips.

To buffer ourselves against the inevitable downturns in the silicon cycle, we are focusing on new fields not closely related to semiconductors, such as quartz microchips for biomedical applications and space optics and energy-conservation fields.

Following a first and highly successful year, the division anticipates another good year ahead. It remains atop the semiconductor and LCD investment cycle. In calendar 2003, Japan outstripped the United States in semiconductor investment for the first time in seven years to capture the number one spot. Consequently, there are strong expectations for further recovery in this market in Japan.

#### Highlight - Sputtering Targets: Essential to Thin Films

Tosoh's advanced metallurgy, sintering, and other technologies are instrumental in the application of thin film technologies in the manufacture of semiconductors and flat-panel displays. We produce the sputtering targets used by the manufacturers of these products to deposit thin films of aluminum, titanium, tantalum, chrome, molybdenum, and an array of metal alloys, principally using physical vapor deposition (PVD) techniques. In PVD, our thin film deposition materials, or sputtering targets, are bombarded with positive-ion argon gas in reduced pressure or vacuum chambers. The positive argon ions dislodge atoms of the metal or metal alloy of the sputtering target. These sputtered atoms are then deposited on wafers or other targeted substrates, resulting in a thin layer that is highly uniform and that accurately replicates the composition of the metal or metal alloy of the sputtering target.

The main applications for sputtering targets in the electronics industry are the formation of adhesion, antireflection, barrier layers and interconnections, and capacitors. Technological and market trends point to an even brighter future for sputtering targets in the fields of thin film devices and coated products for microelectronics, data storage, advanced displays, and optical coatings.

Our sputtering targets are highly regarded for their high purity and high decomposition efficiency – the proportion of the whole target that can be effectively used. Our top market share reflects this reputation.

To meet growing demand, our subsidiary Tosoh Speciality Materials Corporation (TSMC) expanded its sputtering target production capacity 50% at its plant in Yamagata in 2003. That plant is emphasizing the big sputtering targets required for increasingly large LCD and plasma displays for television sets.

Performance was strong during the first year of the new division thanks to the growing popularity of flat-screen televisions and digital home appliances.

#### FY 2004 Review: Scientific Instruments

Although the HPLC market in Japan is mature, the sales of our gel permeation chromatography (GPC) columns expanded in fiscal 2004. Tosoh is the market leader in Japan for TSK-GEL<sup>®</sup> HPLC packing materials and packed columns, which enjoy an excellent reputation worldwide. Despite the highly competitive nature of the ion chromatography (IC) market, we made steady inroads during the fiscal year under review. We have introduced an add-on reaction unit that enables our IC equipment to detect bromate and cyanide. Sales of our TOYOPEARL<sup>®</sup> packing materials, used by major pharmaceutical companies in the United States and Europe, again rose because of high demand overseas.

HPLC systems and packing materials Enzyme immunoassay systems lon chromatography systems Glycohemoglobin analyzers

# Scientific Instruments

The difficulties in the immunoassay test market continued, with the overall number of tests performed in Japan, the United States, and Europe increasing while end-user prices declined. Growth in the number of customers, however, supported increased sales in our three major markets. In Japan, sales were firm for the newly introduced AIA-1800. Bolstered by the popularity of the quick-result capability for the cardiac marker B-type natriuretic peptide (BNP) among our established customers and the attractiveness of our midsized AIA-600II to new customers, we posted gains in sales and profits.

In our diagnostic liquid chromatography business, sales of consumables rose in Japan, Europe, and the United States. But sales of equipment declined amid aggressive marketing by our competitors in Europe and the United States. We commenced sales of our products in China in January 2003, but the impact of the severe acute respiratory syndrome (SARS) epidemic in that country drove sales down substantially below expectations.

In Japan, however, the sales of our automated glycohemoglobin analyzer HLC-723G7 continued to post sales growth. In the United States, it retains a major share of the market for laboratories using the chromatograph ion exchange method. Sales of analyzers to test for neuroblastoma in children dropped dramatically because Japan's Ministry of Health, Labor and Welfare removed its requirement that this problem be tested for during the year under review.

#### Strategy & Outlook: Scientific Instruments

We are one of the few companies that develops, manufactures, and sells instruments, columns, and reagents and that provides maintenance services. Moreover, we have a global footprint based on our Tosoh Bioscience network in Japan, Europe, and the United States. Along with our technical leadership, this infrastructure positions us strongly in markets. Our TSK-GEL columns and packing materials hold the top market share in Japan and are known worldwide. We also hold the number one share of the domestic gel permeation chromatography (GPC) market. And our TOYOPEARL packing materials are popular with major pharmaceutical companies in Europe and the United States.

Based on the all-in-one reagent made possible by our proprietary freeze-drying technology, our AIA analyzers are sophisticated, fast, easy-to-use systems with top-class sensitivity and reproducibility. Our wide range of models offers comprehensive tests, ensuring that we cover most of the needs of the patients of our customers. Our lineup was further strengthened by the introduction of the compact AIA-360 in April 2004.

We are revising and restructuring our scientific measurement and separation businesses with a view to improving their profitability. Plans are to upgrade the capabilities of our environmentally related ion chromatography equipment, developing it into a major product on the same level as our popular GPC equipment. We also plan to expand our BioAssist series in late 2004 by launching BioAssist eZ for use in purifying proteins.

We anticipate further growth in our sale of TOYOPEARL packing materials. Consequently, we have expanded production capacity for these materials at our Nanyo Complex.

In diagnostics, the number of tests is rising but the price of each test is falling, and we fully expect this trend to continue, in Japan and overseas. Staying ahead of the intensifying competition that we face from other manufacturers means that we must focus on maintaining our technological and our cost-competitive edge.

We are promoting the further development of the AIA market by offering large-, mid-, and compactsized analyzers. This expands our market scope beyond medical institutions to individual doctors and meets the demand for instant testing for emergency situations and for confirming a diagnosis before Strategically, we are revising and restructuring our scientific instrument and separation businesses with a view to improving profitability.



# Specialty Group

#### Highlight - Genetic Diagnostics: The Wave of the Future

Genetic testing is commonly connected with screening for disorders or for a predisposition to disease, such as cancer. Equally well known is its role in the DNA fingerprinting so popular in crime investigation programs on television. Genetic testing, though, is also effective in the diagnosis of or screening for some infectious diseases or diseases such as cancer where the concentration of specific types of RNA or other proteins build up within the body and can be used as markers for the disease.

Simply put, the genetic information in cellular DNA is copied and transcribed for use in manufacturing proteins by messenger RNA and transfer RNA. In effect, therefore, Tosoh's diagnostic system is looking at a specific protein that is indicative of the disease mechanism, rather than attempting to spot disorders in DNA or to identify the DNA of the microbe.

Tosoh's TRC system can identify the RNA, for example, produced by a pathogenic microbe or cancer cell. Technology has been developed to take a very small sample and increase its amount to allow accurate detection through a process called amplification, in which the strands of RNA are duplicated. The speed of the process and the quality of the RNA produced clearly have an important bearing on the performance of the diagnostic equipment. Tosoh's advanced amplification and detection technologies, which require only 10 to 30 minutes to test a pretreated sample, have been complemented by the Company's alliance with Gene-Probe. That tie-up is allowing the quick development of TRC reagents for detecting microbes. This technology is set to make significant contributions to the early detection of infectious and other diseases with the real-time fluorescence monitor TRCR-160.

We have hit the ground running in the exciting new gene test reagent and device market, introducing a TRC test reagent and monitoring system in Japan in fiscal 2004. starting treatment. In Japan, our addition of new testing categories, such as BNP and other cardiac markers, has set the stage for sales and profitability growth based on new and established customers. In the United States, we are targeting the 14,000-strong physician office laboratories (POLs) market, where we see strong sales potential for our compact AIA-360 model because of its high speed and simple operation.

Although revisions in medical treatment prices will influence the sales of diagnostic HPLC testing for glycohemoglobin, testing is critical in the treatment of diabetes, ensuring firm demand. The increase in the number of diabetics globally causes us to anticipate demand to grow worldwide. Our automated glycohemoglobin analyzer HLC-723G7 remains highly competitive in its field for its speed, simplicity of use, and accuracy. We are confident that efforts to make lower-cost and more-compact models of this analyzer will continue its popularity.

In December 2003, we laid the groundwork for our entrance into the gene test reagent and device business by signing a cross-licensing agreement with Gen-Probe, of the United States. The agreement concerns nucleic acid testing (NAT) technologies and products (see highlight). As a result, Tosoh has gained access to Gen-Probe's proprietary transcription-mediated amplification (TMA) and ribosomal RNA technologies, which it will combine with its own patented transcription reverse-transcription concerted (TRC) amplification and intercalation activating fluorescence (INAF) detection technologies.

We have hit the ground running in this exciting new market, introducing a TRC test reagent and monitoring system in Japan in 2004. The reagent measures a messenger RNA transcribed from a toxin-linked gene that causes food poisoning. Other test reagents in the works include those for detecting mRNA specific to a variety of diseases. In addition, we began sales of TRCR-160, a real-time monitoring system for TRC reactions that is fast, simple to use, and compact. Utilizing a homogenous amplification and fluorescence monitoring technique, TRCR-160 requires only 10 to 30 minutes to test a pretreated sample. These features ensure strong sales for the monitoring system and for the continually expanding family of test reagents.

### **Service Group**

Service Group consolidated net sales increased 3.6%, to ¥41.3 billion, and operating income declined 2.6%, to ¥2.3 billion.



#### FY 2004 Review

Although the revenues of logistics services and trading subsidiaries increased, construction services subsidiaries performed poorly.

#### Strategy & Outlook

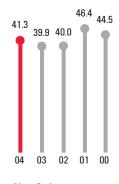
Service Group operations primarily comprise logistics, construction, engineering support, and related services. For the cost-efficient concentration of resources and expertise, these services have been set up under an autonomous group that supports the rest of Tosoh's business groups.

Tosoh's analytical chemistry, information technology, and general administrative operations have also been spun off into independent operating companies to provide the most efficient support to the rest of the Company's operations.

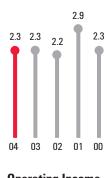
The Tosoh Analysis & Research Center specializes in organic, inorganic, and polymer chemistry and in electronic materials and provides a range of sophisticated analytical services to Tosoh Group members. Tosoh Information Systems likewise assists Tosoh Group companies in IT solutions, such as the introduction and development of a new ERP system. Tosoh General Services provides support for personnel management, employee benefit administration, and training activities. The company is particularly focused on developing new social services that support employees. We operate financial services in Japan, while for other regions these functions are undertaken by regional service platforms.

Service Group companies are constantly working to improve the quality of their operations. Tosoh Logistics received ISO 9001 certification for all its quality control systems at nine sites in Japan, as did Tosoh Analysis & Research Center for three sites in Japan.

Additionally, companies in the Group are evolving from cost centers to profit centers. This is accomplished by operating more on a commercial basis. Prices are determined by market rates, allowing for competition with external suppliers. This shift is being implemented as a means to further increase cost performance.



Net Sales (Billions of Yen)



**Operating Income** (Billions of Yen)

### **Research & Development**

During fiscal 2004, the Tosoh Group invested more than ¥10 billion in R&D.



Tosoh R&D is supporting development of tomorrow's advanced IT systems. Society increasingly looks to technological progress to support increased comfort and safety. That expectation applies to the IT systems used to transmit massive amounts of information, to the so-called green transport and energy systems that we rely on to minimize environmental impact and to the medical diagnostic systems that we depend on for the early discovery of debilitating and life-threatening diseases.

To fulfill that expectation, makers such as Tosoh of the chemical and other materials used in advanced technologies will need to impart to those materials ever-superior functionality and reliability. At Tosoh Group, approximately 800 researchers join their experience and knowledge with that of leading-edge research institutions and of the academic community in the quest for progress. The Tosoh Group invested over ¥10 billion in R&D in fiscal 2004.

#### **Contributing to the Communications Revolution**

Accelerating advances in IT systems demand increased integration in semiconductor chips. Achieving this requires nanometer-level design accuracy, extremely high-purity materials, and a high degree of formation control. At Tosoh, we utilize our accumulated technologies in metallurgy, metal organics, organic compound molecular design, and organic synthesis to supply materials to support the development of advanced IT systems.

Sputtering targets represent the fruits of our labors in the field of metallurgy. They involve the highpurity chrome, aluminum, and other metals essential to the production of semiconductors, magnetic recording media, and recording head and thin-film resistors.

The thin films used in the semiconductors of the future will depend on chemical vapor deposition (CVD) technology. Based on its expertise in molecular design and thin film formation technologies, Tosoh is hard at work developing CVD materials, such as ruthenium and iridium complexes, with superior performance features.

Quartz parts, such as reaction chambers and boats, and substrates produced by Tosoh play an important role in the manufacture of semiconductors. To increase yields, quartzware must exhibit high levels of purity and superior heat resistance, durability, and ease of processing. Our researchers are improving on our refining, formation, fabrication, powder molding, and plasma spraying technologies for quartz to steadily develop a line of quartzware products that is in a class by itself globally.

A revolution is under way in flat-panel displays, which play a central role in our information society. Manufacturing large-screen LCDs places daunting requirements on quartz substrates because they must have highly accurate dimensions and a uniformly polished face despite their large size. The proprietary technologies of the Tosoh Group have been instrumental in bringing large-screen displays to consumers.

Another Tosoh material important to LCD production is the indium tin oxide (ITO) sputtering target used in the manufacture of transparent electrodes. To maintain our position as a global leader in ITO sputtering targets, we are constantly improving our products in this area, aiming for the next level of excellence. Equally important to the sharp picture quality of flat-panel displays is Tosoh-developed, maleimide-based, transparent heat-resistant resin, which is used as an optical film.

Our molecular design and organic synthesis technologies are key contributors to the development of materials for the organic electroluminescent (EL) displays rapidly gaining popularity in the display market. The technology to synthesize high-efficiency electron hole transport materials, long an industry stumbling block, is among the results of our efforts with these technologies.

#### **Contributing to Better Health Care**

Superior rigidity and separation capabilities have extended the applications for our organic polymer TOYOPEARL packing materials beyond the research field. Those materials now contribute significantly in the pharmaceutical and food products fields.

We also have moved into the health care diagnostic field. We have done so by combining our knowhow in high-performance liquid chromatography (HPLC) equipment, developed based on the special features of our packing materials, with our trace amount analysis and other technologies. Speed and accuracy have built for us a reputation as a leading manufacturer of glycohemoglobin analyzers, important tools in the long-term care of diabetic patients, who must regularly monitor their blood sugar levels. In addition, we are developing an analyzer for certain lipoproteins that indicate patients are at high risk for arteriosclerosis.

We have, meanwhile, combined our scientific instrument analysis technology with biotechnology. This has led us to develop immunodiagnostics systems that work based on a method of measurement using monoclonal antibodies. Our customers in the clinical diagnosis field hold these systems in great regard.

We have taken several steps forward in biotechnology, particularly with the development of the transcription reverse-transcription concerted (TRC) amplification method and a system for monitoring it. This advance has opened the door for Tosoh's entry into genetic diagnosis, which has application in the quick and accurate diagnosis of infectious diseases.

#### **Contributing to Environmental Protection and Energy Conservation**

Tosoh believes that the chemical industry as a whole must use its knowledge of chemistry to contribute to environmental preservation and remediation. For its part, Tosoh is heavily engaged in activities related to wastewater, groundwater, and contaminated soil purification. The Tosoh Group puts the special properties of a variety of its chemicals and other materials to work in preserving and cleaning up the environment.

The heavy metals in the fly ash emitted from garbage incinerators pose a considerable threat to the surrounding environment and to the inhabitants of nearby communities. So Tosoh has developed a chelating agent that safely traps toxic heavy metals, preventing them from being released into the environment. This product is used in fly ash processing systems at garbage incinerators throughout Japan. And we are working on new applications of this agent in soil remediation.

Tosoh Group subsidiary Organo Corporation specializes in wastewater treatment technology. Moreover, a Tosoh research team now complements Organo's expertise with materials that it has developed to efficiently remove small amounts of fluorine ions and other harmful substances from wastewater and groundwater. Tosoh continues, meanwhile, to pursue new applications of chemistry for the protection of water.

To clean the air we breathe, Tosoh utilizes the special properties of zeolite. We used the extensive knowledge that we gained in producing an array of synthetic zeolites to develop a practical application for zeolite in cleaning the exhaust emissions of automobiles. This product is in use in the exhaust systems of automobiles in Japan and Europe. We also have used modifying technologies to add functions that expand the applications of zeolite to purify gas exhaust at factories.

In addition, Tosoh is developing a business in measuring environmental pollutants and continues to make progress in developing improved analytic technologies. Eco-Techno Corporation, a Tosoh subsidiary, has developed technologies that efficiently and rapidly test for dioxin. And Tosoh has applied knowledge gained in developing medical diagnostic systems to create a simple method of measuring endocrine-disrupting materials, such as estrogen, in the environment using antibodies.

#### **Contributing to Better Lifestyles through More Comfortable and Safer Products**

Because Tosoh is principally a materials manufacturer, it does not produce a host of end-user products. End users, however, do come in direct contact with many of our polymers and other materials. Therefore, we conduct R&D aimed at improving consumers' lifestyles through developing safer and better materials.

Tosoh's major bulk products include polyethylene, EVA, polyvinyl chloride, chloroprene rubber, chlorosulfonated polyethylene, and hot-melt adhesives. We are improving these bulk products to develop grades that more directly match customer needs. For example, we are developing markets for specialty polyethylene for intravenous drip bags and film used in the agriculture field and for EVA for heat-resistant hot-melt adhesives. We also have introduced a low viscous grade polyvinyl chloride paste.

Tosoh also produces an important engineering plastic, polyphenylene sulfide (PPS), of which it is developing improved grades for electrical and electronic parts, optical devices, and automotive parts. Recently, demand for PPS has begun emerging from hybrid car manufacturers.

Tosoh's tertiary-amine catalyst for making polyurethane foam is used in a range of products, such as car seats, sofas, insulation, and shoe soles. Our expertise in this area has led to our development of many new catalysts to meet the need for CFC-free and amine emission-free environmentally friendly processes. In addition, our research centers provide technical services in this area worldwide.

Tosoh R&D is resulting in materials that help purify contaminated soil, reduce toxic emissions, remove harmful substances from wastewater, create cleaner automobile emissions, and test for environmental pollutants.

## **Environmental Responsibility**

Tosoh shares environmental concerns with the communities around it.



## Total Commitment – the Integral Role of Environmental Preservation and Public Safety and Health

The Tosoh Group has long realized that good corporate citizenship is an essential foundation for its business strategies, such as harnessing technology and achieving sustainable growth. Over the years, this awareness has been blended into every facet of our business, becoming an integral part of our operations. We have developed programs, established standards, set goals, and put in place assessment functions. Because the bar is regularly being raised on industry regulations, we are constantly dealing with growing pains, but when we do make a mistake we learn from it and take steps to avoid repeating it. The incident of the ethylene plant shutdown at the Yokkaichi Complex during the fiscal year under review related to a problem in the administration of our voluntary safety inspection program has spurred us to reevaluate all our procedures and ensure outstanding compliance throughout the Company.

**Audited Responsible Care Activities** 

In 1995, we were proud to become one of the founding members of the Japan branch of the worldwide Responsible Care<sup>®</sup> (RC) movement because we believed the organization would help further systematize our efforts and focus the entire chemical industry on its important goals.

Our Responsible Care activities are assessed using internal and external audits. External audits are carried out as part of the Japan Responsible Care<sup>®</sup> Council (JRCC) Responsible Care Verification System and the ISO certification process. In 2001, the JRCC Responsible Care Verification Center inspected and approved our management system and our occupational safety and health and social dialogue programs. In 2002, it followed up with certification of our safety and disaster prevention, distribution safety, and environmental preservation programs.

Voluntary internal audits are conducted through a process where our RC Committee reports directly to the president in keeping the Company on track toward the environmental and safety goals set out in its environmental plan. We are now working toward establishing a global environmental plan and related standards for the entire Tosoh Group.

The ISO certification program also provides an external check of our programs. All Tosoh's manufacturing complexes in Japan have obtained ISO 9001 quality assurance and ISO 14001 environmental management certification. And our Group affiliates are targeting the same goals. In July 2002, Tosoh's Scientific Instruments Division, Tosoh AIA Inc., Tosoh Techno-System Inc., and Tosoh Hi-Tec Inc. obtained ISO 13485 certification, a special standard for medical devices.

All of Tosoh's manufacturing complexes in Japan have obtained ISO 9000 series quality assurance and ISO 14001 environmental management certification.

#### **Targeting a Cleaner and Safer Environment**

We have clear long-term goals for pollution control. We are aiming for a 75% decrease in emissions singled out for control by the Japanese government under the Pollutants Release and Transfer Register (PRTR) Law compared with 1995 figures by March 2007 and achieved a 68% reduction by the end of the fiscal year ended March 2003. We also are working toward an 80% reduction in our disposal volume of industrial waste compared with 1990 by 2010 and already have attained a 66% decrease. We are cutting our emissions of benzene and several other chemicals the government has singled out for voluntary control. To ensure the safety of our products, we monitor them throughout their life cycle by looking at such factors as their toxicity and proper use. We then provide tools, such as Material Safety Data Sheets (MSDS), to manage any discernible risks. Our active product safety inspection program carried out 27 inspections during the fiscal year under review.

#### **Eco-Business and Recycling**

Centered on such subsidiaries as Organo Corporation, our eco-business principally comprises aminebased toxic heavy metal chelating agents used at municipal incinerators and environmentally friendly, hydrocarbon-based cleaning agents used in the precision machinery and electronics industries, as well as advanced wastewater treatment facilities, and groundwater and soil purification operations. We also market a broad range of analytical equipment for environmental monitoring.

The cement plant at our Nanyo Complex is a stellar example of a multiple resource recycling operation. The plant utilizes solid refuse-derived fuel (RDF) produced from the refuse of a nearby town. It also recycles sludge from petroleum refineries and electronic materials manufacturers, slag from steelmakers, scrap tires, and even the ash from the spent RDF pellets. Tosoh recycles the wastes of companies outside its own group in other operations as well. Plant waste from pharmaceutical, agricultural pesticides, and chemical compound manufacturers are processed at its chlorine and bromine recycling facilities.

We communicate our environmental preservation concerns and activities to the communities around us and try to take part in their environmental preservation activities. We provide tours of our production facilities; hold regional Responsible Care meetings with community members, government officials, and educators; and manage and sponsor regional volunteer cleanup activities. Sharing leads to greater commitment on both sides to contribute to environmental preservation.

#### **Environmentally Friendly Products and Technology**

#### Zeolites

Tosoh is utilizing the strong adsorption and catalyst properties of zeolites to develop a range of products that collect volatile organic compounds (VOCs) emitted by factories and hydrocarbons and other substances emitted by automobiles. The application of zeolite in catalytic converters for exhaust emissions is expected to make a significant contribution to reduced pollution from automobiles.

#### **Next-Generation Chemical Process Technology Project**

#### **Triarylamines Technology**

With the world rapidly shifting to organic electroluminescent (EL) displays, the next generation of flatpanel displays, Tosoh is already working on minimizing the impact of this new technology on the environment. The triarylamines used for hole transport in EL displays traditionally required large volumes of copper for synthesis. By developing an organic metal complex catalyst with higher activity and selectivity, Tosoh has succeeded in significantly reducing the required amount of copper, conserving resources and generating less waste. Tosoh is developing new products to help reduce pollution, energy consumption, and the use of natural resources in manufacturing.

### Management's Discussion and Analysis

#### **Business Overview**

#### **Market Conditions**

During the fiscal year ended March 31, 2004, the long-awaited recovery in Japan's economy commenced, finally providing some light at the end of the tunnel. Riding the wave of a robust export market, corporate Japan's performance swung upward, prompting growth in private-sector capital investment to improve facilities and to prepare for further recovery. Concurrently, government structural reform of the financial sector began to demonstrate results and in conjunction with overall economic growth in 2003 helped to shore up the ailing stock market. Nevertheless, Japan still wrestled with deflation, and many companies continued their restructuring programs. These conditions prevented any improvement in consumers' concern over job security and falling personal income and dampened any potential rise in personal consumption. Overall, the benefits of recovery in the economy and improved corporate performances have yet to trickle down to the consumer sector and support a broader-based economic recovery. However, there are signs that this process is under way.

Outside Japan, the economies of the United States and Europe remained firm. The major economies | of Asia, and of China in particular, continued to post strong growth, despite some fluctuations during the fiscal year caused by the end of the severe acute respiratory syndrome (SARS) epidemic and by the overheating of the Chinese economy. Globally, the recoveries of the semiconductor and IT markets played a notable role in fueling growth, bolstered by the growing market penetration of digital electronic products.

For the Japanese chemical industry, the strong demand from Asian markets remained the driving force in the market. Price increases were achieved in many product categories in domestic and overseas markets, albeit many of the price hikes came late in the fiscal year, particularly in the domestic market. On the flip side of the coin, booming demand had its price in higher feedstock prices and other costs, such as freight services.

Against the backdrop of robust export markets, Tosoh's core sources of earnings – Vinyl Isocyanate Chain operations and specialty products – again registered growth. Despite the closing of the ethylene plant at the Yokkaichi Complex for two months, the Company maintained shipment levels for such major products as chlorine, caustic soda, and vinyl chloride monomer (VCM). Continued recovery in IT-related industries, the expanding flat-panel display market, and a generally firm automotive market supported favorable sales performances by our Organic Chemicals and Electronic Materials divisions. Moreover, the high-performance liquid chromatography columns and other scientific instruments and related chemical products of the Scientific Instruments Division also recorded growth worldwide.

#### **Significant Events**

In spring 2003, the Company discovered that previous voluntary inspections of the ethylene plant at the Yokkaichi Complex had not been carried out as required according to its certification as an approved operator under the High-Pressure Gas Safety Law. To conduct the inspections once more and completely ensure operational safety, Tosoh halted operations at the ethylene plant in May 2003. The plant resumed operation in July, with measures in place to prevent any reoccurrence of this event.

Management again took steps to solidify the business bases of its petrochemical and basic operations by expanding their scope and improving their competitiveness.

To strengthen chlor-alkali operations in line with the accelerating demand in Asia, Tosoh completed an expansion of its caustic soda production facilities at its Nanyo Complex in June 2004 after the end of the fiscal year, adding 130,000 tons of capacity. Similarly in June 2004, the Company completed construction of a naphtha-based carbon monoxide production facility to supply affiliate Nippon Polyurethane Industry Co., Ltd. (NPU), with raw materials for the production of urethane. Tosoh is also in the process of adding 400,000 tons of vinyl chloride monomer (VCM) capacity by the end of 2005. And aniline production facilities with an annual capacity of 150,000 tons to supply NPU's methylene diphenyl diisocyanate (MDI) production are set to come onstream in March 2005. To boost its electrolysis capacity, the Company has also begun the long process of clearing regulatory hurdles and constructing another electric power plant. The power plant is slated to come onstream some time in 2008.

During fiscal 2004, Tosoh continued to expand PVC resin capacity to supply the hungry Asian market. The Company took a larger stake in Philippine Resins Industries, Inc., and raised that company's capacity to 100,000 tons annually by eliminating a bottleneck in its operations. Moreover, Tosoh decided to build a PVC plant in Guangzhou, China, that will add further PVC capacity.

In the petrochemicals business, the Company built a tertiary butyl alcohol (TBA) production facility to more effectively utilize its naphtha derivative products.

Tosoh's efforts in the Specialty Group were aimed at building technological capabilities and developing product lines that are leaders in global markets. In April 2003, the Company converted Tosoh Silica Corporation, which manufactures and sells white carbon and fillers, to a wholly owned subsidiary. At the end of the fiscal year under review, the Scientific Instruments Division entered the highly promising field of genetic diagnosis.

#### Net Sales

Consolidated net sales climbed 2.6%, to ¥484.4 billion (\$4,583 million), continuing their performance rebound thanks to booming demand in Asia and because of recoveries in other overseas markets.

By business segment, the Petrochemical Group took advantage of continued strong demand and rising prices to overcome the impact of the ethylene plant stoppage. Sales rose 2.2%, to ¥139.8 billion (\$1,323 million), accounting for 28.9% of consolidated net sales. Our Basic Group enjoyed sharply rising demand overseas, particularly for VCM from China. The domestic market firmed up as well, enabling sales to rise 2.5%, to ¥138.4 billion (\$1,309 million). The Basic Group contributed 28.6% of net sales. The Specialty Group, usually our main generator of growth, achieved strong sales expansion in areas related to the upswing in semiconductor and IT-related industries but struggled in some other areas. Overall, however, sales still increased 2.9%, to ¥164.9 billion (\$1,560 million), accounting for 34.0% of net sales. Sales of the Service Group rose 3.6%, to ¥41.3 billion (\$391 million), generating 8.5% of consolidated sales.

Overseas sales – defined as export sales and sales outside Japan by overseas subsidiaries – were up slightly, to ¥128.9 billion (\$1,219 million). As a proportion of consolidated net sales, overseas sales decreased to 26.6%, from 27.1%, indicating the firming up of domestic sales during the fiscal year under review. Sales to Asia totaled ¥90.7 billion (\$858 million), contributing 18.7% of consolidated net sales.

#### **Costs & Expenses**

#### **Operating Expenses**

Along with 2.6% net sales growth there was a 2.8% rise in the cost of sales, which increased ¥10.2 billion (\$97 million), to ¥373.0 billion (\$3.5 billion). The cost of sales ratio, however, remained approximately the same, at 77.0%.

Selling, general and administrative (SG&A) expenses increased marginally, to ¥81.4 billion (\$770 million). The ratio of SG&A expenses to sales declined to 16.8%, from 17.2%.

R&D expenditures remained on par with the previous year and totaled ¥10.3 billion (\$98 million). The average price of naphtha, one of the Group's major costs, rose to ¥25,550 per kiloliter, from ¥23,950 per kiloliter, during the fiscal year under review. Given that the average exchange rate against

the U.S. dollar appreciated from ¥121.98 to ¥113.19, that increase represented a larger jump on global markets.

#### **Capital Expenditures, Depreciation and Amortization**

Tosoh Group capital expenditures during the fiscal year ended March 2004 totaled ¥21.3 billion (\$202 million), up substantially from the previous fiscal year because of ongoing capacity expansion. Management's policy is to keep capital investment within the scope of depreciation. That goal was again achieved in fiscal 2004, with depreciation and amortization expenses declining somewhat, to ¥24.0 billion (\$227 million). Management expects depreciation expenses of a similar level in fiscal 2005.

#### Earnings

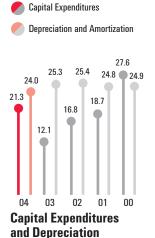
#### **Operating Income**

Despite sales growth, at 2.6%, falling below the increase in the cost of sales, at 2.8%, gross profit still edged up ¥2.2 billion (\$21 million), or 2.1%, to ¥111.4 billion (\$1,054 million). The gross profit margin, however, declined slightly to 23.0%, from 23.1%. Subtracting SG&A expenses yielded an increase in consolidated operating income of ¥2.0 billion (\$19 million), or 7.2%, to ¥30.1 billion (\$284 million). The operating profit margin improved to 6.2%, from 5.9%.

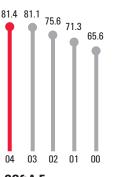
Tosoh's business segments posted mixed performances in profits compared with the previous year, primarily due to the impact of the stoppage of the ethylene plant. The operating income of the Petrochemical Group dropped 54.0%, to ¥3.0 billion (\$28 million). On the other hand, the operating income of our Basic Group surged ahead 56.4%, to ¥8.9 billion (\$85 million). The Specialty Group's operating income advanced 17.7%, to ¥15.8 billion (\$150 million). The operating income of the Service Group declined 2.6% year on year, to ¥2.3 billion (\$21 million).

#### Nonoperating Income and Expenses

At ¥509 million (\$5 million), interest and dividend income increased 26.6% compared with the previous fiscal year. Among nonoperating expenses, interest expense continued to decline in line with Tosoh's efforts to cut interest-bearing debt and the continued low interest rate climate, falling 16.6%, to ¥4.6 billion (\$44 million). Among other items, there were foreign exchange losses, net of ¥1.7 billion (\$16 million), equity in losses of affiliates totaling ¥1.0 billion (\$10 million), and insurance received totaling ¥2.5 billion (\$23 million). Excluding extraordinary items, there was a net nonoperating expense of ¥4.7 billion (\$44 million) compared with ¥6.7 billion in the previous fiscal year. Ordinary income (income before extraordinary items, taxes, and minority interests), therefore, rose 18.8%, to ¥25.4 billion (\$240 million).



and Amortization (Billions of Yen)



SG&A Expenses (Billions of Yen)

#### **Net Income, Extraordinary Items**

The major extraordinary item in the fiscal year under review was an impairment loss on fixed assets totaling ¥10.8 billion (\$103 million). Impairment loss on fixed assets is a new accounting standard introduced for the first time in the fiscal year under review. The new accounting method seeks to better reflect the true value of long-lived assets on the Company's books. An impairment loss is recognized when there has been a clear and significant reduction in the recoverable value of an asset. In the fiscal year under review, such assets mainly comprised the real estate assets of the Company. For further details, please see the Notes to the Consolidated Statements.

Among other extraordinary items, there was a recognized prior service credit amounting to ¥3.8 billion (\$35.7 million). This prior service cost resulted from the Company revising its post-employment benefits plan. The Company booked a gain on sales of investment securities of ¥1.3 billion (\$12 million).

Income before income taxes and minority interests rose ¥4.7 billion (\$44 million), jumping 39.7%, to ¥16.4 billion (\$155 million). Income taxes increased to ¥8.3 billion (\$79 million). Net income, therefore, amounted to ¥7.3 billion (\$69 million), compared with ¥4.8 billion the year before. Net income per share was ¥11.96 (\$0.11), compared with ¥7.87 in the previous fiscal year. Return on equity (ROE) advanced again, improving to 7.6%, from 5.2% in the prior fiscal year.

#### **Financial Position**

#### Assets

Current assets expanded to ¥235.2 billion (\$2,226 million), an increase of ¥9.3 billion (\$88 million), or 4.1%, over the previous year. This increase can be mainly attributed to higher levels of trade receivables, less allowance for doubtful accounts, which increased 7.6%, to ¥133.2 billion (\$1,260 million), and a 7.7% rise in inventories, to ¥68.9 billion (\$652 million). Cash and cash equivalent were down 19.7%, to ¥17.0 billion (\$160 million).

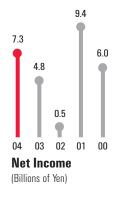
Total investments advanced 6.7%, to ¥55.3 billion (\$524 million). Property, plant and equipment, less accumulated depreciation, declined 3.7%, to ¥235.7 billion (\$2,230 million). Total assets edged up marginally, to ¥549.2 billion (\$5,196 million). At fiscal year-end, our net assets per share amounted to ¥165.7 (\$1.57).

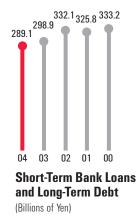
#### Liabilities

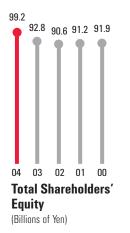
Current liabilities declined 4.1% year on year, to ¥262.5 billion (\$2,484 million). The decrease could be mainly attributed to a significant decline in the current maturities of long-term debt, which fell 36.3%, to ¥42.8 billion (\$405 million), primarily because of the redemption of convertible bonds. With the exception of short-term bank loans, which decreased marginally, to ¥105.9 billion (\$1,002 million), other items also moved up. Trade payables increased 10.2%, to ¥72.6 billion (\$687 million), while income taxes payable rose to ¥8.4 billion (\$79 million) and other current liabilities climbed to ¥32.9 billion (\$311 million). The gap between current assets and liabilities contracted during the fiscal year, producing a significant improvement in our working capital deficit, which dropped ¥20.5 billion (\$194 million), or 42.8%, to ¥27.3 billion (\$258 million). Negative working capital is largely attributable to the ongoing expansion of Tosoh Group business.

Long-term debt, less current maturities, increased 11.6% year on year, to ¥140.4 billion (\$1,329 million).

At fiscal year-end, the decreases in short-term bank loans and long-term debt resulted in a net decrease in interest-bearing debt of ¥9.8 billion (\$93 million), or 3.3%, to ¥289.1 billion (\$2,735 million). Retirement and severance benefits declined 24.9%, to ¥22.0 billion (\$208 million). Total liabilities and minority interests, therefore, decreased slightly, to ¥450.0 billion (\$4,257 million).







#### **Shareholders' Equity and Dividends**

Shareholders' equity at fiscal year-end was up 6.9%, to ¥99.2 billion (\$939 million). Retained earnings, which advanced ¥3.7 billion (\$35 million), were the main factor in this growth. Reflecting expanded value, the shareholders' equity ratio improved to 18.1%, from 17.0% in the prior fiscal year.

#### **Cash Flows**

Although free cash flow for the year fell ¥15.9 billion (\$151 million), or 52.5%, to ¥14.4 billion (\$136 million), Tosoh maintained adequate liquidity for operations. There was an overall net decrease in cash and cash equivalents, however, of ¥4.2 billion (\$39 million), mainly related to increased purchases of plant and equipment and investment securities coupled with large repayments of long-term debt, offset somewhat by proceeds from long-term debt. The effect of exchange rate changes on cash and cash equivalents was negative but not material.

Net income before taxes and minority interests increased, while net cash provided by operating activities decreased 24.4%, to ¥33.9 billion (\$321 million), because of a variety of factors including increases in income taxes paid and inventories.

Net cash used in investing activities amounted to ¥19.5 billion (\$185 million), up 34.1% year on year. A 53.4% increase in payments for purchases of property, plant and equipment, to ¥20.3 billion (\$192 million), was mainly responsible for this expansion.

Net cash used in financing activities totaled ¥18.4 billion (\$174 million), down 47.8% from the previous year. Although there were repayments of long-term debt totaling ¥68.1 billion (\$644 million), they were largely offset by ¥54.5 billion (\$516 million) in proceeds from long-term debt.

## **Consolidated Statements of Income**

Tosoh Corporation and Its Consolidated Subsidiaries Years ended March 31, 2004 and 2003

Teal's ended March 31, 2004 and 2003					т	housands of
	Millions of Yen			U.S. Dollars (Note 1)		
		2004		2003		2004
Revenues:						
Net sales (Note 12)	¥ 4	84,389	¥	471,921	\$ 4	1,583,111
Interest and dividend income		509		402		4,816
Gain on sales of investment securities		1,301		20		12,310
Insurance received		2,482		135		23,484
Recognized prior service credit (Note 8)		3,768		_		35,651
Gain on return of substituted portion of the government's welfare Pension Insurance						
Scheme (Note 8)		_		3,835		_
Other income		2,621		2,794		24,799
Total	4	95,070		479,107	4	1,684,171
Cost and expenses:						
Cost of sales (Note 12)	3	72,969	:	362,740	3	,528,896
Selling, general and						
administrative expenses (Note 12)		81,365		81,133		769,846
Interest expense		4,625		5,543		43,760
Foreign exchange losses, net		1,711		876		16,189
Loss on revaluation of investment securities		11		3,369		104
Equity in losses of affiliates		1,005		697		9,509
Impairment loss on fixed assets (Note 12)		10,841		-		102,574
Amortization of net transition obligation (Note 8)		_		7,666		_
Other expenses		6,150		5,348		58,188
Total	4	78,677	4	467,372	4	,529,066
Income before income taxes and minority interests		16,393		11,735		155,105
Income taxes:						
Current		9,695		7,164		91,730
Deferred (Note 11)		(1,380)		(1,222)		(13,057)
Minority interests		(781)		(984)		(7,390)
Net income	¥	7,297	¥	4,809	\$	69,042
			Yen			ars (Note 1)
Per share of common stock:			1611		5.5. DUII	
Net income per share	¥	11.96	¥	7.87	\$	0.11
Cash dividends applicable to the year	¥	5.00	¥	5.00	\$	0.05

The accompanying notes are an integral part of these statements.

## **Consolidated Balance Sheets**

Tosoh Corporation and Its Consolidated Subsidiaries March 31, 2004 and 2003

	Million	Thousands of U.S. Dollars (Note 1)	
	2004	2003	2004
Assets			
Current assets:			
Cash and cash equivalents	¥ 16,950	¥ 21,100	\$ 160,375
Marketable securities (Note 5)	89	290	842
Trade receivables, less allowance			
for doubtful accounts (Notes 3 and 7)	133,213	123,778	1,260,413
Inventories (Note 4)	68,934	64,004	652,228
Deferred tax assets (Note 11)	4,859	4,659	45,974
Other current assets (Note 7)	11,182	12,077	105,800
Total current assets	235,227	225,908	2,225,632
Investments:			
Investment securities (Notes 5 and 7)	26,324	19,546	249,068
Investments in affiliates	22,810	25,799	215,820
Long-term loans receivable	787	835	7,446
Other (Note 7)	5,410	5,670	51,188
Total investments	55,331	51,850	523,522
Property, plant and equipment - net (Notes 6 and 7)	235,715	244,845	2,230,249
Other assets:			
Deferred tax assets (Note 11)	15,244	15,474	144,233
Intangible and other assets	7,696	7,620	72,816
Total other assets	22,940	23,094	217,049

Total assets	¥549,213	¥ 545,697	\$5,196,452

The accompanying notes are an integral part of these statements.

	Millior	Millions of Yen	
	2004	2003	2004
Liabilities and Shareholders' Equity			
Current liabilities:			
Short-term bank loans (Note 7)	¥ 105,926	¥ 105,955	\$ 1,002,233
Current maturities of long-term debt (Note 7)	42,752	67,134	404,504
Trade payables	72,568	65,880	686,612
Income taxes payable	8,384	5,622	79,326
Other current liabilities	32,911	29,110	311,392
Total current liabilities	262,541	273,701	2,484,067
Long-term liabilities:			
Long-term debt, less current maturities (Note 7)	140,419	125,797	1,328,593
Retirement and severance benefits (Note 8)	21,969	29,237	207,863
Other liabilities	3,745	3,795	35,433
Total long-term liabilities	166,133	158,829	1,571,889
Total liabilities	428,674	432,530	4,055,956
Minority interests:	21,301	20,372	201,542
Contingent liabilities (Note 9)			
Shareholders' equity:			
Common stock:			
Authorized – 1,200,000,000 shares;			
lssued – 601,161,912 shares	40,634	40,634	384,464
Capital surplus	29,726	29,727	281,257
Retained earnings	31,775	28,028	300,643
Net unrealized holding gains on securities	3,729	262	35,282
Foreign currency translation adjustments	(5,721)	(5,000)	(54,129)
Treasury stock, 3,033,269 shares in 2004 and			
2,876,490 shares in 2003	(905)	(856)	(8,563)
Total shareholders' equity	99,238	92,795	938,954
Total liabilities and shareholders' equity	¥ 549,213	¥ 545,697	\$ 5,196,452

# **Consolidated Statements of Cash Flows**

Tosoh Corporation and Its Consolidated Subsidiaries Years ended March 31, 2004 and 2003

	Millions	s of Yen	Thousands of U.S. Dollars (Note 1)
	2004	2003	2004
Cash flows from operating activities:			
Income before income taxes	¥ 16,393	¥ 11,735	\$ 155,105
Adjustments to reconcile income before income taxes	+ 10,000	÷ 11,700	ψ 100,100
to net cash provided by operating activities:			
Depreciation and amortization	24,540	25,767	232,188
Impairment loss on fixed assets	10,841		102,574
Increase (Decrease) in retirement and severance			,
benefits	(7,851)	1,294	(74,283)
Interest and dividend income	(509)	(402)	(4,816)
Interest expense	4,625	5,543	43,760
Equity in losses of affiliates	1,005	697	9,509
Net (gain) loss on sales of investment securities	(1,288)	9	(12,187)
Increase in trade receivables	(5,564)	(3,127)	(52,645)
(Increase) Decrease in inventories	(3,337)	4,696	(31,573)
Increase in trade payables	3,654	7,113	34,573
Other, net	2,142	(849)	20,266
Subtotal	44,651	52,476	422,471
Interest and dividends received	946	774	8,951
Interest paid	(4,735)	(5,718)	(44,801)
Income taxes paid	(6,941)	(2,660)	(65,673)
Net cash provided by operating activities	33,921	44,872	320,948
Cash flows from investing activities:			
Payments for purchases of property, plant and			
equipment	(20,281)	(13,217)	(191,891)
Proceeds from sales of property, plant and			
equipment	753	5,279	7,125
Purchases of investment securities	(2,789)	(6,933)	(26,388)
Proceeds from sales of investment securities	2,645	1,760	25,026
Other, net	156	(1,444)	1,475
Net cash used in investing activities	(19,516)	(14,555)	(184,653)
Cash flows from financing activities:			
Net decrease in short-term bank loans	(1,615)	(4,615)	(15,281)
Proceeds from long-term debt	54,548	18,045	516,113
Repayments of long-term debt	(68,086)	(45,209)	(644,205)
Cash dividends paid	(3,291)	(3,282)	(31,138)
Other, net	43	(206)	407
Net cash used in financing activities	(18,401)	(35,267)	(174,104)
Effect of exchange rate changes on cash and			
cash equivalents	(163)	42	(1,542)
Net decrease in cash and cash equivalents	(4,159)	(4,908)	(39,351)
Cash and cash equivalents at beginning of year	21,100	25,881	199,640
Increase in cash and cash equivalents resulting from			
changes in number of consolidated subsidiaries	9	127	86
Cash and cash equivalents at end of year	¥ 16,950	¥ 21,100	\$ 160,375

The accompanying notes are an integral part of these statements.

# Consolidated Statements of Shareholders' Equity

Tosoh Corporation and Its Consolidated Subsidiaries Years ended March 31, 2004 and 2003

	Millions	s of Yen U	Thousands of S. Dollars (Note 1)
-	2004	2003	2004
Common stock:	V 40 624	V 40 624	¢ 294 464
Balance at beginning of period	¥ 40,634 40,634	¥ 40,634	\$ 384,464
Balance at end of period	40,034	40,634	384,464
Capital surplus:			
Balance at beginning of period	29,727	29,637	281,266
Increase due to revaluation of land of affiliates			
accounted for by the equity method	_	90	_
Loss on disposal of treasury stock	(1)	_	(9)
Balance at end of period	29,726	29,727	281,257
Retained earnings:			
Balance at beginning of period	28.028	26,436	265,190
Net income for the year	7,297	4.809	69,042
Cash dividends paid at ¥5.00 per share	(3,003)	(3,006)	(28,413)
Bonuses paid to directors and corporate auditors	(99)	(40)	(937)
Decrease due to increase in consolidated subsidiaries	(3)	(177)	(28)
Decrease due to changes in shareholding ratio	(445)	(177)	(4,211)
Other	(1.10)	6	( .,=,
Balance at end of period	31,775	28,028	300,643
Net unrealized holding gains (losses) on securities:		(0.40)	
Balance at beginning of period	262	(249)	2,479
Net increase	3,467	511	32,803
Balance at end of period	3,729	262	35,282
Foreign currency translation adjustments:			
Balance at beginning of period	(5,000)	(4,582)	(47,308)
Net decrease	(721)	(418)	(6,821)
Balance at end of period	(5,721)	(5,000)	(54,129)
Traccurst stack			
Treasury stock: Balance at beginning of period	(856)	(1,319)	(8,100)
Reclassifications due to new accounting standard	(850)	601	(8,100)
Disposal of treasury stock	 12	001	114
• •	(45)	(120)	
Purchase of treasury stock Other		(138)	(426)
	(16) ¥ (905)	 ¥ (856)	(151) \$ (8,563)
Balance at end of period	¥ (905)	¥ (856)	\$ (8,563)

The accompanying notes are an integral part of these statements.

## Notes to Consolidated Financial Statements

Tosoh Corporation and Its Consolidated Subsidiaries

#### **1. Basis of Presenting Financial Statements**

Tosoh Corporation (the "Company") and its consolidated domestic subsidiaries maintain their accounts and records in accordance with the provisions set forth in the Japanese Securities and Exchange Law and its related accounting regulations, and in conformity with accounting principles generally accepted in Japan ("Japanese GAAP"), which are different in certain respects as to application and disclosure requirements of International Financial Reporting Standards.

The accounts of consolidated overseas subsidiaries are based on their accounting records maintained in conformity with generally accepted accounting principles prevailing in the respective countries of domicile. The accompanying consolidated financial statements have been restructured and translated into English (with some expanded descriptions and the inclusion of consolidated statements of shareholders' equity) from the consolidated financial statements of the Company prepared in accordance with Japanese GAAP and filed with the appropriate Local Finance Bureau of the Ministry of Finance as required by the Securities and Exchange Law. Some supplementary information included in the statutory Japanese language consolidated financial statements, but not required for fair presentation, is not presented in the accompanying consolidated financial statements.

The translations of the Japanese yen amounts into U.S. dollars are included solely for the convenience of readers outside Japan, using the prevailing exchange rate at March 31, 2004, which was ¥105.69 to U.S. \$1.00. The convenience translations should not be construed as representations that the Japanese yen amounts have been, could have been, or could in the future be converted into U.S. dollars at this or any other rate of exchange.

#### 2. Summary of Accounting Policies

#### **Consolidation and Investments**

The consolidated financial statements include the accounts of the Company and its significant subsidiaries. All significant intercompany transactions and accounts have been eliminated in the consolidation.

Investments in unconsolidated subsidiaries and affiliates are, with minor exceptions, accounted for by the equity method. Equity in earnings of unconsolidated subsidiaries and affiliates has been calculated by excluding unrealized intercompany profits.

In the elimination of investments in subsidiaries, the assets and liabilities of the subsidiaries, including the portion attributable to minority shareholders, are evaluated using the fair value at the time the Company acquired control of the respective subsidiaries.

#### **Translation of Foreign Currencies**

Receivables and payables denominated in foreign currencies are translated into Japanese yen at the year-end rates.

Financial statements of consolidated overseas subsidiaries are translated into Japanese yen at the year-end rate, except that shareholders' equity accounts are translated at historical rates and income statement items resulting from transactions with the Company at the rates used by the Company.

#### **Cash and Cash Equivalents**

Cash, readily-available deposits and short-term highly liquid investments with original maturities of three months or less are considered cash and cash equivalents.

#### Securities

Securities are classified into one of the following categories based on the intent of holding, resulting in the different measurement and accounting for the changes in fair value. Held-to-maturity debt securities are stated at amortized cost. Equity securities issued by subsidiaries and affiliated companies, which are not consolidated or accounted for using the equity method, are stated at moving-average cost. Available-for-sale securities with available fair market values are stated at fair market value. Unrealized gains and unrealized losses on these securities are reported, net of applicable income taxes, as a separate component of shareholders' equity. Other available-for-sale securities with no available fair market values are stated at moving-average cost.

Significant declines in fair market value or the net asset value of held-to-maturity debt securities, equity securities, not on the equity method, issued by unconsolidated subsidiaries and affiliated companies, and availablefor-sale securities, judged to be other than temporary, are charged to income.

#### **Allowance for Doubtful Accounts**

The Company and its consolidated subsidiaries (the "Companies") provide the allowance for doubtful trade receivables by individually estimating uncollectible amounts and for normal receivables based on the Companies' historical experience of write-offs of such receivables.

#### Inventories

Inventories are principally valued at cost as determined by the weighted average method.

### **Property, Plant and Equipment, and Depreciation**

Property, plant and equipment are stated at cost. Cumulative amounts of impairment losses recognized have been deducted from acquisition costs. Depreciation is principally computed over the estimated useful lives of the assets on the straight-line basis. Repairs, maintenance and minor renewals are charged to expense as incurred.

Effective from the year ended March 31, 2004, the Company and its consolidated domestic subsidiaries adopted early the new Japanese accounting standard for impairment of fixed assets. The new standard requires the Companies to review and evaluate its fixed assets for impairment when events or changes in circumstances indicate that the related carrying amounts may not be recoverable. When such events or circumstances arise, an estimate of the future undiscounted cash flows produced by the asset, or the appropriate grouping of assets, is compared to the asset's carrying value to determine if an impairment exists. If the asset is determined to be impaired, the impairment loss is measured based on the excess of its carrying value over its fair value. Assets to be disposed of are reported at the lower of carrying value or net realizable value. As a result of the adoption of this standard, income before income taxes and minority interests for the year ended March 31, 2004 decreased by ¥10,841 million (\$102,574 thousand).

#### Lease Transactions

Finance leases, except those leases for which the ownership is considered to be transferred to the lessee, are accounted for as operating leases.

#### **Retirement and Severance Benefits**

The Companies provide two types of post-employment benefit plans, unfunded lump-sum payment plans and funded contributory pension plans, under which all eligible employees are entitled to benefits based on the level of wages and salaries at the time of retirement or termination, length of service and certain other factors.

The Companies provide allowance for employees' retirement and severance benefits based on the estimated amounts of projected benefit obligation, actuarially calculated using certain assumptions, and the fair value of the plan assets.

Effective April 1, 2000, the Companies adopted the current method described above in accordance with the new Japanese accounting standard for retirement and severance benefits and decided to recognize net transition obligation primarily over five years by using the straight-line method commencing in the year ended March 31, 2001.

In the year ended March 31, 2003, the Company charged to expenses all of the remaining net transition obligation. This was made in light of the substantial reduction in the net transition obligation due to the transfer of the substantial portion of the pension plan and related gain described in Note 8 and the recent increase in unrecognized actuarial losses of the pension plan.

The effect of this change was to decrease income before income taxes by ¥4,151 million.

Prior service cost (credit) is recognized as expense (income) as incurred.

Actuarial gain (loss) is recognized as expense (income) using the straight-line method over 10 years commencing in the following period.

## **Income Taxes**

The asset and liability approach is used to recognize deferred tax assets and liabilities for the expected future tax consequences of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes.

#### **Shareholders' Equity**

The maximum amount that the Company can distribute as dividends is calculated based on the nonconsolidated financial statements of the Company in accordance with the Japanese Commercial Code.

#### **Bonuses to Directors and Corporate Auditors**

Bonuses to directors and corporate auditors are subject to approval by the shareholders and are accounted for by an appropriation of retained earnings.

## **Amounts per Share**

Net income per share is computed based upon the weighted average number of shares of common stock outstanding during the period.

### Reclassifications

Certain reclassifications have been made in the 2003 financial statements to conform to the 2004 presentation.

## 3. Allowance for Doubtful Accounts

Trade receivables have been reduced by allowances for doubtful accounts of ¥512 million (\$4,844 thousand) and ¥800 million, as of March 31, 2004 and 2003, respectively.

## 4. Inventories

Inventories as of March 31, 2004 and 2003 consisted of the following:

	Millions	Thousands of U.S. Dollars (Note 1)	
	2004	2003	2004
Finished products	¥ 40,139	¥ 37,677	\$ 379,781
Raw materials and supplies	18,771	18,366	177,604
Work-in-process	10,024	7,961	94,843
Total	¥68,934	¥ 64,004	\$652,228

## 5. Market Value Information of Securities

The following tables summarize acquisition costs, book values and fair values of securities with available fair values as of March 31, 2004 and 2003.

(1) Held-to-maturity debt securities:

		Millions of Yen				Thousands of U.S. Dollars (Note 1)				
		2004			2003			2004		
	Book value	Fair value	Difference	Book value	Fair value	Difference	Book value	Fair value	Difference	
Total	¥ 60	¥ 60	¥ (0)	¥ 60	¥ 60	¥ (0)	\$ 568	\$ 568	\$ (0)	

(2) Available-for-sale securities:

	Millions of Yen				Thousands of U.S. Dollars (Note		s (Note 1)		
		2004			2003			2004	
	Acquisition cost	Book (fair) value	Difference	Acquisition cost	Book (fair) value	Difference	Acquisition cost	Book (fair) value	Difference
Securities with book values exceeding acquisition costs Securities with book values not exceeding	¥ 8,457	¥ 14,882	¥ 6,425	¥ 2,322	¥ 3,274	¥ 952	\$ 80,017	\$ 140,808	\$ 60,791
acquisition costs	615	596	(19)	7,684	7,253	(431)	5,819	5,639	(180)
Total	¥ 9,072	¥ 15,478	¥ 6,406	¥ 10,006	¥ 10,527	¥ 521	\$ 85,836	\$ 146,447	\$ 60,611

The following tables summarize book values of securities with no available fair values as of March 31, 2004 and 2003.

	Book Value					
	Millions of Yen			Thousands of U.S. Dollars (Note 1)		
		2004		2003		2004
Held-to-maturity debt securities	¥	11	¥	11	\$	104
Equity securities issued by unconsolidated						
subsidiaries and affiliated companies	2	1,026	2	4,060	19	98,940
Available-for-sale securities	10,896		9,438		103,094	

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## 6. Property, Plant and Equipment

Property, plant and equipment as of March 31, 2004 and 2003 consisted of the following:

	Millior	U.S. Dollars (Note 1)	
	2004	2003	2004
Land	¥ 72,676	¥ 77,130	\$ 687,634
Buildings and structures	157,112	155,120	1,486,536
Machinery and equipment	521,059	511,790	4,930,069
Construction in progress	12,126	2,965	114,732
	762,973	747,005	7,218,971
Less accumulated depreciation	(527,258)	(502,160)	(4,988,722)
Net property, plant and equipment	¥ 235,715	¥244,845	\$ 2,230,249

Thousands of

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

Short-term bank loans (partially secured) bore interest at weighted average annual rates of 0.89% and 0.96% as of March 31, 2004 and 2003, respectively. Such loans are generally renewable at maturity.

Long-term debt as of March 31, 2004 and 2003 consisted of the following:

	Millio	Thousands of U.S. Dollars (Note 1)	
	2004	2003	2004
Loans from banks and other financial institutions, 1.65 % maturing serially through 2022:			
Secured	¥ 22,856	¥ 24,923	\$ 216,255
Unsecured	160,315	158,144	1,516,842
Convertible bonds, 2.20%			
maturing serially through 2004			
Unsecured	_	9,864	_
	183,171	192,931	1,733,097
Less current maturities	(42,752)	(67,134)	(404,504)
Total	¥ 140,419	¥ 125,797	\$ 1,328,593

Assets pledged as collateral to secure primarily short-term bank loans and long-term debt as of March 31, 2004 and 2003 were as follows:

		Millions of Yen			Thousands of U.S. Dollars (Note 1)		
		2004		2003		2004	
Property, plant and equipment	¥	132,015	¥	140,607	\$	1,249,077	
Investment securities		221		124		2,091	
Other		927		-		8,771	
Total	¥	133,163	¥	140,731	\$	1,259,939	

The annual maturities of long-term debt as of March 31, 2004 were as follows:

Years ending March 31,	Millions of Yen	Thousands of U.S. Dollars (Note 1)		
2005	¥ 42,752	\$	404,504	
2006	38,325		362,617	
2007	33,201		314,136	
2008	23,361		221,033	
2009	30,770		291,134	
2010 and thereafter	14,762		139,673	
Total	¥ 183,171	\$	1,733,097	

## 8. Retirement and Severance Benefits

The liabilities for retirement and severance benefits at March 31, 2004 and 2003 were as follows:

	Thou					
	Millio	ns of Yen	U.S. Dollars (Note 1)			
	2004	2003	2004			
Projected benefit obligation	¥ 72,451	¥ 72,146	\$685,505			
Fair value of pension assets	(41,311)	(29,933)	(390,870)			
Unfunded benefit obligation	31,140	42,213	294,635			
Unrecognized actuarial loss	(9,171)	(12,976)	(86,772)			
Retirement and severance benefits	¥ 21,969	¥ 29,237	\$ 207,863			

Retirement benefit costs for the year ended March 31, 2004 and 2003 were as follows:

		Thousands of
Millior	ns of Yen	U.S. Dollars (Note 1)
2004	2003	2004
¥ 2,508	¥ 3,297	\$ 23,730
1,779	2,634	16,832
(681)	(1,082)	(6,444)
_	7,666	_
1,480	1,460	14,003
(3,768)	_	(35,651)
1,318	13,975	12,470
_	(3,835)	_
¥ 1,318	¥ 10,140	\$ 12,470
	2004 ¥ 2,508 1,779 (681) 	¥ 2,508 ¥ 3,297   1,779 2,634   (681) (1,082)   - 7,666   1,480 1,460   (3,768) -   1,318 13,975   - (3,835)

### Notes:

- The discount rate and the rate of expected return on pension assets used by the Companies are 2.5% and 3.0%, respectively, for the year ended March 31, 2004. Both of the discount rate and the rate of expected return on pension assets used by the Companies are 3.0% for the year ended March 31, 2003.
- 2. The estimated amount of all retirement benefits to be paid at the future retirement dates is allocated equally to each service year using the estimated number of total service years.
- 3. The Company obtained approval from Japan's Ministry of Health, Labor and Welfare for return of the future benefit obligation with respect to the portion that the Company acts for the government (the so-called substituted portion) on December 16, 2002. The Company recognized the settlement of the substituted portion at the date of the permission by the Ministry of Health, Labor and Welfare. As a result, in the year ended March 31, 2003, the Company recorded gains on return of the substituted portion of the government's welfare Pension Insurance Scheme amounting to ¥3,835 million, which was calculated based on the amounts of the substituted portion of the projected benefit obligations, the related pension assets, and the related unrecognized items. The amount of pension assets to be transferred back to the government was ¥21,455 million as at March 31, 2003.
- 4. In the year ended March 31, 2004, the Company revised its post-employment benefits plan. As a result of this revision, prior service credit arose and was charged to current income.

#### 9. Contingent Liabilities

Contingent liabilities primarily for loans from banks to unconsolidated subsidiaries and affiliates which are guaranteed by the Companies and for notes receivable discounted at banks with recourse as of March 31, 2004 were as follows:

		Thousands of
	Millions of Yen	U.S. Dollars (Note 1)
Loans guaranteed	¥11,755	\$ 111,221
Notes receivable discounted	155	1,467
Total	¥ 11,910	\$ 112,688

### 10. Derivative Financial Instruments and Hedging Transaction

The Companies use interest rate swaps only for the purpose of mitigating future risks of interest rate fluctuations with respect to borrowings.

The Companies use foreign currency forward exchange contracts only for the purpose of mitigating future risks of exchange rate fluctuations with respect to foreign currency denominated forecasted transactions.

The Companies also use currency swap contracts only for the purpose of mitigating future risks of exchange rate fluctuations.

All of the derivative transactions utilized by the Companies are accounted for as hedges.

## 11. Income Taxes

The Company and its consolidated domestic subsidiaries are subject to a number of income taxes, which, in the aggregate, indicate a statutory rate in Japan of approximately 41.7% for the years ended March 31, 2004 and 2003.

The following table summarizes the significant differences between the statutory tax rate and the Companies' effective tax rate for financial statement purposes for the years ended March 31, 2004 and 2003.

	March 31, 2004	March 31, 2003
Statutory tax rate	41.7%	41.7%
Increase (reduction) in taxes resulting from:		
Non-deductible expenses	2.2	3.7
Amortization of consolidation difference	2.7	3.8
Equity in earnings of affiliates	(0.6)	1.1
Tax credit for research and development expenses	(5.2)	_
Valuation allowance	7.9	_
Other	2.0	0.3
Effective tax rate	50.7%	50.6%

Due to the revised local tax law, which will go into effect commencing on April 1, 2004, the Companies revaluated deferred tax assets and liabilities at March 31, 2003. As a result, deferred tax assets decreased by ¥238 million and deferred income taxes increased by ¥244 million for the year ended March 31, 2003.

Significant components of deferred tax assets and liabilities as of March 31, 2004 and 2003 were as follows:

	Millio	Thousands of U.S. Dollars (Note 1)	
	2004	2003	2004
Deferred tax assets:			
Operating loss carryforwards	¥ 2,633	¥ 2,474	\$ 24,913
Unrealized gains on intercompany transactions	7,273	6,809	68,814
Retirement and severance benefits	10,454	12,817	98,912
Impairment loss on fixed assets	4,353	_	41,186
Other	7,380	5,281	69,827
Total gross deferred tax assets	32,093	27,381	303,652
Less valuation allowance	(3,401)	(767)	(32,179)
Total deferred tax assets	28,692	26,614	271,473
Deferred tax liabilities:			
Reserve for replacement of			
property, plant and equipment	(3,144)	(3,468)	(29,747)
Reserve for special depreciation of fixed assets	(1,020)	(1,283)	(9,651)
Net unrealized holding gains on securities	(2,577)	(197)	(24,383)
Other	(3,340)	(2,788)	(31,602)
Total deferred tax liabilities	(10,081)	(7,736)	(95,383)
Net deferred tax assets	¥ 18,611	¥ 18,878	\$ 176,090

## 12. Segment Information

The operations of the Companies are classified into four business segments – Petrochemical Group, Basic Group, Specialty Group and Service Group.

Operations of the Petrochemical Group include the manufacture and sale of olefins and polymers.

Operations of the Basic Group include the manufacture and sale of caustic soda, vinyl chloride monomer, polyvinyl chloride and cement.

Operations of the Specialty Group include the manufacture and sale of fine chemicals, scientific and diagnostic instruments and systems, electronic materials, quartz, water treatment equipment, and specialty materials.

Operations of the Service Group include transportation, warehousing and construction.

"Operating expenses" used in the following segment information include cost of sales and selling, general and administrative expenses.

				Millions of Yen			
	Petro-					Elimination	
Year ended	Chemical	Basic	Specialty	Service		and	
March 31, 2004	Group	Group	Group	Group	Total	Corporate	Consolidated
Net sales:							
Outside customers	¥ 139,799	¥ 138,371	¥ 164,900	¥ 41,319	¥ 484,389	¥ —	¥ 484,389
Inter-segment	42,441	11,248	3,914	46,420	104,023	(104,023)	_
Operating expenses	179,235	140,681	152,974	85,467	558,357	(104,023)	454,334
Operating income	¥ 3,005	¥ 8,938	¥ 15,840	¥ 2,272	¥ 30,055	¥ —	¥ 30,055
Identifiable assets	¥ 100,818	¥ 150,457	¥ 205,666	¥ 43,039	¥ 499,980	¥ 49,233	¥ 549,213
Depreciation and							
amortization	¥ 3,763	¥ 9,610	¥ 8,472	¥ 1,316	¥ 23,161	¥ 807	¥ 23,968
Impairment loss							
on fixed assets	¥ 81	¥ 131	¥ 839	¥ 242	¥ 1,293	¥ 9,548	¥ 10,841
Capital expenditures	¥ 2,026	¥ 10,328	¥ 7,956	¥ 648	¥ 20,958	¥ 347	¥ 21,305

				Millions of Yen			
	Petro-					Elimination	
Year ended	Chemical	Basic	Specialty	Service		and	
March 31, 2003	Group	Group	Group	Group	Total	Corporate	Consolidated
Net sales:							
Outside customers	¥ 136,758	¥ 135,015	¥ 160,246	¥ 39,902	¥ 471,921	¥ —	¥ 471,921
Inter-segment	38,393	11,022	4,305	47,976	101,696	(101,696)	_
Operating expenses	168,612	140,324	151,088	85,545	545,569	(101,696)	443,873
Operating income	¥ 6,539	¥ 5,713	¥ 13,463	¥ 2,333	¥ 28,048	¥ —	¥ 28,048
Identifiable assets	¥ 100,407	¥ 139,239	¥ 207,149	¥ 41,776	¥ 488,571	¥ 57,126	¥ 545,697
Depreciation and							
amortization	¥ 4,108	¥ 10,098	¥ 8,802	¥ 1,338	¥ 24,346	¥ 909	¥ 25,255
Capital expenditures	¥ 1,589	¥ 3,059	¥ 6,411	¥ 690	¥ 11,749	¥ 378	¥ 12,127

	Thousands of U.S. Dollars (Note 1)													
		Petro-									E	limination		
		Chemical		Basic		Specialty		Service				and		
Year ended March 31, 2004		Group		Group		Group		Group		Total		Corporate	С	onsolidated
Net sales:														
Outside customers	\$	1,322,727	\$	1,309,216	\$ 1	1,560,223	\$ 3	390,945	\$	4,583,111	\$	_	\$ -	4,583,111
Inter-segment		401,561		106,424		37,033	2	139,209		984,227	( 9	984,227)		_
Operating expenses		1,695,856		1,331,072		1,447,384	8	308,657	5	,282,969	( 9	984,227)	2	1,298,742
Operating income	\$	28,432	\$	84,568	\$	149,872	\$	21,497	\$	284,369	\$	—	\$	284,369
Identifiable assets	\$	953,903	\$ <sup>-</sup>	1,423,569	\$ î	1,945,936	\$	407,219	\$ 4	,730,627	\$ 4	465,825	\$ !	5,196,452
Depreciation and														
amortization	\$	35,604	\$	90,926	\$	80,159	\$	12,452	\$	219,141	\$	7,635	\$	226,776
Impairment loss on														
fixed assets	\$	766	\$	1,240	\$	7,938	\$	2,290	\$	12,234	\$	90,340	\$	102,574
Capital expenditures	\$	19,169	\$	97,720	\$	75,277	\$	6,131	\$	198,297	\$	3,283	\$	201,580

The "Elimination and Corporate" column of "Identifiable assets" in the above schedules includes corporate assets of ¥65,127 million (\$616,208 thousand) and ¥73,939 million for the years ended March 31, 2004 and 2003, respectively, which mainly consist of cash, time deposits, investment securities and assets of administrative departments.

Geographic information for the years ended March 31, 2004 and 2003 were as follows :

			Millions of Yen		
				Elimination	
				and	
Year ended March 31, 2004	Japan	Other	Total	Corporate	Consolidated
Net sales:					
Outside customers	¥ 440,257	¥ 44,132	¥ 484,389	¥ —	¥ 484,389
Inter-segment	15,849	1,050	16,899	(16,899)	_
Operating expenses	427,129	44,104	471,233	(16,899)	454,334
Operating income	¥ 28,977	¥ 1,078	¥ 30,055	¥ —	¥ 30,055
Identifiable assets	¥ 466,342	¥ 47,082	¥ 513,424	¥ 35,789	¥ 549,213

	Millions of Yen									
				Elimination						
				and						
Year ended March 31, 2003	Japan	Other	Total	Corporate	Consolidated					
Net sales:										
Outside customers	¥ 425,662	¥ 46,259	¥ 471,921	¥ —	¥ 471,921					
Inter-segment	14,965	2,270	17,235	(17,235)	_					
Operating expenses	414,153	46,955	461,108	(17,235)	443,873					
Operating income	¥ 26,474	¥ 1,574	¥ 28,048	¥ —	¥ 28,048					
Identifiable assets	¥ 452,096	¥ 46,000	¥ 498,096	¥ 47,601	¥ 545,697					

	Thousands of U.S. Dollars (Note 1)									
		Elimination								
				and						
Year ended March 31, 2004	Japan	Other	Total	Corporate	Consolidated					
Net sales:										
Outside customers	\$ 4,165,550	\$ 417,561	\$ 4,583,111	\$ —	\$ 4,583,111					
Inter-segment	149,957	9,935	159,892	(159,892)	_					
Operating expenses	4,041,338	417,296	4,458,634	(159,892)	4,298,742					
Operating income	\$ 274,169	\$ 10,200	\$ 284,369	\$ —	\$ 284,369					
Identifiable assets	\$ 4,412,357	\$ 445,473	\$ 4,857,830	\$338,622	\$ 5,196,452					

Export sales and sales outside of Japan made by overseas subsidiaries were ¥128,873 million (\$1,219,349 thousand), and ¥128,006 million for the years ended March 31, 2004 and 2003, respectively, representing 26.6% and 27.1% of consolidated net sales. For the years ended March 31, 2004 and 2003, such sales in Asia were ¥90,713 million (\$858,293 thousand) and ¥87,906 million, representing 18.7% and 18.6%, respectively, of consolidated net sales.

## 13. Subsequent Events

At the general shareholders' meeting of the Company held on June 29, 2004, retained earnings of the Company as of March 31, 2004 were appropriated as follows:

	Millions of Yen	Thousands of U.S. Dollars (Note 1)
Year-end cash dividends (¥5.00 per share)	¥ 3,003	\$ 28,413
Bonuses to directors	¥ 78	\$ 738

## Independent Auditors' Report

## To the Shareholders and Board of Directors of Tosoh Corporation:

We have audited the accompanying consolidated balance sheets of Tosoh Corporation and subsidiaries as of March 31, 2004 and 2003, and the related consolidated statements of income, shareholders' equity and cash flows for the years then ended, all expressed in yen. These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits.

We conducted our audits in accordance with auditing standards generally accepted in Japan. Those standards 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 consolidated financial statements referred to above present fairly, in all material respects, the consolidated financial position of Tosoh Corporation and subsidiaries as of March 31, 2004 and 2003, and the consolidated results of their operations and their cash flows for the years then ended, in conformity with accounting principles generally accepted in Japan.

Without qualifying our report, we draw attention to the following.

- (1) As discussed in Note 2 to the consolidated financial statements, in the year ended March 31, 2003, Tosoh Corporation and subsidiaries charged to expenses all of the remaining net transition obligation with respect to retirement and severance plans.
- (2) As discussed in Note 2 to the consolidated financial statements, effective from the fiscal year ended March 31, 2004, Tosoh Corporation and its consolidated domestic subsidiaries adopted the new accounting standard for impairment of fixed assets.

The U.S. dollar amounts in the accompanying consolidated financial statements with respect to the year ended March 31, 2004 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 1 to the consolidated financial statements..

KPMG AZSA & Co.

KPMG AZSA & Co.

Osaka, Japan June 29, 2004



## **Board of Directors**

**Chairman & CEO** Madoka Tashiro **President** Takashi Tsuchiya Senior Managing Directors Yukihiro Tsutsumi Keiichi Ohtagaki Managing Directors Ichiro Hiraki Hiroshige Wagatsuma Hideo Yamasaki Kazuya Hoshi Shinji Kurata

Directors Yuzo Arima Masatoshi Inai Hiroyuki Uchida Koji Fujii Katsumi Ishikawa Kenichi Udagawa Kazuo Higuchi

## Corporate Auditors Katsuhiko Kawamura Osami Matsuura Akio Fujita Yoshio Shibata

(As of June 29, 2004)

### **Investor Information**

Date of Incorporation February 11, 1935

Paid-in Capital ¥41 billion

**Common Stock** Authorized: 1,200,000,000 shares Issued: 601,161,912 shares

Number of Shareholders 57,308

**Stock Exchange Listings** Tokyo TSE ticker symbol: 4042

**Transfer Agent for Shares** The Chuo Mitsui Trust & Banking Co., Ltd. 33-1, Shiba 3-chome Minato-ku, Tokyo 105-0014 Japan

Independent Auditors KPMG AZSA & Co.

## Number of Employees 9,196

Head Office Tosoh Corporation Shiba-koen First Building 3-8-2, Shiba Minato-ku, Tokyo 105-8623 Japan

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(As of March 31, 2004)



## **TOSOH CORPORATION**

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