Overview of Business Segments

INDUSTRIAL PRODUCTS

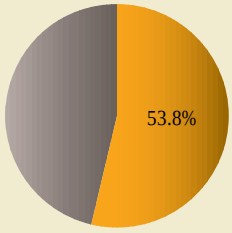
We offer a diverse range of functional materials in a variety of fields, from leading-edge electronic materials to consumer goods based on tape technologies.

PRODUCTS

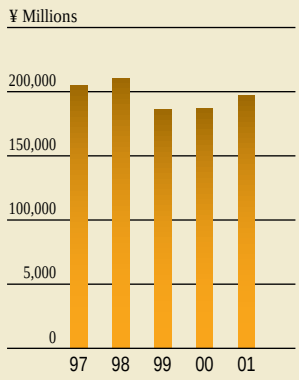
Surface protection film for automobiles bodies, thermal release sheet (REVALPHA), ceramic bar-code label, tape for transporting electronic components, foam sealing material (EPT Sealer)

Share of industrial products: 53.8% Sales: ¥196,535 million

Share of Industrial Products



Net Sales



ELECTRONIC PRODUCTS

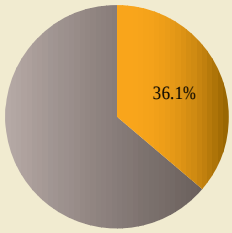
Our products, such as optical films, semiconductor-related products, and flexible printed circuit products, serve to sustain technological advances in the electronics industry.

PRODUCTS

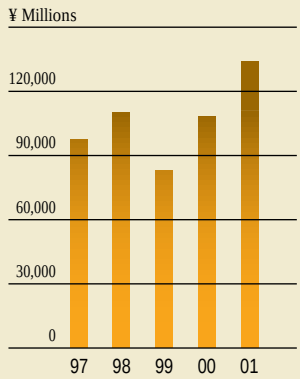
Polarizing films (NPF), retardation films (NRF), polarization converting system (NIPOCS), thin metal core boards for magnetro resistive heads, flexible printed circuits, semiconductor encapsulating resins

Share of electronic products: 36.1% Sales: ¥132,145 million

Share of Electronic Products



Net Sales



FUNCTIONAL PRODUCTS

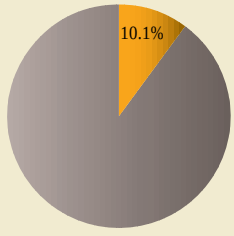
We are contributing to the environment and health care. We provide medical-related products, polymer separation membrane for refining water, and engineering plastics.

PRODUCTS

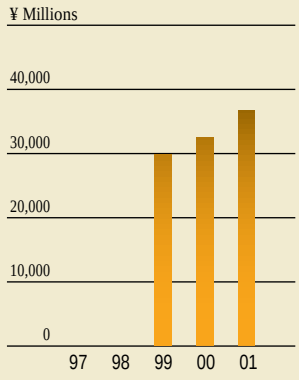
Polymer separation membrane modules for application in the semiconductor manufacturing process, transdermal therapeutic patches, fluoroplastic tapes, semi-conductive polyimide belts

Share of functional products: 10.1% Sales: ¥37,018 million

Share of Functional Products



Net Sales



**The Corporation split industrial products into industrial products and functional products beginning fiscal 1999.*

INDUSTRIAL PRODUCTS

Consolidated net sales of industrial products in fiscal 2001 amounted to ¥196,535 million, up 5.8% over fiscal 2000. Consolidated operating income was ¥13,229 million, up 23.4%. Sales of tapes used in electronic appliances and automobiles were especially strong.

Peelable double-coated adhesive tape

Bonding and Joining Products

Both domestic and overseas sales of bonding and joining products for the electronics field, including communications and OA equipment, increased. Sales of existing products rose and sales of new products were strong. Increased production capacity for coating equipment facilitated sales growth.

In the second half of fiscal 2001, we were adversely affected by inventory adjustments among our customers, but given that the market is predicted to recover by mid-fiscal 2002, we will continue to concentrate on the electronics field.

Sealing Products

Our reinforcement and vibration-damping materials were adopted for a number of new automobile models and sales increased substantially. We now produce EPT Sealer, our foam sealant, in Japan, North America (U.S.), Europe (Belgium) and Asia (Thailand). Sales were up in fiscal 2001, making an important contribution to the overall improvement in business performance. Sales of film sealing materials for electronics, HDDs, mobile phones and similar applications increased. The target markets in these fields are extremely competitive. In response, we are vigorously promoting sales of new products while also rationalizing the lineup of existing products.

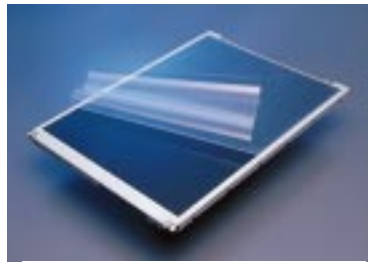
EPT Sealer

Anticorrosion and Waterproofing Products

Though new housing starts were flat, the requirements of the Housing Quality Assurance Act have increased demand for waterproofing and airtight-type products from the housing construction industry. As a result, we increased sales of ZENTEN SHEET waterproof-weathering materials. This rise in demand is expected to continue. Sales of anticorrosion materials decreased, reflecting a reduction in construction work by gas companies.

Pro-Techno Products

Sales of general construction materials were approximately the same as for fiscal 2000. Sales of IT-related products, including surface protection products for stainless steel for semiconductor manufacturing and aluminum plates for LCDs and semiconductors manufacturing increased substantially. In fiscal 2001, we began overseas sales of E-MASK, a protective packaging material for polarizing films for LCDs; exports to Taiwan and South Korea were especially strong. We expect this product to contribute significantly to overall performance in fiscal 2002. In the first half of fiscal 2002, we will begin operations at our new SCM Center, which features a fully integrated system from manufacture to delivery.



E-MASK

Packaging System

In the second half of fiscal 2001, electronics companies reduced inventories sharply, which had an adverse impact on packaging products sales and income. Sales for fiscal 2001 were virtually unchanged from fiscal 2000. We pushed sales of environment-friendly products, including such new products as dehalogenation sealing tape and OPP tape. We plan to reduce the time period of our basic contract in order to improve cash flow. We are also establishing enhanced distribution and information systems, and introducing a CRM (customer relationship management) system.

Construction Materials

The housing construction market in fiscal 2001 was virtually unchanged from fiscal 2000. In response, the industry sought to add value by focusing on materials that contribute to "safer housing." We launched dehalogenation adhesive tapes and other environment-friendly products, and sales were encouraging. To reduce costs, we are enhancing the efficiency of the finishing process and integrating the product lineup. In fiscal 2002, we will focus on the introduction of new products and expanding sales, particularly recycling- and environment-related products.

Vinyl tapes for electrical insulation

Life Care Products

The maturation of the markets for diapers and body-warmers has intensified price competition. Sales of material for disposable body-warmers were up, thanks to inclement weather in Japan. With the country's birth rate decreasing, sales of baby diaper tape were weak. Elsewhere in Asia, however, we expect the life care market to grow. In April 2001, in response to price competition and the rapid appearance of new products in this field, Nitto Life-tech Co., Ltd. took over all development, manufacturing and sales functions for this business.

Consumer Products

Prices in this field continued to decrease rapidly. Beginning in April 2000, we integrated our consumer products business into Nitoms Inc. Sales of new products went well. Beginning fiscal 2002, the Group as a whole will vigorously explore new fields and expand overseas sales channels.

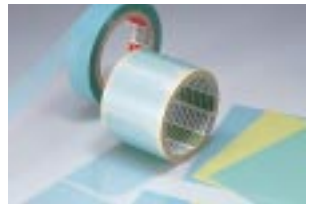
Flooring cleaner

Industrial-use Bar-code Labels

The market for communications devices grew in the first half of fiscal 2001, then went sour in the second. Our sales to manufacturers tracked this trend, and rose only slightly for fiscal 2001 as a whole. Over the medium and long term, however, we expect the information and communication devices markets to grow. Through fiscal 2002 and beyond, we will continue to reinforce our marketing efforts targeting manufacturers of computers, memory devices and mobile phones. We also aim to increase sales of new products designed for high heat-resistance applications such as cathode ray tubes.

Electronic Component-related Products

Sales of REVALPHA thermal release sheets used for temporary holding in the electronic components manufacturing process increased, as did sales of tapes used for transporting electronic components for mobile terminals. A slowdown in the second half of fiscal 2001 in the communications devices and PC industries held sales of electronic components to only a slight increase. Nevertheless, we will start operations at our new factory in Malaysia in August 2001 to ensure adequate production capacity in the first half of fiscal 2002, when the market is expected to recover. We are also promoting sales of new products used in the manufacturing process and developing numerous new applications of existing products.



REVALPHA

Electrical Insulation Products

Investment in new equipment by Japanese electric companies was weak, leading to stagnant domestic demand in this field.

In fiscal 2000, we worked to eliminate all unprofitable products, and this was reflected in a slight decrease in sales in fiscal 2001. New products included electrical insulation materials for electric vehicle motors, which we expect to contribute significantly to performance in fiscal 2002. We will continue to focus on new markets for high-performance insulating materials.

Stagnant domestic demand has led to falling prices and we expect this to continue in fiscal 2002. In response, we will further rationalize production and review our distribution methods.

■ ELECTRONIC PRODUCTS

Net sales of electronic products in fiscal 2001 amounted to ¥132,145 million, an increase of 23.4% over fiscal 2000. Operating income was ¥16,392 million, up 28.8%.

Sales of LCD-related materials were strong, as were sales of a number of new products. Sales of semiconductor- and flexible printed circuit-related materials increased, supported by expanding mobile phone and computer markets. However, sales of thin metal core boards for HDD magnetro resistive head materials were poor due to intense price competition.

NIPOCS

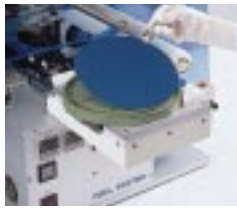
LCD-related Products

Higher demand for LCD monitors and notebook computers led to significantly increased sales of polarizing film for large panels and wide-angle polarizing films. Against a background of increased demand for mobile phones, sales of semi-transmissive polarizing films for mobile phone panels and retardation films also increased. These factors boosted sales of LCD-related products substantially.

In the last quarter of fiscal 2001, sales were down due to inventory adjustments by manufacturers. However, we expect demand for LCD monitors and notebook computers to recover during the first half of fiscal 2002 and demand for mobile phones to bounce back in the second half. In summer 2001, we will start mass-production of plastic substrates for LCD panels, a new product well received in fiscal 2001.

Semiconductor-related Products

Supported by growing sales of PC and peripherals, and mobile phones, sales of semiconductor encapsulating resins and wafer-protection tapes for the semiconductor manufacturing process increased. Substantial capital investment in the semiconductor industry led to excellent sales of silicone wafer protective tape applicators. In fiscal 2001, we expanded our lineup of transparent encapsulating resins for optical devices, which contributed to sales. In the second half, the electronics market in North America was sluggish and inventory adjustments by manufacturers reduced sales. Nevertheless, for fiscal 2001 as a whole, we greatly improved our sales performance. Our introduction of environment-friendly resins and other new products is gathering momentum.


Silicon wafer protective tape applicator

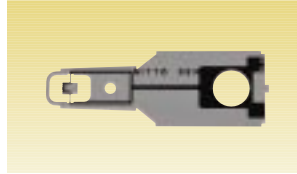
Flexible Printed Circuit Products

Continued growth in the IT industry and the communications market has underpinned increased sales of flexible printed circuits (FPCs). Mobile phone and flat panel display (FPD) applications grew particularly rapidly. Sales of FPCs for HDDs, optical drives and other PC-related devices were almost unchanged from fiscal 2000. We released a fine-pattern FPC for the latest super-compact, high-definition IC for use in color mobile phones, and this contributed significantly to sales. We will continue to develop applications to support our customers' new product development.


FPC for HDDs

Thin Metal Core Boards and Related Products

Although demand for HDDs increased, heads per drive decreased, leaving the demand for heads virtually unchanged. We were somewhat slow to shift to the specifications deriving from the change in the mainstream format for suspension flexible circuits, so production and shipping volumes of thin metal core boards with circuits for HDD heads decreased. Also, greater competition lowered prices. The combined effect of these factors was a disappointing sales performance. However, we expect sales of our additive-type long-tail product, introduced in fiscal 2001, to increase in the second half of fiscal 2002.


Thin metal core board for HDDs

➢ Optical-related Business: Maintaining Market Leadership

The optical-related business is changing rapidly. We are responding by anticipating changes in demand and proposing new products. We are also establishing advanced manufacturing systems. We aim to switch from a "market-connected" approach to a "market-leading" approach.

The Onomichi Plant is the Largest Facility of its Type in the World

Optical Design Center Opens

In March 2001, we opened an Optical Design Center at our Onomichi Plant. The Onomichi Plant is now our sole base for developing variable optical films for LCDs. Previously, development work was divided between the Onomichi and Toyohashi plants.

The Center has a floor space of 4800 square meters. Equipped with the latest testing and evaluation equipment, it has a staff complement of 60, engaged in developing LCD optical film products, mainly polarizing film for LCDs.

Now that the Center is operational, we can justly say that we have a comprehensive, advanced new product development system dedicated to the LCD-related field capable of staying close to the evolving needs of customers.

Third Facility Under Construction

A third facility at the Onomichi Plant is scheduled for completion in August 2001.

In July 1999, we began operations at the plant's second facility, and in September 2000 we increased production there. As a result, production capacity for polarizing films rose from eight million to 18 million square meters. When the third facility is fully operational, production capacity will increase to 24 million square meters.

The new facility, which is four stories and is constructed of reinforced concrete, has a total floor space of approximately 8000 square meters. Our total investment will amount to ¥10 billion. We are expanding production capacity in anticipation of increased demand, particularly from the mobile phone, PC and other digital equipment fields. We predict global market growth of approximately 20% per annum.

New Converting Processing Facilities in Taiwan and South Korea

In April 2000, we opened a new facility for optical film converting processing at Nitto Denko (Taiwan) Corp., increasing annual production capacity from 10 million to 20 million units (15-inch panel size). In July 2000, we started construction of a new facility at Korea Nitto Optical Co., Ltd. that will increase annual converting processing capacity to 10 million units.

These new facilities are our response to a rapid increase in demand in Taiwan and South Korea, and our need to shorten delivery times to customers in these countries.

With a view to ensuring we stay closely in touch with our customers, we are now considering introduction of a multi-polar management system for our LCD-related converting processing activities.

FUNCTIONAL PRODUCTS

Net sales of functional products in fiscal 2001 amounted to ¥37,018 million, up 13.8% over fiscal 2000. Operating income was ¥5,203 million, up 64.7%. Sales of medical-related products, including transdermal therapeutic patches, engineering plastics for electronic products, and membranes for the semiconductor industry increased.

Medical-related Products

Sales of our market-leading transdermal therapeutic patches for asthma increased, while sales of patches for angina pectoris treatment held steady.

In the surgical products market, price competition is intensifying. We are therefore reorganizing this business, particularly its profit structure. In June 2001, we introduced "Yu-ki ban Alpha," a new surgical tape that is much gentler on the skin than existing tapes. We expect this product to gain market share rapidly.

Transdermal therapeutic patch

In the diagnostic drugs and bacteria detection kits fields, we plan to launch new products and explore the introduction of new manufacturing technology. In the first half of fiscal 2002, we will make a detailed plan for introducing our transdermal therapeutic patches overseas.

Engineering Plastic Products

We increased sales of polyimide belts to two major domestic copier and laser printer manufacturers who have recently introduced new products. Orders for bag filter increased, with most going to incinerators or other applications requiring high heat resistance. Filtration products for the OA, automotive (lamps, electrics), home electronics, and organic EL equipment fields sold well. Sales of fluoroplastic adhesive tape for the food and electronics fields held steady.

We are working toward a mass-production system for polyimide belts to cope with increased demand.

Bag filter

Membrane Products

Sales of polymer separation membrane modules for application in the semiconductor industry increased. Overseas demand for membranes used in seawater desalination is growing, which led to an improved performance in this field. Furthermore, our membranes will be used in a large-scale seawater desalination plant to be built in Fukuoka.

Growth in overseas water treatment markets is expected to continue. In response, we intend to launch new products, including advanced purification equipment. To this end, we are strengthening ties with Hydranautics, our U.S. subsidiary.

Reverse osmosis membrane modules

Introducing Transdermal Therapeutic Patches to Overseas Markets

We are proceeding with the launch of full-scale sales of transdermal therapeutic patches in overseas markets. In September 2000, we established a team to deal with the legal aspects of clinical development and other matters. We have concluded a contract with a medical consulting firm with a view to obtaining cGMP (current Good Manufacturing Practice) certification, a prerequisite to gaining approval from the FDA of the U.S. and the regulatory authorities in various other countries. In March 2001, we completed construction of a Quality Control Center within the Tohoku Plant. We have equipped the center with leading-edge facilities, including automatic inspection devices for therapeutic patches, in order to ensure thorough quality control. Initially, we plan to introduce our asthma therapeutic patch to the Korean market, and follow up with exports to Europe and the U.S.

Quality Control Center

Semi-conductive Polyimide Belts Allow High-resolution, High-speed, Low-cost Color Copiers

We expect the color copier market to grow strongly. At present, color copiers constitute approximately 10% of the total copier market. However, the latest high-resolution, high-speed, low-cost color copiers are likely to rapidly capture market share from black-and-white copiers. Our polyimide belts are ideal for use in these advanced copiers.

The semi-conductive polyimide belt is a seamless tubular film that transfers toner onto paper. In conventional copiers, a photosensitive drum performs this role. Photosensitive drums need time to warm up and thus slow the copying process, and their size stands in the way of compact design. In contrast, polyimide belts are flexible and compact, and their flat surface reproduces scanned images very precisely. Currently, two major copier manufacturers use our semi-conductive polyimide belts.