# Contributing to society with "Green, Clean and Fine" products produced according to our creed of creating new value

# Industrial Tape Business (Functional Base Products)

In the automotive industry, the Group was able to keep growing ahead of the increase in unit automobile production, as we began to see the fruits of *Sanshin* activities in the global arena. Some of the businesses that performed particularly well were lamp inner pressure controlling materials for China and paint protection films for Europe. Also worth mentioning is the renovation of the Automotive Technical Center (ATC) within the Toyohashi Plant in Aichi Prefecture, which was carried out in a bid to combine our material and evaluation technologies for integrated solutions that better cater to the ongoing shift toward lighter-weight, electronic automobiles.

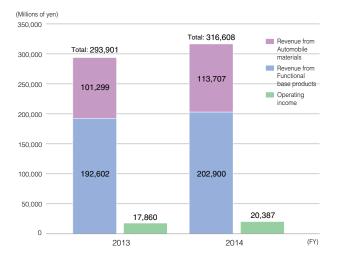
Sales to the electronics industry were driven primarily by double-sided adhesive tapes for smartphone panel modules and waterproof/sound-passing functional products. For general-purpose double-sided adhesive tapes, which are used for a broad range of industrial applications, adverse conditions in the European market were offset by orders from East Asian countries. Meanwhile, processing materials, and heat-resistant fluoroplastic products for the electronics market all fared well.

#### **Optronics Business**

In information fine materials, new smartphone and tablet PC releases, larger-sized panels used in those new models, and customers' increased production on the back of healthy sales sustained the excellent performance of our optical films for those product categories. Optical films for LCD TVs also gave a strong showing owing to special demand triggered by the FIFA World Cup and the shift toward demand for larger-sized panels following the market debut of 4K TVs. Meanwhile, sales of transparent electroconductive films for touch panels were sluggish overall, as they sold well to Chinese customers but production by other major customers did not grow as expected. Sales of flexible printed circuits remained robust as the number of smartphone models using them in displays grew throughout the year. The number of such circuits used also increased due to expansion of the high-capacity HDD market. In processing materials, tapes used for downstream processing in semiconductor fabrication sold favorably, as the semiconductor market was buoyed by continued expansion of the smartphone market.

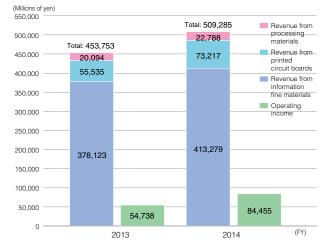
		Fiscal 2013	Fiscal 2014	Year-on-year comparison
Revenue	Functional base products	192,602	202,900	105.3%
	Automobile materials	101,299	113,707	112.2%
	Total	293,901	316,608	107.7%
Operating income	Total	17,860	20,387	114.1%

Millions of Yen



		Fiscal 2013	Fiscal 2014	Year-on-year comparison
Revenue	Information fine materials	378,123	413,279	109.3%
	Printed circuit boards	55,535	73,217	131.8%
	Processing materials	20,094	22,788	113.4%
	Total	453,753	509,285	112.2%
Operating income	Total	54,738	84,455	154.3%

Millions of Yen



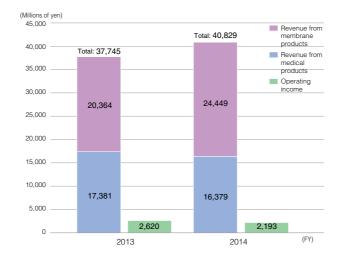
#### Medical and Membrane Businesses

In medical products, an attempt was made to offset the earnings decline in Japan due to the National Health Insurance (NHI) drug price revision of transdermal therapeutic patches and the government's promotion of generic drugs by boosting orders at a U.S. group company in the oligonucleotide field. Nonetheless, medical product revenues were weak overall. Sales of membrane products (polymer separation membranes), on the other hand,

		Fiscal 2013	Fiscal 2014	Year-on-year comparison
Revenue	Medical	17,381	16,379	94.2%
	Membrane	20,364	24,449	120.1%
	Total	37,745	40,829	108.2%
Operating income	Total	2,620	2,193	83.7%

Millions of Yen

remained strong, as we were able to receive orders for high-value-added ultrapure water projects from the semiconductor and LCD panel markets, in addition to a steady inflow of replacement orders for boiler feed water membranes and waste water recovery membranes in China and South Asia.

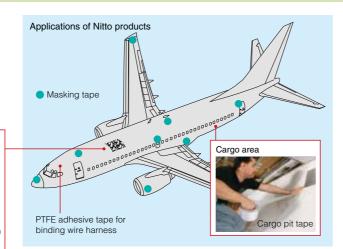


## **Expansion of Aircraft-related Products**

Nitto developed and launched aircraft anti-corrosion and moisture barrier materials (product names: AEROSEAL® and Moisture Barrier) in fiscal 2014. The products not only provide superior anti-corrosion and moisture barrier functions, but also relieve the customer's workload due to good workability. Recognizing such features, a major airline has already begun adoption of the products for use.

By adding this new productlineup to our existing masking films and double-coated adhesive tapes for aircraft, we aim not only to expand Nitto's presence in the airline industry but also to further develop and supply aircraft-related products.





#### Introduction of Production Line for Personal Hygiene Materials in Malaysia

In March 2015, we introduced a production line for personal hygiene materials at Nitto Denko Materials Malaysia, a local subsidiary in Malaysia. Malaysia is in Asia, a region where a rapid expansion in production of diapers is anticipated. Many diaper manufacturers have plants in neighboring countries in South Asia and in China.

Diaper requirements vary slightly from country to country. We will develop and provide products satisfying consumers' needs by taking advantage of the location of our manufacturing presence in Malaysia.



## Revamping ATCs to Produce Optimum Automotive-related Materials

The Nitto Group has its own testing facilities, known as Automotive Technical Centers (ATCs), in Japan, the U.S., Belgium, China and Thailand, where we evaluate and verify the performance of our products mounted in vehicles.

In July 2014, we thoroughly revamped the ATCs, which make quantitative evaluations of

quantitative evaluations of complete vehicles possible, allowing our customers to experience the benefits of our products in a near real-life environment. In the future, we will seek to create new customer value, paying attention



A revamped ATC

to the keywords safety, comfort and efficiency required of vehicles, seamlessly integrating the evaluation of vehicles, component design technology and materials technology.



ATC global system

# **Rebuilding Our Housing Materials Business**

On April 1, 2015, the Nitto Group's housing materials business was integrated with L Nissho, and its name changed to Nitto L Materials. By taking advantage of the Nitto Group's comprehensive strengths, we will provide optimum solutions for the industry targeting the residential electronics industry, including smart houses, smart cities and HEMS\*. In the future, we will develop the business globally, and aim to become a solution provider in social infrastructure such as home and general construction and civil engineering.

 $^*\mbox{HEMS}$  (Home Energy Management System): a management system for the conservation of energy used in the home



## COLOCOLO® FLOOR CLEAN, Cleaning Every Type of Floor

Nitoms' s COLOCOLO® FLOOR CLEAN can be used on every type of floor surface, such as wood, carpet, tatami and tile. We created this new product by combining two different adhesives, one a strong adhesive which removes dust from carpets, and the other a weak adhesive which does not stick to floors. This was in response to customer requests for another COLOCOLO®, suitable for use on both carpets and hard floors. COLOCOLO® FLOOR CLEAN provides dust-trapping performance applicable to every type of floor.



# Vice President of Korea Nitto Optical Receives Presidential Citation on 42nd Anniversary of Commerce and Industry Day in Korea

On March 18, 2015, the 42nd Anniversary of Commerce & Industry Day was held in Seoul, Korea, where Takahiro Oka, Vice President of Korea Nitto Optical, received a Presidential Citation. The award is given to businesspeople and workers who have contributed to the development of industry in Korea through advances in commerce and industry. Only one of the fifteen Presidential Citation award recipients was Japanese, the other fourteen being Korean.



Former Prime Minister Lee Wankoo (left) and Takahiro Oka







#### Release of NITREAT KINELOGY® EX

On April 1, 2014, Nitto Medical released KINELOGY® EX, a new product in the NITREAT kinesiology tape series supporting muscles.

In response to consumer demand for a tape that 'stays firmly attached' and one that 'can be painlessly removed while not causing a rash', KINELOGY® EX is a sports tape that is gentle on the skin, allowing the skin to breathe, while not easily peeling off when wet with water or sweat.



### Launch of OliGrow® Japan, a Small-scale Oligonucleotide Synthesis Service

Nitto launched OliGrow® Japan, an oligonuleotide synthesis service, at Tohoku Plant, Japan, as an expansion of Nitto Denko Avecia's OliGrow® service in the U.S. OliGrow® serves customers with small-scale synthesis DNA and RNA (ranging from 25mg to 20g) to meet their requirements (such as modification and use of specialty amidites) to support R&D to pre-clinical studies.

OliGrow® Japan can also provide a transition to expanded production and GMP\* manufacturing in the future with Nitto Denko

Avecia's clinical and commercial manufacturing capabilities.

For details on OliGrow® and OliGrow® Japan, please visit the following websites:

http://www.avecia.com/Avecia/nitto-avecia-oligrow.html http://www.nitto.com/jp/ja/products/group/medical/007/ (Japanese)

\*GMP: Good Manufacturing Practice (regulations covering manufacturing and quality control requirements for pharmaceutical products)

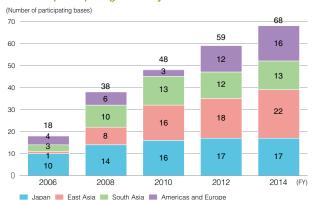
# Group Activity Toward Excellence (GATE)

GATE is a small group activity, which continuously addresses themes concerning manufacturing, and whose goal is improvement of quality.

The Nitto Group, by addressing immediate problems in the workplace, encourages awareness and autonomous action by each employee, promoting revitalization of the workplace. We believe this leads to enhancement of *genba-ryoku\** and as a consequence, the "creation of a safe and ideal workplace environment" and the "pursuit of customer-satisfying quality."

Eighteen bases participated in GATE when it was

#### Number of participating bases by area



launched in fiscal 2006. However, there is an increasing number of bases eager to take part in the activity every year and by fiscal 2014 the number of participants had grown to sixty-eight bases, including almost all production and processing bases. In the future, we will develop the activity in each area and aim to establish it throughout the Group, while developing it at every base concerned with manufacturing, such as sales and development.

We share examples of improvements achieved by individual teams at our Global Presentation after selection by base and area screening committees.

\* The ability of an employee to identify tasks and issues in a workplace, and to find solutions to them independently.



Fiscal 2014 Global Presentation (Poster session site)











