Linking your dreams
LINTEC Corporation

Creating the Future with Adhesive Technologies

Linkage + Technology

LINTEC

Sep. 7, 2017

Company information

- Head Office:
  Itabashi-ku, Tokyo, Japan
- Securities Code:
  7966 (Tokyo Stock Exchange, 1st Section)
- Established: October 15, 1934
- Common Stock: 23.2 billion yen (as of March 31, 2017)
- Number of Employees: 4,760 (as of March 31, 2017)
- Net Sales: 206.0 billion yen (year ended March 31, 2017)
- Fiscal Year-End: March 31
- Business Activities: Development, manufacture, and marketing of adhesive products and related equipment, specialty papers, release papers and films, etc.
- Consolidated Subsidiary: 3 companies (Japan)
  38 companies (Overseas)

Company history

1934: Establishment of FUJI SHIKO CORPORATION, manufacturer of gummed tape (Itabashi, Tokyo)

*The name was changed to FSK CORPORATION in 1984

1960: Started production and sales of adhesive papers and films for labels

Subsequently expanded adhesive operations in industrial fields such as decorative materials for interiors and exteriors, motorcycle, automobile and others

1986: Developed UV curable dicing tape and made full-scale entry into the semiconductor-related product field

1987: MADICO, INC. , became a subsidiary

1990: Merged with SHIKOKU PAPER CO., LTD., and SOHKEN KAKO CO., LTD.
Name was changed to LINTEC Corporation

Expanded business activities from release papers and films, specialty papers to the fields of adhesive paper and films, related equipment

1991: Made full-scale entry into LCD-related product field

Company history

1994: PT. LINTEC INDONESIA was established

2000: LINTEC INDUSTRIES (MALAYSIA) SDN. BHD. was established

2002: LINTEC (SUZHOU) TECH CORPORATION was established

LINTEC (SUZHOU) TECH CORPORATION

LINTEC SPECIALITY FILMS (KOREA), INC., was established

2003: LINTEC SPECIALITY FILMS (TAIWAN), INC., was established

2004: LINTEC KOREA, INC., was established

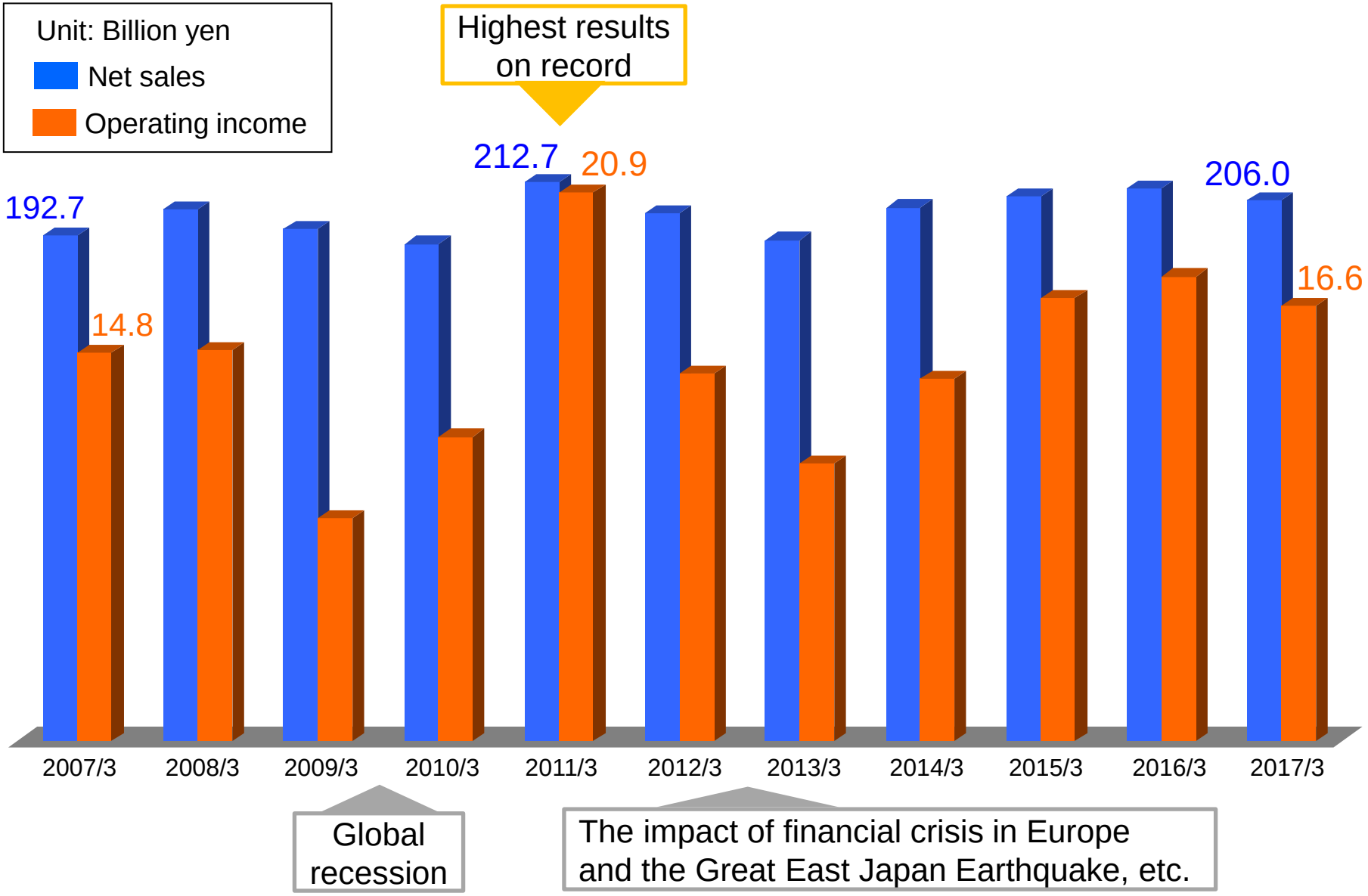
2011: LINTEC (THAILAND) CO., LTD., was established

2015: LINTEC ASIA PACIFIC REGIONAL HEADQUARTERS PRIVATE LIMITED was established

2016: MACTAC AMERICAS, LLC, became a subsidiary

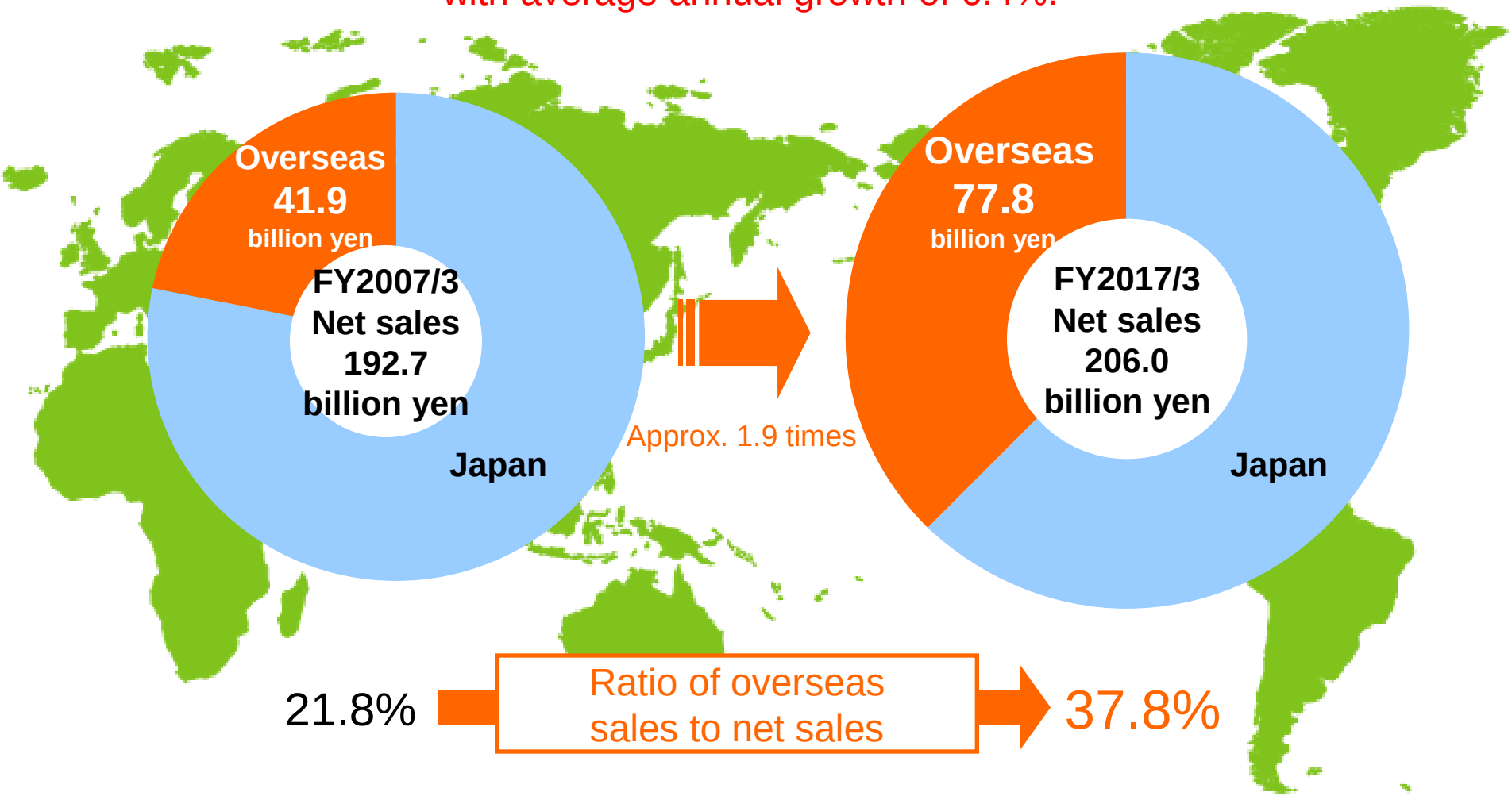
LINTEC (THAILAND) CO., LTD.

Performance trends ／ Net sales, Operating income



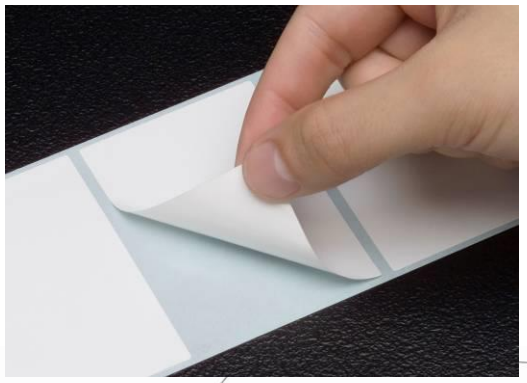
Performance trends ／ Overseas sales

Overseas sales have increased 35.8 billion yen over the last 10 years with average annual growth of 6.4%.



21.8% → Ratio of overseas sales to net sales → 37.8%

Basic composition of adhesive products



Surface improvement

Printability, durability etc.

Facestock

(Base paper / film)

Adhesive

Release paper / film

Meeting needs with in-house technologies

Four core technologies and operational segments

Core technologies

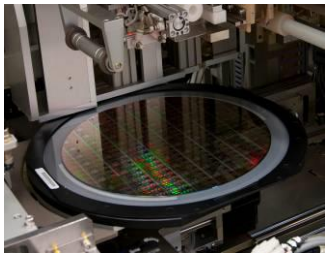
1. Adhesive applications
2. Surface improvement
3. System development
4. Specialty papers and Release materials production

Printing and Industrial Materials Products

- Printing & Variable Information Products Operations
- Industrial & Material Operations

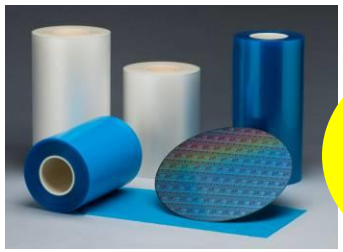
Electronic and Optical Products

- Advanced Materials Operations
- Optical Products Operations



Paper and Converted Products

- Fine & Specialty Paper Products Operations
- Converted Products Operations

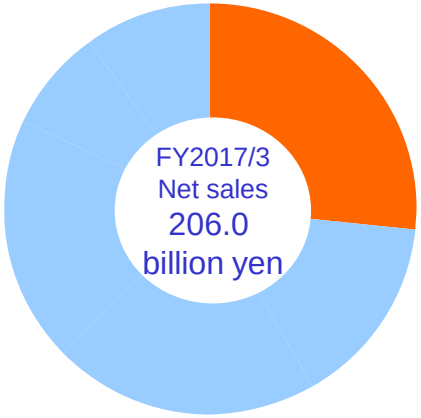


Adhesive materials + Equipment

Printing & Variable Information Products Operations

- Adhesive papers and films for labels
  - Main types : Permanent, Removable, Restickable
  - Properties : Printability, Durability, Heat resistance, Water resistance, Cold resistance, Curved-surface adhesion, Dimensional stability, Design and others.

55.1 billion yen
26.7%



Printing & Variable Information Products Operations

Usage of adhesive papers and films for labels / Required properties

For commodity items

- Water resistance
- Curved-surface adhesion
- Design

For food products

- Water resistance
- Curved-surface adhesion
- Cold resistance

For stationery

- Durability
- Dimensional stability
- Design etc.

For distribution applications

- Printability
- Adequacy for affixing seals
- Cold resistance

For medical and pharmaceutical items

- Printability
- Chemical resistance
- Tamper-evident

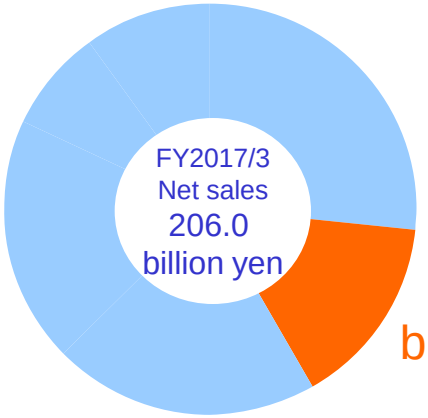
For industrial applications

- Oil- and water-resistance
- Durability
- Heat resistance

Industrial & Material Operations

- Window films
- Films for outdoor signs and advertising
- Interior finishing mounting sheets

- Automobile-use adhesive products
- Industrial-use adhesive tapes
- Labeling machines, etc.



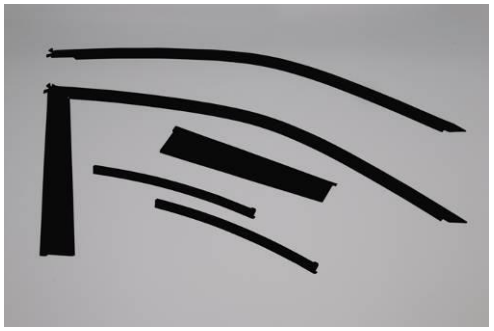
30.6
billion yen

14.9%

Industrial & Material Operations

Automobile-use adhesive products

- Paint replacement films for door sashes



▶▶▶ Original material design increases the passage of air and makes it simple to apply

With air bubbles

With no air bubbles

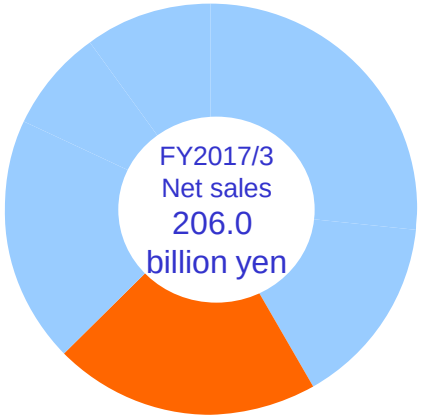
- Protective films for aluminum wheels

- Marking films

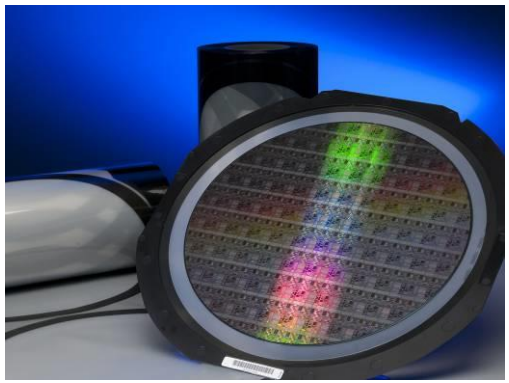
- Window films

Advanced Materials Operations

- Semiconductor-related adhesive tapes
- Semiconductor-related equipment
- Multilayer ceramic capacitor-related tapes, etc.



43.0 billion yen
20.9%



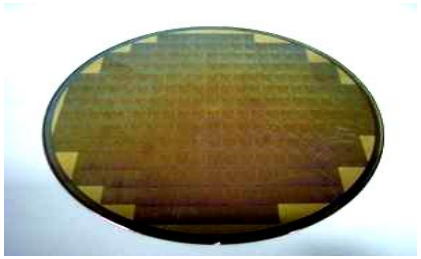
Advanced Materials Operations

Manufacturing process for semiconductor chip

【Fabrication】

Single crystal silicon ingot

Wafer



Wafer following circuit formation

【Back-end process】

*Uses of our tapes and equipment

Wafer following circuit formation

Lamination of surface protective tape*

Back grinding (wafer thinning)

Lamination of dicing tape*

Removal of surface protective tape*

Dicing (wafer cutting)

UV irradiation of tape*

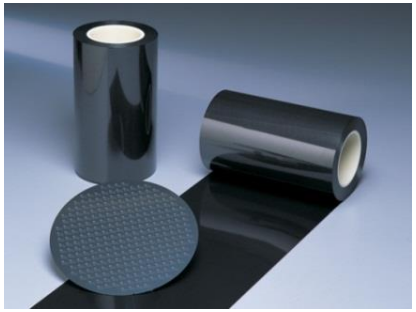
Picking up

Mounting / Stacking

Molding

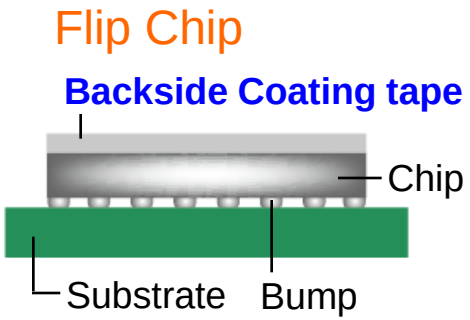
Advanced Materials Operations

Key tape products related to semiconductors



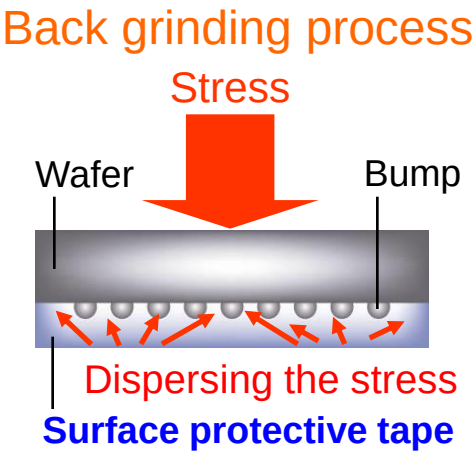
Backside coating tape for Flip Chip

- This tape protects and reinforces the die backside in applications such as Flip Chip, in which some bumps(electrodes) is formed on the circuit surface and mounted onto a substrate.
- It blocks light to minimize effects on the circuit surface
- Unlike a coating of liquid mold material, this product is available as a tape, ensuring outstanding uniformity in thickness, and allowing the simplification of conventional processes
- We have broad lineups of the tapes including Infrared Transmission Type and Thermal Conductive Type



Surface protective tape for thin & high-bump wafers

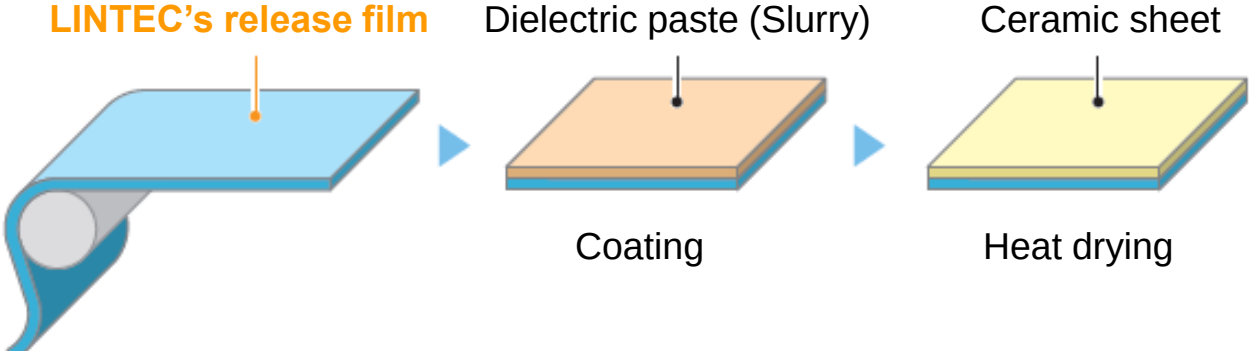
- This tape is specially designed to prevent thin wafers from bowing after back grinding.
- It protects the surface of wafers from contamination by attaching to bumps formed on the circuit surface.
- It prevents wafer damage by dispersing the stress placed upon wafers during back grinding.

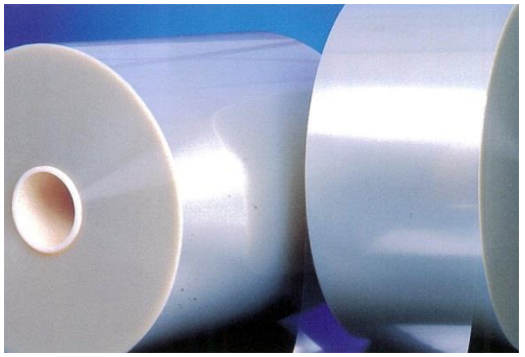


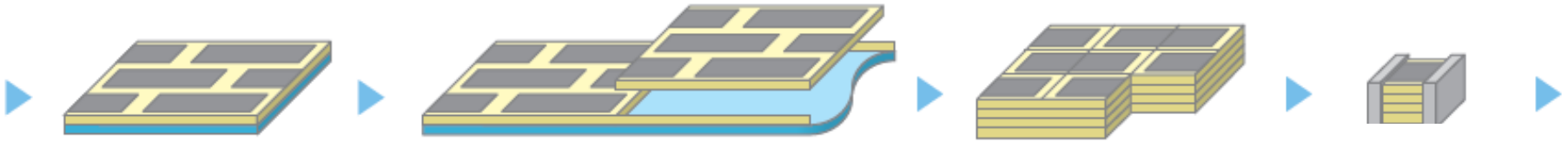
Advanced Materials Operations

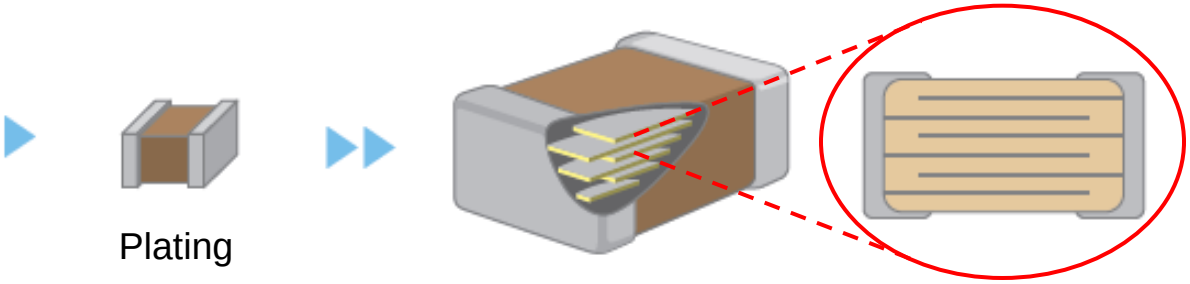
Multilayer ceramic capacitor (MLCC) –related tapes

Manufacturing process for MLCC









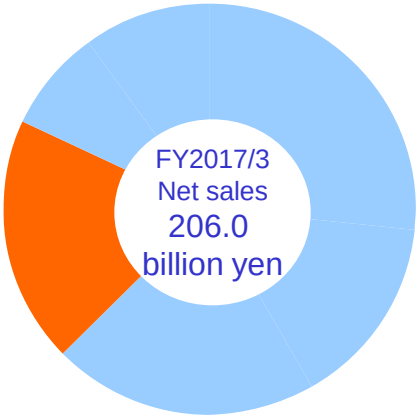
Forming several hundred layers in a 1mm square or less

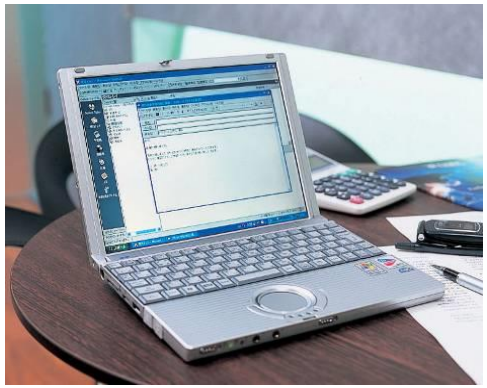
Optical Products Operations

- Polarizing films and retardation films for LCDs
  / Adhesive processing
- Polarizing films for LCDs
  / Surface improvement processing
- Protective films for polarizing films, etc.

40.2 billion yen

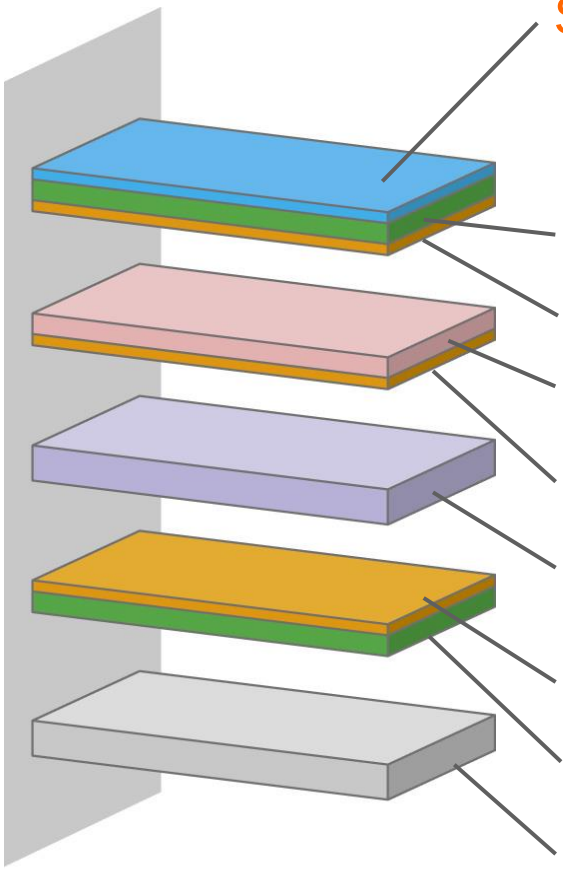
19.5%





Optical Products Operations

Structure of LCD



Surface improvement
Anti-reflection / Anti-glare / Abrasion-resistance properties

Polarizing film

Adhesive

Retardation film

Adhesive

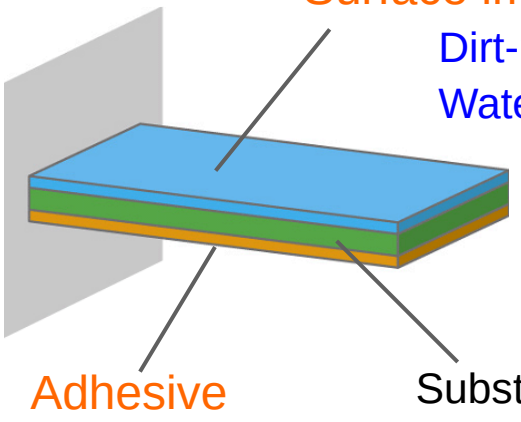
Liquid crystal cell

Adhesive

Polarizing film

Light source

● Protective films for polarizing films



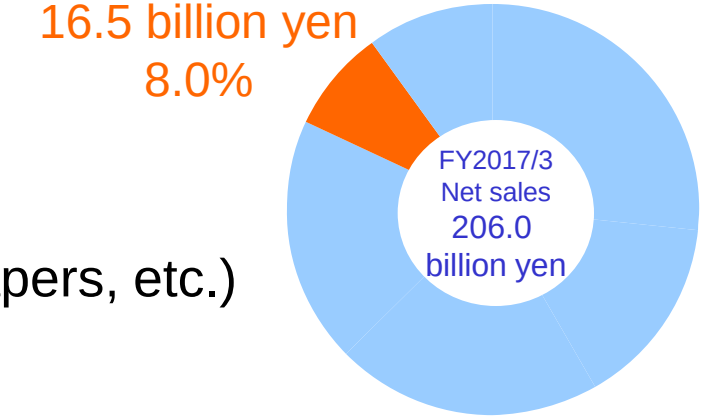
Surface improvement
Dirt-resistance / Water-resistance / Anti-static

Adhesive

Substrate (film)

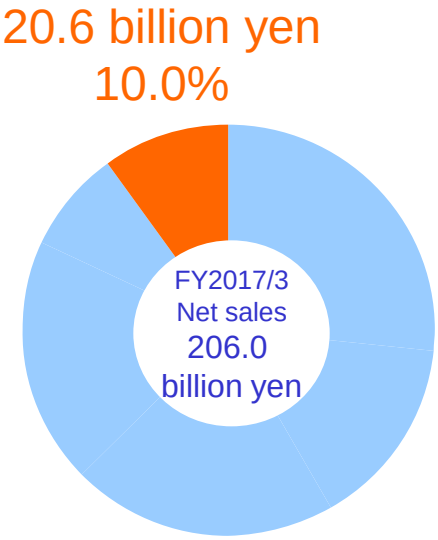
Fine & Specialty Paper Products Operations

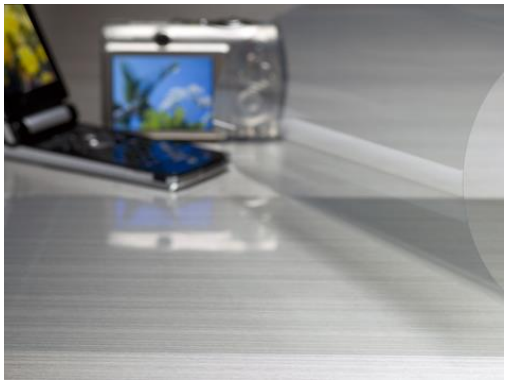
- Color papers for envelopes
- Colored construction papers
- Special function papers
  (Dust-free papers and Oil resistant papers, etc.)
- High-grade printing papers
- High-grade papers for paper products, etc.



Converted Products Operations

- Release papers for adhesive products
- Release films for optical-related products
- Release papers for FPC* cover lay films
- Casting papers for synthetic leather (release paper)
- Casting papers for carbon fiber composite materials (release paper), etc.





*FPC:Flexible Printed Circuit

Converted Products Operations

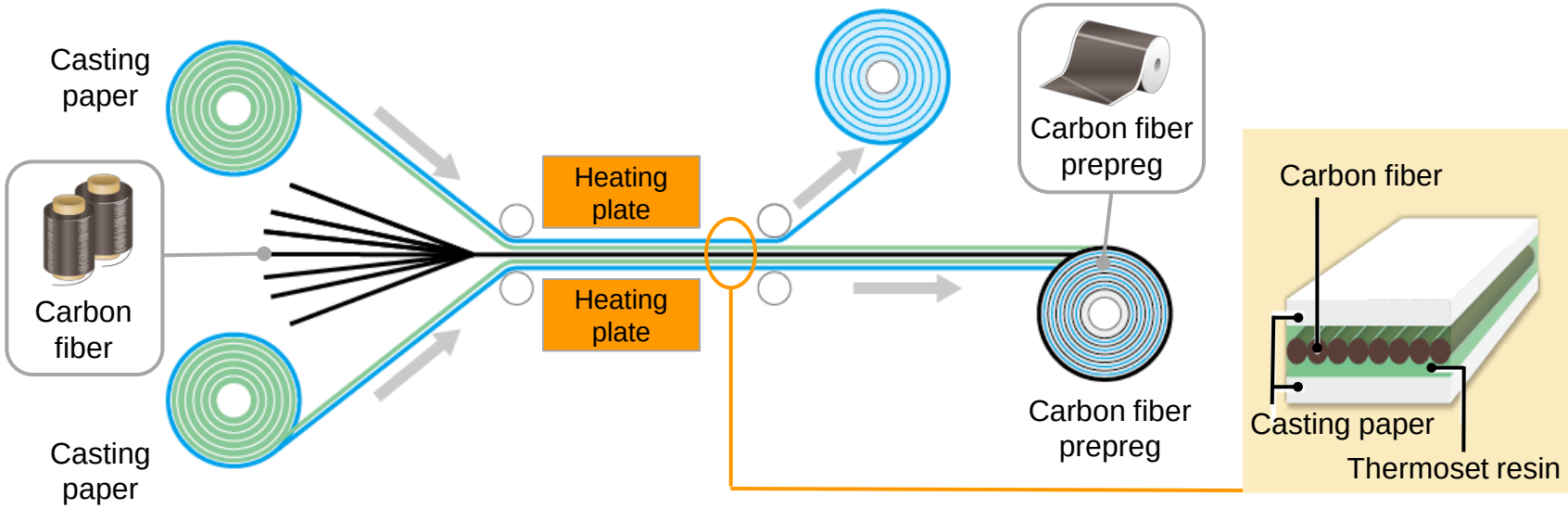
Casting papers for carbon fiber composite materials

- The casting paper is used as a base sheet for manufacturing "carbon fiber prepreg", which is a composite material composed of a sheeted form of carbon fiber fixed with resin.

- Carbon fiber prepreg has been used for goods for sports and leisure, such as tennis racket, golf shaft, and fishing rod, as well as for aircraft, and the demand has been expanding.

Features
- Suitability for resin coating
- Heat resistance
- Strength
- Most appropriate difference in release strength between the front and the back etc.

Manufacturing process for Casting papers for carbon fiber composite materials

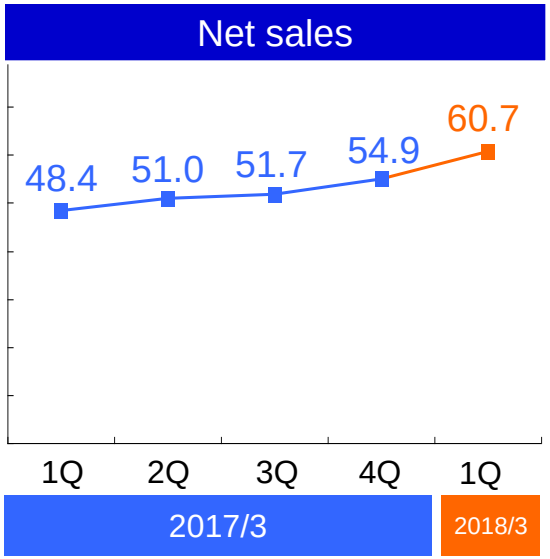


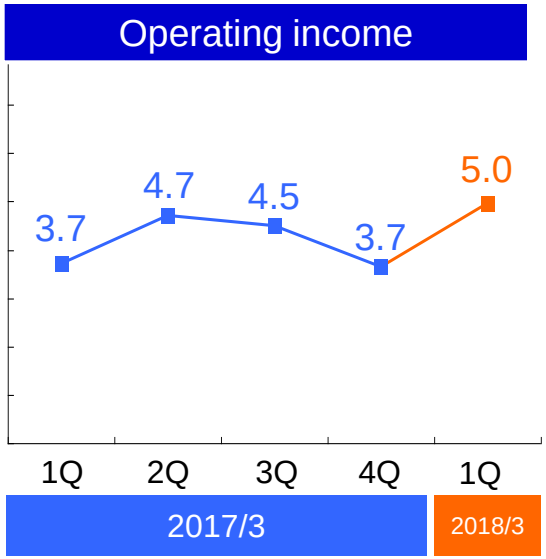
Consolidated financial results for first quarter FY2018/3

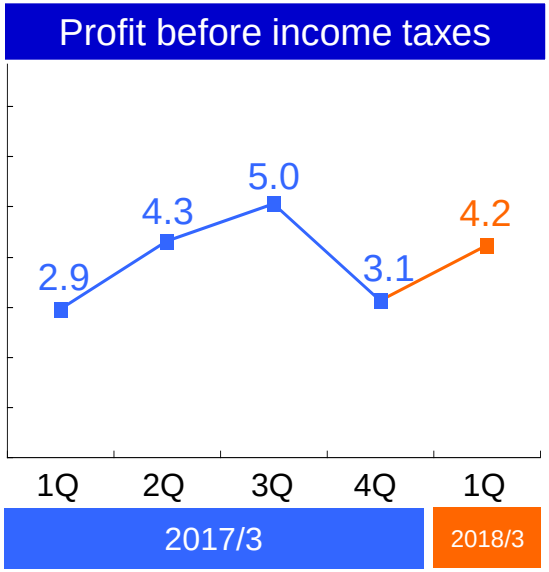
(Billion yen)

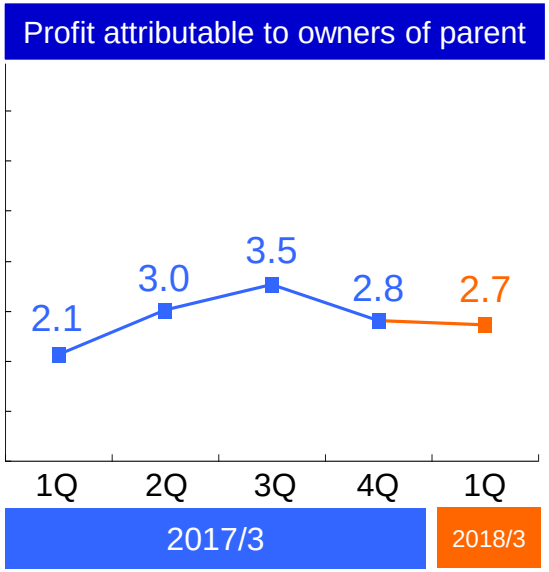
	2018/3 1Q results	2017/3 1Q results	Increase (decrease)
Net sales	60.7	48.4	12.3 25.4%
Operating income	5.0	3.7	1.2 33.3%
Profit before income taxes	4.2	2.9	1.3 43.4%
Profit attributable to owners of parent	2.7	2.1	0.6 28.6%

(Billion yen)









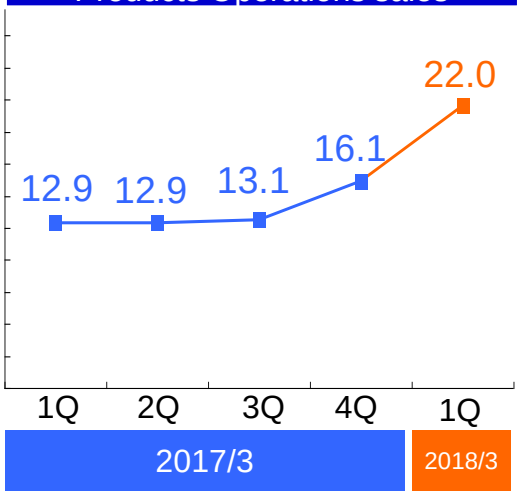
Printing and Industrial Materials Products

(Billion yen)

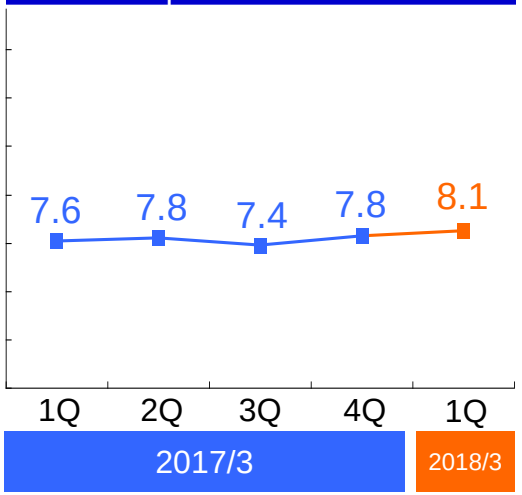
Printing and Industrial Materials Products	2018/3 1Q results	2017/3 1Q results	Increase (decrease)
Printing and Variable Information Products Operations	22.0	12.9	9.1 70.3%
Industrial and Material Operations	8.1	7.6	0.5 6.8%
Segment net sales	30.1	20.5	9.6 46.8%
Segment operating income	0.7	0.6	0.0 6.8%

(Billion yen)

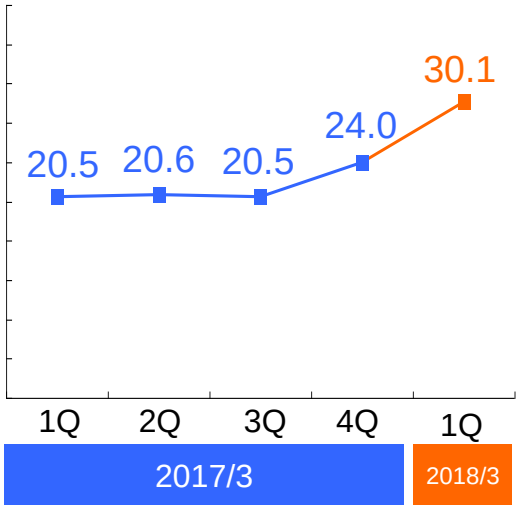
Printing and Variable Information Products Operations sales



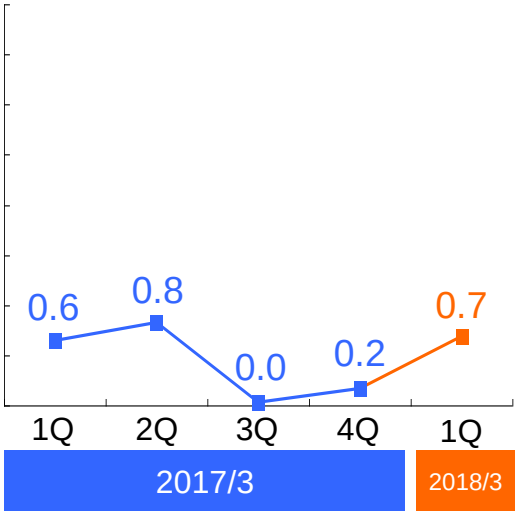
Industrial and Material Operations sales



Segment net sales



Segment operating income



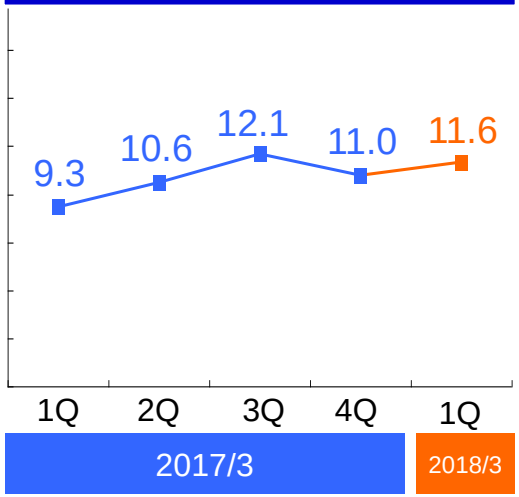
Electronic and Optical Products

(Billion yen)

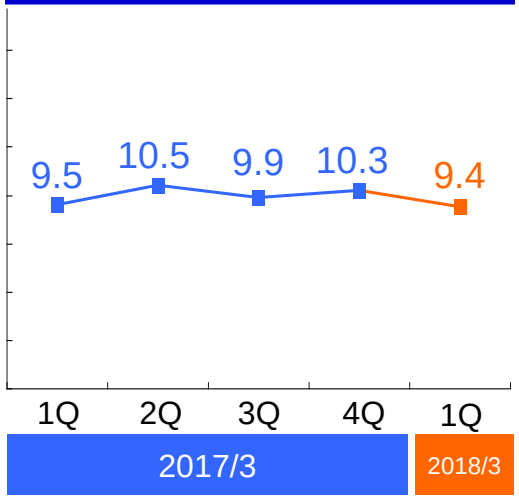
Electronic and Optical Products	2018/3 1Q results	2017/3 1Q results	Increase (decrease)
Advanced Materials Operations	11.6	9.3	2.3 24.6%
Optical Products Operations	9.4	9.5	(0.1) (1.2%)
Segment net sales	21.0	18.9	2.2 11.6%
Segment operating income	2.8	2.0	0.9 44.8%

(Billion yen)

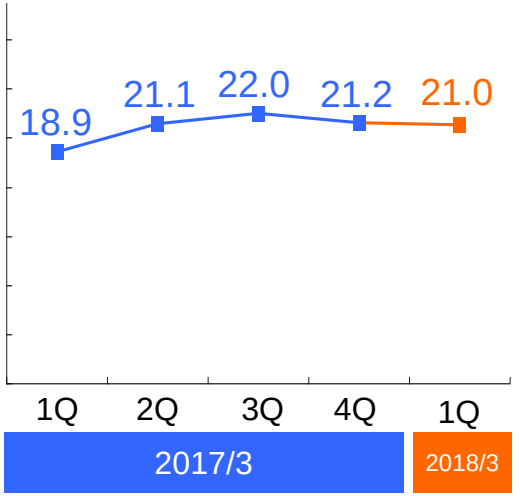
Advanced Materials Operations sales



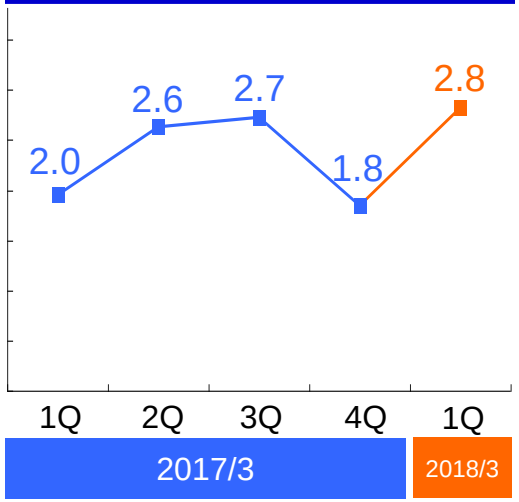
Optical Products Operations sales



Segment net sales



Segment operating income



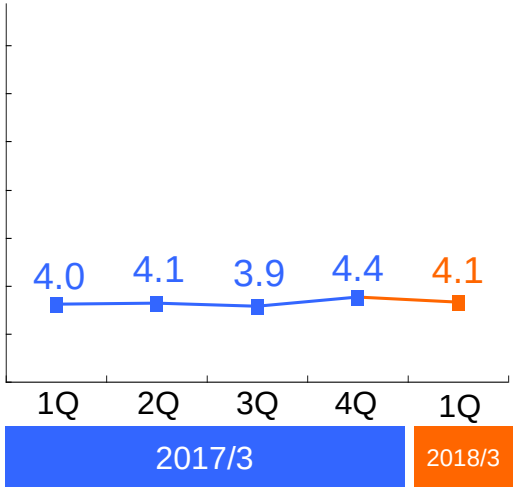
Paper and Converted Products

(Billion yen)

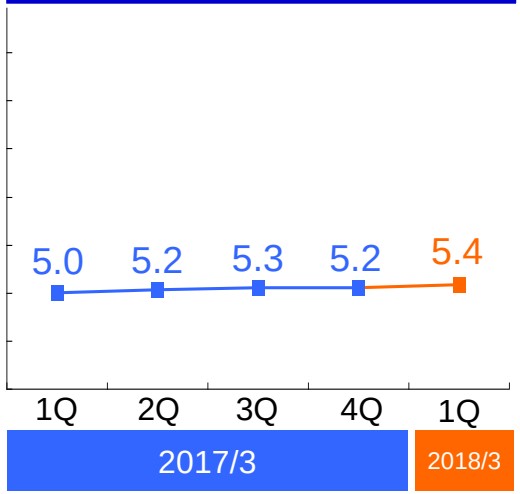
Paper and Converted Products	2018/3 1Q results	2017/3 1Q results	Increase (decrease)
Fine and Specialty Paper Products Operations	4.1	4.0	0.1 3.0%
Converted Products Operations	5.4	5.0	0.4 7.6%
Segment net sales	9.5	9.0	0.5 5.6%
Segment operating income	1.5	1.1	0.4 33.6%

(Billion yen)

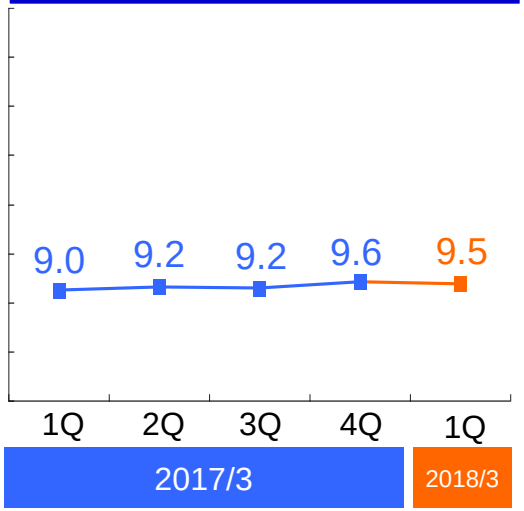
Fine and Specialty Paper Products Operations sales



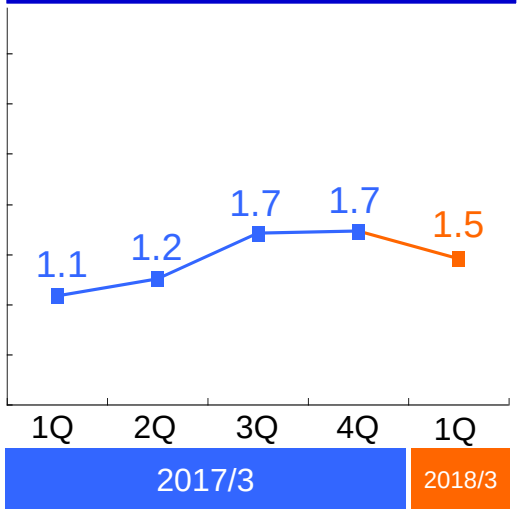
Converted Products Operations sales



Segment net sales



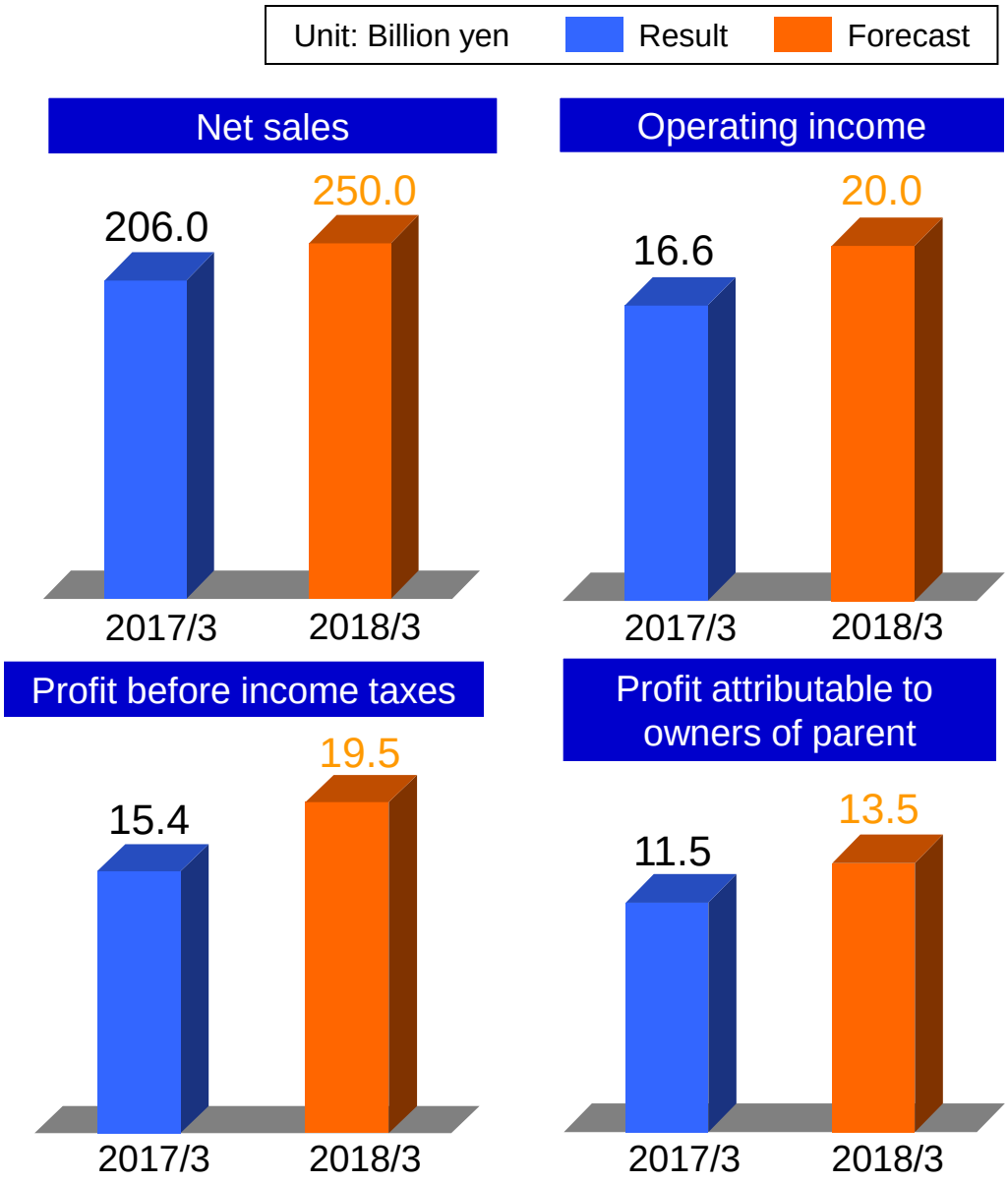
Segment operating income



Forecasts of consolidated financial results for FY2018/3

(Billion yen)

	2018/3 full year forecasts	2017/3 full year results	Increase (decrease)
Net sales	250.0	206.0	44.0 21.4%
Operating income	20.0	16.6	3.4 20.5%
Profit before income taxes	19.5	15.4	4.1 26.6%
Profit attributable to owners of parent	13.5	11.5	2.1 17.9%



Forecasts of net sales and operating income for FY2018/3 by operational segment

(Billion yen)

Printing and Industrial Materials Products	2018/3 forecasts	2017/3 results	Increase (decrease)
Printing and Variable Information Products Operations	88.6	55.1	33.5 60.8%
Industrial and Material Operations	36.6	30.6	6.0 19.7%
Segment net sales	125.2	85.7	39.5 46.2%
Segment operating income	4.8	1.7	3.1 187.1%

(Billion yen)

Electronic and Optical Products	2018/3 forecasts	2017/3 results	Increase (decrease)
Advanced Materials Operations	47.0	43.0	4.0 9.2%
Optical Products Operations	39.8	40.2	(0.4) (0.9%)
Segment net sales	86.8	83.2	3.6 4.3%
Segment operating income	9.4	9.2	0.2 2.7%

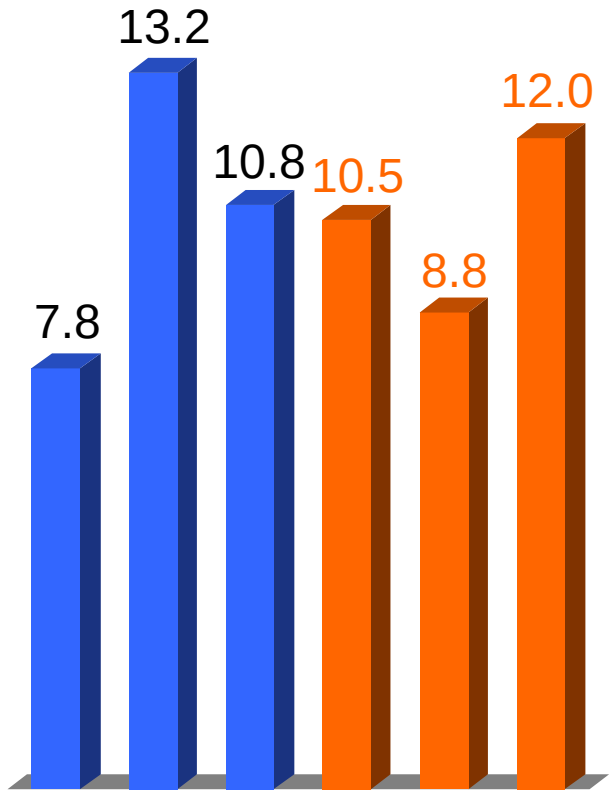
(Billion yen)

Paper and Converted Products	2018/3 forecasts	2017/3 results	Increase (decrease)
Fine and Specialty Paper Products Operations	17.0	16.5	0.5 3.3%
Converted Products Operations	21.0	20.6	0.4 1.7%
Segment net sales	38.0	37.1	0.9 2.4%
Segment operating income	5.8	5.8	0.0 0.6%

Capital expenditure, Depreciation & Amortization, R&D expenses

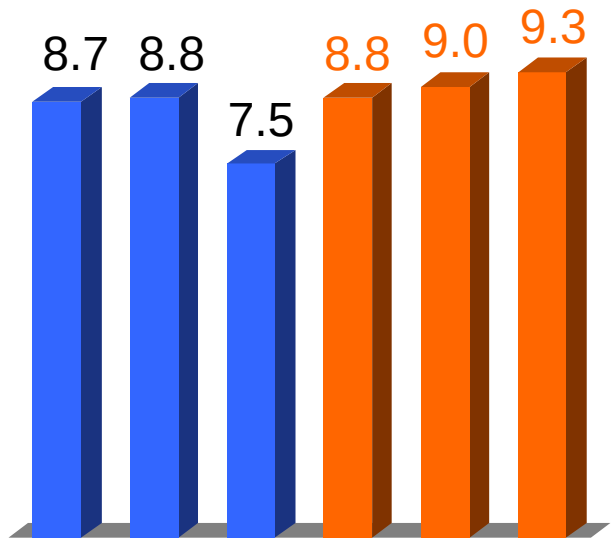
Unit：Billion yen　Result　Forecast

Capital expenditure



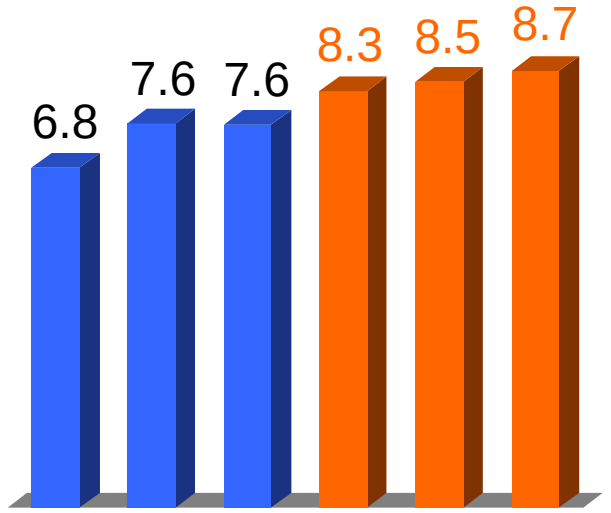
LIP-2016 31.8　LIP-2019 31.3

Depreciation & Amortization



LIP-2016 25.0　LIP-2019 27.1

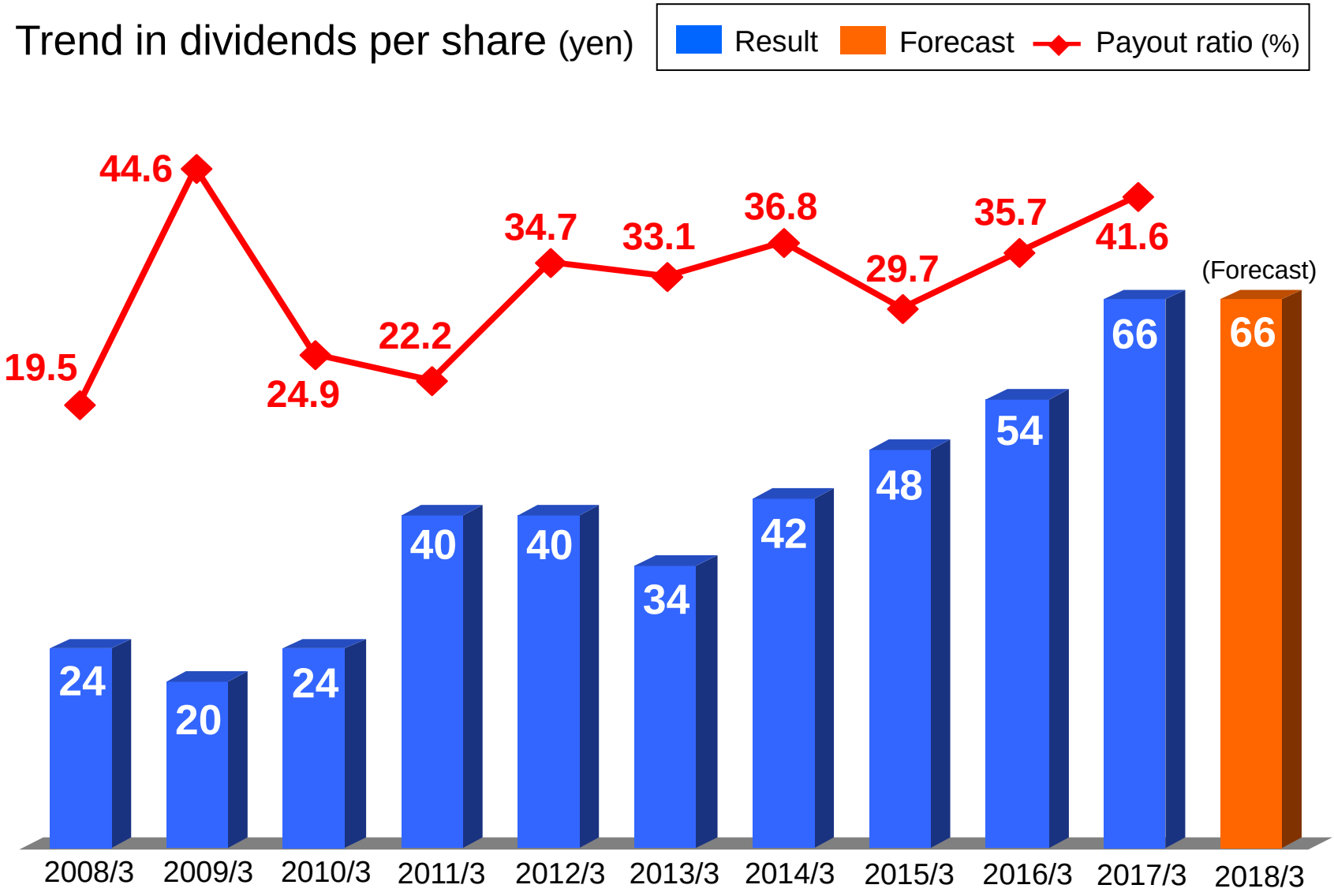
R&D expenses



LIP-2016 22.0　LIP-2019 25.5

Dividend

Trend in dividends per share (yen)



Medium-term business plan

LIP-2019 LINTEC INNOVATION PLAN

Title	LIP (LINTEC INNOVATION PLAN) -2019
Period	From April 2017 to March 2020
Basic Policy	**Deepening innovation aimed at driving new growth**
Key initiatives	**1. Strengthening of regional strategy** **2. Creation of new value** **3. Bolstering the corporate structure** **4. Activities for realizing a sustainable society**

Major numerical targets

- ■Net sales: ¥270.0 billion
- ■Operating profit margin: More than 9%
- ■Operating income:¥ 25.0 billion
- ■ROE(Return on equity): More than 9%

Recent acquisition results

Overview of three companies in Europe and the US that became subsidiaries after October 2016

MACTAC AMERICAS, LLC

Establishment : 1959

Registered Office : Ohio, the United States

Number of Employees : 496 (as of the end of December, 2016)

Business Description : Manufacture and sales of label materials for printing, VIP label materials, graphic sheets, industrial and medical tapes, etc.

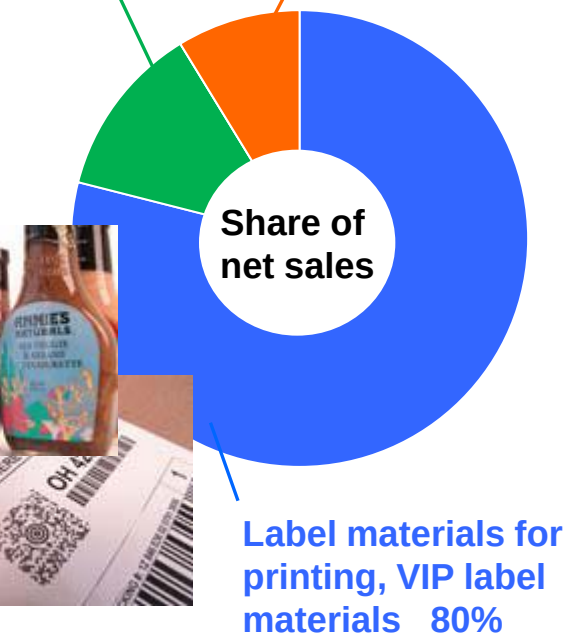
Net Sales : 34.2 billion yen (Fiscal year ended December 31, 2016)

Operating Income : 3.6 billion yen (Fiscal year ended December 31, 2016)

Acquisition Price : Approx. USD 270 million* * Debt assumption is not included

Ratio of Membership Interests to be Acquired : 100%

Closing Date : December 1, 2016



- Full-scale entry into the North American market of adhesive papers and films for labels
- Expansion of sales of LINTEC products using MACTAC AMERICAS' sales channels

Recent acquisition results

Overview of three companies in Europe and the US that became subsidiaries after October 2016

VDI, LLC

Establishment : 1971

Registered Office : Kentucky, the United States

Number of Employees : 36
(as of the end of December, 2016)

Business Description :
Manufacture and sales of functional films

Net Sales : 1,070 million yen
(Fiscal year ended December 31, 2016)

Operating Income : 20 million yen
(Fiscal year ended December 31, 2016)

Acquisition Price : USD 26 million*
* Debt assumption is not included

Ratio of Membership Interests to be Acquired : 100%

Closing Date : October 31, 2016

- Use of metallizing technologies, including metal deposition and sputtering, which LINTEC did not have
- Development of operations in a new field

LINTEC GRAPHIC FILMS LIMITED

Establishment : 1993

Registered Office : Buckinghamshire, the United Kingdom

Number of Employees : 18 (as of the end of October, 2016)

Business Description : Processing and sales of label materials for printing, graphic sheets, etc.

Net Sales : 850 million yen
(Fiscal year ended October 31, 2016)

Operating Income : 130 million yen
(Fiscal year ended October 31, 2016)

Acquisition Price : GBP 7.3 million

Ratio of Shares to be Acquired : 100%

Closing Date : November 30, 2016

- LINTEC GRAPHIC FILMS sells LINTEC products in European market under a licensing agreement concluded in 2010.
- Acceleration of customer acquisition using the company's marketing capability and sales network

Company motto and Mission statement

Company motto

Sincerity and Creativity

Mission statement

The company name LINTEC derives from “linkage” and “technology,” two key components of our business philosophy, which emphasizes the importance of close relations, inside and outside the company, and leading-edge R&D programs. By bringing these together to develop innovative solutions, we have established a reputation in Japan and overseas as a dynamic and reliable company that contributes to the prosperity of our stakeholders, to the growth of our industry, and to a brighter future for society as a whole. And underpinning all of our business activities is an unwavering emphasis on “Sincerity and Creativity,” the twin values enshrined in our company motto.

For tomorrow we build today

This material includes forward-looking statements, such as forecasts of business results, based on information currently held and assumptions that have been judged as reasonable by the Company.

The Company cannot guarantee the accuracy of these statements or definitively assure the realization of future numerical targets and policies.

Actual business results, etc., may vary due to various factors and circumstances.