Creating the Future with Adhesive Technologies

Linkage + Technology
LINTEC
Company information

■ Head Office:  
   Itabashi-ku, Tokyo, Japan

■ Security Code:  
   7966 (Tokyo Stock Exchange, 1st Section)

■ Established:  October 15, 1934

■ Common Stock:  23.2 billion yen (as of March 31, 2013)

■ Number of Employees:  4,270 (as of March 31, 2013)

■ Net Sales:  190.8 billion yen (as of March 31, 2013)

■ 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:  4 companies (Japan)  
                            20 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 marketing of adhesive papers and films for labels
Subsequently expanded adhesive operations to such areas as decorative materials for interior and exterior, motorcycle, automobile and others.

1984: Developed UV curable dicing tape and made full-scale entry into field of semiconductor-related products

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 paper, specialty papers to the fields of adhesive paper and films, related equipment
1991: Made full-scale entry into LCD-related operations

1993: LINTEC (TIANJIN) INDUSTRY CO., LTD. was established

1994: PT. LINTEC INDONESIA was established

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

2002: LINTEC (SUZhou) TECH CORPORATION was established

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

2004: LINTEC KOREA, INC., was established

2011: LINTEC (THAILAND) CO., LTD., was established
Performance trends / Net sales, Operating income

Unit: Billion yen
- Net sales
- Operating income

Highest Results on Record
212.7 20.9 190.8

Global recession

IT recession
7.3

The impact of financial crisis in Europe and the Great East Japan Earthquake, etc.
Oversea sales have increased 43.5 billion over the last 10 years with average annual growth of 12.0%.
(Sales in Asia have shown average annual growth of 15.1%)
Basic composition of adhesive products

- Surface improvement
  Printability / imprintability, Durability, etc.
- Substrate
  (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 and Variable Information Products Operations
- Industrial and Material Operations

Electronic and Optical Products
- Advanced Materials Operations
- Optical Products Operations

Paper and Converted Products
- Fine and Specialty Paper Products Operations
- Converted Products Operations

Adhesive materials + Equipment
● Adhesive papers and films for labels

- Main types: Permanent, Removable, Restickable

● Label printing machines, etc.
Usage of LINTEC Label Materials / Required properties

- **For commodity items**
  - Water resistance
  - Curved-surface adhesion
  - Design

- **For food packaging**
  - Water resistance
  - Curved-surface adhesion
  - Cold resistance

- **For stationery**
  - Durability
  - Dimensional stability
  - Design etc.

- **For distribution**
  - Imprintability
  - Adequacy for affixing seals
  - Cold resistance

- **For medical and pharmaceutical**
  - Printability / imprintability
  - Chemical resistance
  - Tamper-evident

- **For industrial**
  - Oil- and water-resistance
  - Durability
  - Heat resistance
Industrial and Material Operations

- Window films
- Films for outdoor signs and advertising
- Interior finishing mounting sheets
- Automobile-use adhesive products
- Industrial-use adhesive tapes
- PV backsheets
- Labeling machines, etc.

FY2013
Net sales
190.8 billion yen

33.2 billion yen
17.4%
Industrial and 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

- Protection films for aluminum wheels

- Marking films

- Window films
Advanced Materials Operations

- Semiconductor-related tapes
- Semiconductor-related equipment
- Coated films for multilayer ceramic capacitor production
- Touch screen-related products, etc.

FY2013
Net sales
190.8 billion yen

34.0 billion yen
17.8%
Manufacturing process for semiconductor chip

【Fabrication】
- Single crystal silicon ingot
- Wafer following circuit formation
- Back grinding (wafer thinning)
- Lamination of dicing tape*
- Removal of surface protection tape*
- Dicing (wafer cutting)
- UV irradiation of tape*
- Picking up
- Mounting
- Molding

【Back-end process】
*Uses of our tapes and equipment

*Uses of our tapes and equipment
**Key tape products related to semiconductors**

- **Surface protection tape for thin & high-bump wafers**
  - Specially designed to prevent thin wafers from bowing after back grinding.
  - Protects the surface of wafers from contamination by attaching to bumps formed on the surface of the circuitry.
  - Prevents wafer damage by dispersing the stress placed upon wafers during back grinding.

- **Dicing die bonding tape**

  **Dicing process**
  - Chips are firmly fixed

  **Picking up process**
  - Adhesive is transcribed to the reverse side of chips

  **Die bonding process**
  - No need for paste application during the mounting process
Coated films for multilayer ceramic capacitor (MLCC) production

Manufacturing process for MLCC

1. LINTEC’s coated film
2. Dielectric paste (Slurry)
3. Ceramic sheet
4. Coating
5. Heat drying
6. Internal electrode printing
7. Die cutting and releasing
8. Stacking, compression bonding and cutting
9. Firing and external electrode forming
10. Forming several hundred layers in a 1mm square or less
Touch screen-related products

- **Anti-shatter film (ASF)**
  - This is a hard coated adhesive film designed to prevent the shattering of glass type touch screen.

- **Optically clear adhesive sheet (OCA)**
  - Structure of OCA:
    - Secondary release film
    - Adhesive
    - Primary release film

- **Hard coat film for ITO**
  - Structure of ITO film:
    - ITO
    - Hard coat
    - Polyester film
    - Hard coat

- **ITO film**

- **Cover glass**

- **LCD**
Optical Products Operations

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

FY2013
Net sales 190.8 billion yen

38.4 billion yen 20.1%
● Protection films for polarizing films

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

Adhesive
Substrate (film)

Polarizing film
Light source

Liquid crystal cell

Retardation film

Adhesive

Adhesive

Adhesive

Polarizing film

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

Polarizing film

Substrate (film)
Fine and Specialty Paper Products Operations

- Color papers for envelopes
- Colored construction papers
- Lint-free paper
- High-grade printing papers
- High-grade papers for paper products, etc.

15.9 billion yen
8.3%

FY2013 Net sales
190.8 billion yen
Converted Products Operations

- Release papers and films for adhesive labels
- 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.

19.8 billion yen
10.4%

FY2013 Net sales 190.8 billion yen

*FPC = Flexible Printed Circuit
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

- 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.
## Consolidated financial results for Third quarter FY2014

<table>
<thead>
<tr>
<th></th>
<th>FY2014 3Q results</th>
<th>FY2013 3Q results</th>
<th>Increase (decrease)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Net sales</strong></td>
<td>150.5</td>
<td>144.4</td>
<td>6.1 4.2%</td>
</tr>
<tr>
<td><strong>Operating income</strong></td>
<td>10.9</td>
<td>8.5</td>
<td>2.5 29.0%</td>
</tr>
<tr>
<td><strong>Income before income taxes</strong></td>
<td>10.8</td>
<td>8.7</td>
<td>2.1 23.8%</td>
</tr>
<tr>
<td><strong>Net income</strong></td>
<td>7.7</td>
<td>6.3</td>
<td>1.4 21.5%</td>
</tr>
</tbody>
</table>

### Line Graphs

- **Net sales**
  - FY2013: 46.0, 50.1, 48.3, 46.5, 51.9
  - FY2014: 46.9, 51.6
- **Operating income**
  - FY2013: 2.5, 3.2, 2.8, 2.1, 3.0
  - FY2014: 3.8, 4.2
- **Income before income taxes**
  - FY2013: 2.6, 3.1, 3.1, 3.4, 3.2
  - FY2014: 4.1
- **Net income**
  - FY2013: 1.7, 2.4, 2.2, 1.3
  - FY2014: 2.4, 2.4, 2.9
## Printing and Industrial Materials Products

### Net sales / Operating income by Operational segment

<table>
<thead>
<tr>
<th></th>
<th>FY2014 3Q results (Billion yen)</th>
<th>FY2013 3Q results (Billion yen)</th>
<th>Increase (decrease)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Printing and Industrial Materials Products</td>
<td>39.4</td>
<td>37.6</td>
<td>1.8 (4.8%)</td>
</tr>
<tr>
<td>Printing and Variable Information Products Operations</td>
<td>24.1</td>
<td>24.8</td>
<td>(0.7) (2.8%)</td>
</tr>
<tr>
<td>Net sales</td>
<td>63.5</td>
<td>62.4</td>
<td>1.1 (1.8%)</td>
</tr>
<tr>
<td>Operating income</td>
<td>1.9</td>
<td>2.1</td>
<td>(0.2) (8.0%)</td>
</tr>
</tbody>
</table>

### Graphs

**Printing and Variable Information Products Operations sales**

- FY2013: 12.4, 12.8, 12.0, 12.6, 13.2, 13.5
- FY2014: 8.2, 8.7, 7.9, 8.3, 7.5, 8.1, 8.5

**Industrial and Material Operations sales**

- FY2014: 0.7, 0.8, 0.5, 0.3, 0.5, 0.6, 0.8

**Segment net sales**

- FY2014: 0.7, 0.8, 0.5, 0.3, 0.5, 0.6, 0.8

**Segment operating income**

- FY2014: 0.7, 0.8, 0.5, 0.3, 0.5, 0.6, 0.8
## Electronic and Optical Products

### Net sales / Operating income by Operational segment

<table>
<thead>
<tr>
<th>Segment</th>
<th>FY2014 3Q results</th>
<th>FY2013 3Q results</th>
<th>Increase (decrease)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electronic and Optical Products</td>
<td>27.9</td>
<td>25.7</td>
<td>2.3, 8.9%</td>
</tr>
<tr>
<td>Advanced Materials Operations</td>
<td>30.8</td>
<td>30.0</td>
<td>0.8, 2.8%</td>
</tr>
<tr>
<td>Optical Products Operations</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net sales</td>
<td>58.8</td>
<td>55.7</td>
<td>3.1, 5.6%</td>
</tr>
<tr>
<td>Operating income</td>
<td>5.3</td>
<td>2.7</td>
<td>2.6, 93.6%</td>
</tr>
</tbody>
</table>

### Advanced Materials Operations sales

- FY2013: 8.1, 8.4, 8.3, 8.6, 9.6, 9.7
- FY2014: 8.7, 10.7, 10.7, 8.4, 8.8, 11.2, 10.8

### Optical Products Operations sales

- FY2013: 10.9, 10.7, 10.7, 11.2
- FY2014: 10.8

### Segment net sales

- FY2013: 16.8, 19.1, 17.5, 20.5
- FY2014: 19.8, 16.7, 20.9, 2.3

- FY2013: 0.6, 1.1, 1.0, 1.3
- FY2014: 0.5, 1.7, 2.3
## Paper and Converted Products

<table>
<thead>
<tr>
<th></th>
<th>FY2014 3Q results</th>
<th>FY2013 3Q results</th>
<th>Increase (decrease)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paper and Converted Products</td>
<td>11.8</td>
<td>11.5</td>
<td>2.0%</td>
</tr>
<tr>
<td>Fine and Specialty Paper Products Operations</td>
<td>16.4</td>
<td>14.8</td>
<td>10.7%</td>
</tr>
<tr>
<td>Net sales</td>
<td>28.1</td>
<td>26.3</td>
<td>6.9%</td>
</tr>
<tr>
<td>Operating income</td>
<td>3.8</td>
<td>3.6</td>
<td>3.3%</td>
</tr>
</tbody>
</table>

### Fine and Specialty Paper Products Operations sales

- FY2014: 3.7, 4.0, 3.8, 4.4, 4.0, 3.9, 3.9
- FY2013: 4.9, 4.9, 5.1, 5.0, 5.3, 5.8, 5.2

### Converted Products Operations sales

- FY2014: 8.6, 8.9, 8.9, 9.4, 9.3, 9.7, 9.1
- FY2013: 1.2, 1.3, 1.2, 1.3, 1.3, 1.4, 1.1

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**Linking your dreams**

LINTEC Corporation
Forecasts of consolidated financial results for FY2014

<table>
<thead>
<tr>
<th></th>
<th>FY2014 full year forecasts</th>
<th>FY2013 full year results</th>
<th>Increase (decrease)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net sales</td>
<td>210.0</td>
<td>190.8</td>
<td>19.2 (10.0%)</td>
</tr>
<tr>
<td>Operating income</td>
<td>15.0</td>
<td>10.6</td>
<td>4.4 (42.0%)</td>
</tr>
<tr>
<td>Income before income taxes</td>
<td>15.0</td>
<td>10.8</td>
<td>4.2 (38.4%)</td>
</tr>
<tr>
<td>Net income</td>
<td>10.5</td>
<td>7.7</td>
<td>2.8 (36.7%)</td>
</tr>
</tbody>
</table>

**Unit: Billion yen**

**Increase (decrease)**

- **Net sales**: 19.2 billion yen (10.0% increase)
- **Operating income**: 4.4 billion yen (42.0% increase)
- **Income before income taxes**: 4.2 billion yen (38.4% increase)
- **Net income**: 2.8 billion yen (36.7% increase)
Capital expenditure, Depreciation & Amortization, R&D expenses

<table>
<thead>
<tr>
<th>Year</th>
<th>Capital expenditure</th>
<th>Depreciation &amp; Amortization</th>
<th>R&amp;D expenses</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY 2012</td>
<td>11.7</td>
<td>10.1</td>
<td>6.2</td>
</tr>
<tr>
<td>FY 2013</td>
<td>12.3</td>
<td>10.1</td>
<td>7.3</td>
</tr>
<tr>
<td>FY 2014</td>
<td>10.0</td>
<td>10.0</td>
<td>7.2</td>
</tr>
</tbody>
</table>

Unit: Billion yen  
Result  
Forecast

2012  
2013  
2014
Dividend

Trend in dividends per share (yen)

<table>
<thead>
<tr>
<th></th>
<th>Result</th>
<th>Forecast</th>
<th>Payout ratio (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>18</td>
<td>13.3</td>
<td>-</td>
</tr>
<tr>
<td>2008</td>
<td>24</td>
<td>19.5</td>
<td>-</td>
</tr>
<tr>
<td>2009</td>
<td>20</td>
<td></td>
<td>24.9</td>
</tr>
<tr>
<td>2010</td>
<td>24</td>
<td></td>
<td>22.2</td>
</tr>
<tr>
<td>2011</td>
<td>40</td>
<td></td>
<td>40</td>
</tr>
<tr>
<td>2012</td>
<td>40</td>
<td></td>
<td>34.7</td>
</tr>
<tr>
<td>2013</td>
<td>33.1</td>
<td></td>
<td>34</td>
</tr>
<tr>
<td>2014</td>
<td>42</td>
<td></td>
<td>29.9 (Forecast)</td>
</tr>
</tbody>
</table>

Interim dividend of 21 yen
All statements contained in this material, such as projected operating results are based on assumptions regarding economic conditions, market trends and plans as of the date of this material.

For various reasons, it is possible that the Company’s future results, performance, or achievements will differ from the contents of these forward-looking statements.