Business Strategy of the Cable Materials Company

Hitachi Metals IR Day 2016

June 3, 2016
Hitachi Metals, Ltd.

Kazuya Murakami
Executive Officer
President of the Cable Materials Company
Business Strategy of the Cable Materials Company

[Table of Contents]

1. Business Overview
2. Market Environment
4. Conclusion
Core competencies in cable materials

1-1. Business Domains of the Cable Materials Company

Industrial infrastructure
Contribute to building safe, highly efficient infrastructure
Wires and cables for rolling stock

Electronics
Contribute to making devices smaller and more convenient
Wires and cables for medical devices

Automotive
Contribute to building a safe, secure automobile-based society
EPB harnesses

EPB: Electric parking brake
1-2. Cable Materials Company: Business Overview

**Aim for expansion in the cornerstone segments of rolling stock, medical, and automotive electronic components**

### Core Products

**Main product groups:**
- Wires/cables for construction
- Wires/cables for electronics
- Magnet wires
- Industrial rubber

### Growth Areas

**Main product groups:**
- Wires/cables for rolling stock
- Wires/cables for medical devices
- Automotive electronic components

**Information Systems, etc.**
- Ethernet switches, etc.

**Wires, Cables & Related Products:**

FY2015 Revenues: ¥288.2 bn
Business Strategy of the Cable Materials Company

[Table of Contents]

1. Business Overview
2. Market Environment
4. Conclusion
## 2. Market Environment

<table>
<thead>
<tr>
<th>High-speed railway</th>
<th>Various countries around the world have plans to build high-speed railways. Average annual growth of around 3% is projected over the next 20 years.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical devices</td>
<td>Average annual growth of 5% is projected as a result of the aging of society and increasing sophistication of medical devices.</td>
</tr>
<tr>
<td>Automotive</td>
<td>The need for materials and technologies that will enable lighter weight vehicles and improve fuel efficiency is expanding.</td>
</tr>
</tbody>
</table>

### High-speed railway plans
- **2010**
  - China CRH
- **2015**
  - UK IEP
- **2020**
  - Southern U.S.
  - Western India
  - Western U.S.

### Medical devices
- **European regulations**
  - 2010: 130 g/km
  - 2015: 95 g/km
- **Individual standards (JC 08/NEDC, etc.)**
  - Toward a common global standard (WLTC)
  - High-resolution diagnostic imaging
  - Increasing sophistication of treatment and diagnosis
  - Medical resuscitation devices

### Automotive
- **CO₂ emissions regulations**
  - European regulations
  - 2010: 130 g/km
  - 2015: 95 g/km
- **Standards for measuring fuel efficiency**
  - Individual standards (JC 08/NEDC, etc.)
  - Toward a common global standard (WLTC)

### Demand for wires, cables, and related products
- **Automotive electronic components**
  - Meet EN standards
  - Thinner non-halogen cables
  - Ultra-light cables
  - Cables/wires with high conductivity & high tensile strength
  - High-density (Micro-coaxial and optical cable)
  - Lighter weight (aluminum conductors)
  - For high heat resistance (in the area surrounding the engine)

Source: Hitachi Metals projections based on data published by regulatory authorities in various countries and regions, and data from various market surveys.

Business Strategy of the Cable Materials Company

[Table of Contents]

1. Business Overview
2. Market Environment
4. Conclusion
3-1. Improvement in Profitability Achieved and Plan (FY2012 ⇒ FY2018)

- **FY2012**
  - Revenues: ¥362.0 bn
  - Profit margin: 1.2%

- **FY2015**
  - Revenues: ¥288.2 bn
  - Profit margin: 5.2%

- **FY2018**
  - Revenues: ¥290.0 bn
  - Profit margin: 9.0%

* FY2012: Japanese GAAP; FY2015 and FY2018: IFRS standard
* Circle size: Size of revenues

- **Improve profitability through structural reform**
- **Implement the growth strategy**
3-2. Basic Policy and Growth Strategy of the Company

Basic Policy and Growth Strategy of the Cable Materials Company

Reform to aim for high profitability: Let’s achieve true global growth!

- Implement a global growth strategy
- Strengthen the profit structure by restructuring the business portfolio
- Strengthen monozukuri through innovations in manufacturing processes

FY2018 Medium-Term Management Plan: Goals

<table>
<thead>
<tr>
<th></th>
<th>FY 2015 Actual (¥120 = US$1)</th>
<th>FY 2018 Goal (¥115 = US$1)</th>
<th>Change vs. FY2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenues</td>
<td>¥288.2 bn</td>
<td>¥290.0 bn</td>
<td>101%</td>
</tr>
<tr>
<td>Adjusted operating income</td>
<td>¥15.0 bn</td>
<td>¥26.0 bn</td>
<td>+ ¥11.0 bn</td>
</tr>
<tr>
<td>Adjusted operating margin</td>
<td>5.2%</td>
<td>9.0%</td>
<td>+3.8%</td>
</tr>
<tr>
<td>Overseas sales as a % of total sales</td>
<td>32%</td>
<td>38%</td>
<td>+6%</td>
</tr>
</tbody>
</table>
### Main Action Plan

<table>
<thead>
<tr>
<th>Growth Areas</th>
<th>Core Products</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Rolling Stock</strong></td>
<td><strong>Core Products</strong></td>
</tr>
<tr>
<td>Expand business in the Chinese and European markets</td>
<td>Enhance competitiveness through innovation in manufacturing processes</td>
</tr>
<tr>
<td><strong>Medical Devices</strong></td>
<td></td>
</tr>
<tr>
<td>Enter new areas of medical treatment and expand business domains</td>
<td></td>
</tr>
<tr>
<td><strong>Automotive Electronic Components</strong></td>
<td></td>
</tr>
<tr>
<td>Strengthen the global production and supply structure</td>
<td>Take decisive action to achieve structural reform</td>
</tr>
</tbody>
</table>
3-4. Rolling Stock: Expand Business in the Chinese and European Markets (1)

- Expand share in Chinese rolling stock manufacturers

**China: 12th National People’s Congress**

- **13th Five-Year Plan: (2016-2020)**
  - Total railway investment: RMB 3.8 trillion
  - High-speed railway:
    - Total length, 20,000 km ⇒ 30,000 km

**Strengthen the solutions business**

**Increase production capacity in China**

**Launch new products**

- **Silicone Termination**
  - Helps to achieve thin, lightweight products with a long life span

Chinese rolling stock manufacturers

- Beijing
- Dalian
- Suzhou
- Shanghai

- Manufacturing
- Sales

© Hitachi Metals, Ltd. 2016. All rights reserved.
3-5. Rolling Stock:
Expand Business in the Chinese and European Markets (2)

- Strengthen the supply network for the European market

• Establish new harness supply locations (1H of FY2016)
• Start up location and develop a track record in UK IEP
• Develop leads into European rolling stock manufacturers

Sales goal for the rolling stock sector:
¥9 billion (FY2015) ⇒ ¥14 billion (FY2018)
## Generate synergies with HTP-Meds (U.S. subsidiary)

<table>
<thead>
<tr>
<th></th>
<th>Customer Base</th>
<th>Technology Base</th>
</tr>
</thead>
</table>
| **Hitachi Metals**     | • Major global device manufacturer  
                          • Japanese device manufacturer                                              | • Cabling technology and transmission technology  
                          • Material development capabilities  
                          • Mass production capability                                                 |
| **HTP-Meds**           | • Global dedicated medical manufacturer  
                          • U.S. dedicated medical manufacturer  
                          • Possesses certifications and approvals in medical segment                 | • Forming and processing technology for medical tubing  
                          • Ability to develop products rapidly                                       |

### Mine Customers in the Medical Segment

- **Hitachi Metals**
  - Big 3 Japanese medical customers
- **HTP-Meds**
  - Acquire commercial rights for medical customers in Americas

### New Product Development (Fusion of Diagnosis and Treatment)

- **Diagnostic Cables**
- **Medical Tubing**

### Sales goal for the medical devices segment:

¥7.5 billion (FY2015) ⇒ ¥11.0 billion (FY2018)
3-7. Automotive Electronic Components: Strengthen Global Locations and Supply Structure

- Strengthen the supply structure in growth markets
  - **Czech Republic**: Processing location
  - **China**: Processing location
  - **Japan**: Design, development & production technology
  - **Thailand**: Core manufacturing location
  - **U.S.**: Processing location
  - **Mexico**: Core manufacturing location (capacity increase in 2H of 2015)

- Expand business domains by creating new products
  - Various kinds of development that meet the demand for fuel efficiency & safety
  - **EPB harnesses with multiple unspring sensor (integrate with WSS, etc.)**
  - **New magnetic field sensors (for turbo, engine powertrain control, etc.)**

**Sales goal for automotive electronic components**

¥28 billion (FY2015) ⇒ ¥34 billion (FY2018)

EPB: Electric Parking Brake  
WSS: Wheel Speed Sensor
3-8. Investment in Business Portfolio Restructuring

**Investment Plan**

**Investment in growth**

- Strengthen the railway segment, also keeping M&A in mind
- Increase the capacity of the manufacturing location in China in wires and cables for railway and medical uses
- Strengthen the location in Mexico in automotive electronic components

**Strengthening the foundation**

- Introduce an innovative manufacturing line for wire and cable (scheduled to come online in the 1H of FY2016)
- Introduce a new continuous casting and rolling line (scheduled to come online in April 2018)

**Capital expenditures:**

¥39 billion (cumulative total for FY2016-FY2018)
3-9. Introduce an Innovative Electric Wire and Cable Manufacturing Line

Introduce to location in China (scheduled to come online during 1H of FY2016)

Largest plant in China

Cross-link
- Shorten lead time
- Improve quality

Applied products
- Wire & cable for rolling stock
- Industrial cable
New Continuous Casting and Rolling Line

- Improve energy efficiency and productivity
- Introduce the new process

Improve product competitiveness

- Achieve mass production of the new copper alloy (HiFC™)
  - Flexibility
  - Resistance to hydrogen embrittlement
  - Electrical conductivity
  - Weldability

General-purpose wires and cables
Wires and cables for rolling stock
Medical wires and cables
Magnet wires

Achieve a high-profit structure and develop high value-added products
Develop one of the most profitable businesses in the world in wires, cables and related products

Greater expansion of business in growth areas and increase earning power of core products

FY 2015

- Revenues: ¥288.2 billion
- Profit margin: 5.2%

FY 2018

- Revenues: ¥290.0 billion
- Profit margin: 9.0%

Growth areas

Core products

Information systems, etc.
3-12. Trend in Sales by Region

Strive to expand in growth areas, concentrating on the Americas, China, and Asia

Overseas sales as a % of total sales:
32% (FY2015) ⇒ 38% (FY2018)

FY2015 values for overseas sales as a percentage of total sales reflect the impact of business restructuring.

The graphs compare FY2018 sales to FY2015, assuming FY2015 sales = 1
Business Strategy of the Cable Materials Company

[Table of Contents]

1. Business Overview
2. Market Environment
4. Conclusion
Reform to aim for high profitability: Let’s achieve true global growth!

Cable Materials Company
FY2018 Plan

Revenues: ¥290.0 bn
Adjusted operating income: ¥26.0 bn (9.0%)
Information on Risks Inherent in Future Projections

This document contains forward-looking statements—such as results forecasts and management plans—that are not historical facts. All such forward-looking statements are based upon all available information and upon assumptions and projections that were deemed reasonable at the time the Company prepared this document. Changes to the underlying assumptions or circumstances could cause the actual results to differ substantially. The factors causing such differences include, but are not limited to, the following:

• Changes in economic conditions and regulations in the main markets where the Company operates, particularly Japan, the United States, Asia and Europe
• Sudden changes in technological trends
• Changes in competitive advantage and the capabilities of the Company and its subsidiaries and affiliates to develop and commercialize new products and businesses
• Fluctuations in the status of product markets, exchange rates and international commodity markets
• Changes in financing environment
• The capability of the Company and its subsidiaries and affiliates to cope with fluctuations in product supply and demand, the status of product markets, exchange rates and international commodity markets
• Protection of the Company’s intellectual property, and securing of licenses to use the intellectual property of other parties
• Changes in the status of alliances with other parties for product development, etc.
• Fluctuations in Japanese stock markets