High-Grade Metal Products and Materials

Financial Results (Sales)

Specialty Steel
Sales of molds and tool steels increased in the fiscal year ended March 31, 2015, as the demand in overseas markets has recovered and the demand in the Japanese market has also improved in the second half of the fiscal year ended March 31, 2015, mainly because of the rebound in automobile production. Sales of alloys of electronic products also increased in the fiscal year ended March 31, 2015. Strong demand for display-related materials for medium- to small-sized panels, as well as a recovery trend in semiconductors and other package materials contributed to a sales increase compared with those for the fiscal year ended March 31, 2014. Sales of industrial equipment and energy-related materials increased as the demand for automobile-related materials, including environment-friendly products, remained robust. The brisk demand for materials for aircraft components also contributed to the increase in sales of energy-related materials.

Rolls
Sales of rolls decreased because of low demand in the domestic market, offsetting increased demand in overseas markets. Sales of injection molding machine parts increased from the previous year, reflecting the recovery of demand in both domestic and overseas markets.

Amorphous Metals
Sales of amorphous materials increased in the fiscal year ended March 31, 2015. The demand in the Chinese market, a leading market, remained solid as a result of policies of the Chinese government to encourage the deployment of energy-saving equipment as well as the effects of the weak yen, despite the demand slightly dropping in the second half of the fiscal year ended March 31, 2015.

Cutting Tools
Sales of cutting tools increased because of steady demand in overseas markets supported by improved exports and recovering domestic demand for industrial machinery.

Revenues/Net Sales, Operating Income and Income Margin

<table>
<thead>
<tr>
<th>Year</th>
<th>Revenues/Net Sales (¥ billion)</th>
<th>Operating Income (¥ billion)</th>
<th>Operating Income Margin (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014.3</td>
<td>203.0</td>
<td>16.7</td>
<td>8.3</td>
</tr>
<tr>
<td>2015.3</td>
<td>260.8</td>
<td>18.7</td>
<td>8.3</td>
</tr>
</tbody>
</table>

Capital Expenditures, Depreciation and Amortization, and R&D expenses

<table>
<thead>
<tr>
<th>Year</th>
<th>Capital Expenditures (¥ billion)</th>
<th>Depreciation and Amortization (¥ billion)</th>
<th>Research and Development Expenses (¥ billion)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014.3</td>
<td>12.0</td>
<td>11.8</td>
<td>6.7</td>
</tr>
<tr>
<td>2015.3</td>
<td>18.7</td>
<td>16.7</td>
<td>6.9</td>
</tr>
</tbody>
</table>

YSS SLD-MAGIC™ cold-working Tool Steel
This die steel is suited to high-tensile plates widely used in making lighter cars with safer designs. Its characteristics are high machinability and fewer dimensional deformities following heat treatment. It contributes to overall die cost reductions because its superior quality means that dies last longer.

CVT Belt Materials
These metal belt materials have excellent fatigue endurance and were developed for use in CVT* systems. Preventing nonmetallic inclusions that can cause damage when melting and cold rolling techniques are used, we contribute to improved transmission performance and increased reliability.

Rolls for Steel Mills
Our rolls for steel mills are extremely heat and shock resistant—qualities needed to roll out very hot steel and iron ingots at high-pressure levels. Moreover, the rolls have the superior abrasion resistance required to make highly precise product shapes. Above all, our HINEX™ line of high-speed steel rolls, which is produced through new casting methods, has vastly improved performance compared to traditional rolls, making it possible to reduce rolling costs.

Metglas® Amorphous Metals
These materials are used in the cores of transformers used in electrical substations and pole transformers as well as for cut cores used in photovoltaic cell inverters, wind power generation converters, and other power conversion systems. The use of these materials effectively reduces electrical power loss in the core section, boosting efficiency and reducing power consumption. Amorphous metals are being used in an increasing number of applications as electrical power infrastructure demand related to environmental regulations and smart grids rises. Metglas® is expected to find applications both in Japan and overseas.

Akitoshi Hiraki
Representative Executive Officer
President, High-Grade Metals Company
Hitachi Metals MMC Superalloy, Ltd. — Ascending to the Next Phase of Growth

On July 1, Hitachi Metals MMC Superalloy, Ltd. (HMSA) became a member of the Hitachi Metals Group, determined to strengthen the Group’s capacity in the aircraft and energy materials businesses. Integrated into the High-Grade Metals Company and creating a fusion of the strengths of both sides, HMSA is gearing up to achieve global growth in key industries such as aircraft and energy.

The management motto of the new HMSA is “Speed and Action.” We are adopting an uncompromising stance that reflects this motto, putting our business operations on track to sustainable growth.

The first key point of this policy is the need to invest in a large ring mill. Reflecting rising demand for improved environmental performance, the aircraft and energy markets are projected to pick up momentum on a global scale. The second key point is the quest to generate genuine synergy. I’m referring to streamlining the merger of the High-Grade Metals Company, HMSA and Japan Aeroforge, Ltd. to quickly get our business off the ground. The combination of these three players promises to maximize the synergy rather than just combining our strengths. The respective management resources of each party will be strategically merged as we move through free and open-minded discussions to fuel the PDCA cycle and steadfastly address customer needs in our products.

Striving to Be the Best Partner and Earn the Trust of Customers Worldwide

Hitachi Metals MMC Superalloy, Ltd. Corporate Profile

<table>
<thead>
<tr>
<th>Name</th>
<th>Hitachi Metals MMC Superalloy, Ltd.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Location</td>
<td>3250 Kamihideya, Okegawa, Saitama, 363-8510 Japan</td>
</tr>
<tr>
<td>Representative</td>
<td>Tsutomu Oka, Representative Director and President (General Manager, Aerospace &amp; Energy Materials Business Unit, High-Grade Metals Company)</td>
</tr>
<tr>
<td>Founded</td>
<td>July 1, 2010</td>
</tr>
<tr>
<td>Sales</td>
<td>¥17.79 billion (FY2013 performance)</td>
</tr>
<tr>
<td>Business activities</td>
<td>Manufacturing, R&amp;D and sales of heat-resistant alloys, corrosion-resistant alloys, abrasion-resistant alloys and special copper alloys</td>
</tr>
<tr>
<td>Sales offices</td>
<td>Head Office (Okegawa), Osaka Branch, Nagoya Branch</td>
</tr>
<tr>
<td>Employees</td>
<td>345 (end of March 2014)</td>
</tr>
<tr>
<td>Capital</td>
<td>¥13,808.4 billion</td>
</tr>
<tr>
<td>Equity shares</td>
<td>Hitachi Metals Ltd.: 51%; Mitsubishi Materials Corporation: 49%</td>
</tr>
</tbody>
</table>

Yasugi Works: Lighting ceremony marks completion of 24-ton vacuum induction melter, among world’s largest

The High-Grade Metals Company performed the ceremonial lighting of a newly completed vacuum induction melter (VIM) March 19. At 24 tons, the new VIM at Yasugi Works is among the world’s largest.

The 24-ton VIM will melt and refine materials in a vacuum to remove impure elements and gases. The state-of-the-art equipment is not only among the largest; it also enhances the performance and quality of specialty steel. The equipment will provide important processes for performance products required to meet stringent quality standards. Examples include material for continuously variable transmission (CVT) belts. The outlook calls for rising demand for CVT belt material to enhance automobile environmental performance. The high acclaim such material is getting from customers is already boosting its share of the market. Starting up the 24-ton VIM greatly increases Yasugi Works’s high-performance material production capacity and efficiency. It will ensure that the High-Grade Metals Company is able to meet customer expectations. We also foresee using the 24-ton VIM for aircraft and energy-related materials. This is an area where we expect great growth.

Many guests from Japan and abroad attended the lighting ceremony. They included representatives from the Ministry of Economy, Trade and Industry, Shimane Prefecture, Yasugi City, and the equipment builder. Another special guest was Akira Kihara, the murage (operator) from the Nittoho Tatara, a traditional furnace. Media covering the event included NHK (Japan Broadcasting Corporation) and Nikkei Inc. 80 people attended. Amidst all the outside attention, the solemn ceremony went forward. The crowd made a wish for safety, an early start of mass production with the 24-ton VIM, and a prosperous business.

Yasugi Works will continue to make large investments. These include introducing a 10,000-ton class free forging press and enlarging the high-speed radial forging machine. We will accelerate our global expansion by strengthening our foundation and competitiveness.

Metglas® Amorphous Metal Materials HB1M for Energy-Efficient Distribution Transformers Awarded Top Ten New Products Prize

The High-Grade Metals Company’s Soft Magnetic Materials Business Unit was awarded one of Nikkan Kogyo Shimbun Ltd.’s Top Ten New Products prizes in 2013 for its HB1M metal alloy.

Nikkan Kogyo Shimbun began conferring the awards in 1958, which are seen as the most authoritative awards for superior new products. Every year around ten products are recognized as original inventions that had a great impact in Japan and elsewhere, and for their pioneering roles in helping industry and society progress. This was Hitachi Metals’ first prize since the 53rd awards program in 2010, and the HB1M alloy was the only winner in the materials field this time around.

Using Hitachi Metals’ Metglas® 2605HB1M amorphous metal alloy with high saturation magnetic flux density (Bs) for energy-efficient transformers in the electric power grid makes smaller, lighter, quieter distribution transformers possible. Compared to the usual material—grain-oriented electrical steel sheet—amorphous metal alloy cores ensure around one third less no-load loss (core loss). They are distinctive for their ability to conserve energy and cut carbon dioxide (CO2) emissions. Resolving casting issues has made it possible to preserve high-saturation magnetic flux density (Bs) while reducing core loss and exciting current.
Magnets

Sales of rare earth magnets decreased from the previous year. Strong sales of automotive electronic components for hybrid cars and domestic cars and a recovery trend of the demand for factory automation-related products were not sufficient to offset the continued low demand for hard disk drives and the impact of the fall in raw material prices. Sales of ferrite magnets increased with strong demand for automotive electronic components and household appliance parts in both domestic and overseas markets.

Soft Ferrite and Other Soft Magnetic Materials, and Their Applications

Overall sales of soft ferrite magnets increased on strong demand for parts for solar power generation systems and automotive electronic components. Sales of FINEMET® also increased in the first half of the fiscal year ended March 31, 2015, with robust demand for parts for solar power generation systems in the European markets.

Financial Results (Sales)

**Magnets**

Sales of rare earth magnets decreased from the previous year. Strong sales of automotive electronic components for hybrid cars and domestic cars and a recovery trend of the demand for factory automation-related products were not sufficient to offset the continued low demand for hard disk drives and the impact of the fall in raw material prices. Sales of ferrite magnets increased with strong demand for automotive electronic components and household appliance parts in both domestic and overseas markets.

**Soft Ferrite and Other Soft Magnetic Materials, and Their Applications**

Overall sales of soft ferrite magnets increased on strong demand for parts for solar power generation systems and automotive electronic components. Sales of FINEMET® also increased in the first half of the fiscal year ended March 31, 2015, with robust demand for parts for solar power generation systems in the European markets.
Neodymium-Iron-Boron magnet joint venture established in China

Aim is to expand scale of business to grow globally

The Magnetic Materials Company aims to see its neodymium magnet business grow globally in the medium- to long-term. To that end, it has decided to form a joint venture in China with Chinese magnet manufacturer Beijing Zhong Ke San Huan Hi-Tech Co., Ltd.

NEOMAX® Neodymium-Iron-Boron magnets are among the most powerful in the world. They can make final products smaller and lighter, more efficient, less energy-consuming, and thus better for the environment. They are used widely in the automotive, IT, home appliance, industrial equipment, medical, environmental, and energy fields, among others.

As environmental regulations around the world grow stricter, we foresee demand for Neodymium-Iron-Boron magnets only growing larger. This is true of the global market and especially China. The Chinese market is particularly promising because it will use the magnets in hybrid vehicles, industrial motors, and the like.

The Magnetic Materials Company decided to establish the joint venture with the Chinese firm for several reasons. The venture will create an organization for local production in China. It will promote sales in the global market, including the market in China. It will furthermore expand the scale of our business. Hitachi Metals will take a 51% interest in the venture, and Beijing Zhong Ke San Huan Hi-Tech 49%. The new Hitachi Metals consolidated subsidiary will cover everything from raw materials procurement to manufacturing and sale in the Chinese market. In all, it will provide start-to-finish production of 2,000 tons of Neodymium-Iron-Boron magnets annually. The joint venture will be established in Jiangsu Province in December 2015. It will be equipped initially to produce 1,000 tons/year from December 2016. Thus it will try to quickly meet the demand of growing market sectors. The plan is to increase capacity soon after, taking demand trends into account. We project sales of around 10 billion yen in fiscal 2017.

Through the venture, the Magnetic Materials Company will procure, produce, and sell in China. It will target a wide range of products, expanding beyond our established high-end business. It will enhance our global market competitiveness and expand the scale of our Neodymium-Iron-Boron magnet business in China.

Overview of new joint venture

<table>
<thead>
<tr>
<th>Company name</th>
<th>Hitachi Metals San Huan Magnetic Materials (Nantong) Co., Ltd.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Location</td>
<td>Qidong, Nantong, Jiangsu Province, China</td>
</tr>
<tr>
<td>Date of establishment</td>
<td>December 2015 (plan)</td>
</tr>
<tr>
<td>Title and name of representative</td>
<td>Shigekazu Suwabe, Chairman of the Board</td>
</tr>
<tr>
<td>Business details</td>
<td>Manufacture and sale of Neodymium-Iron-Boron magnets</td>
</tr>
<tr>
<td>Stated capital</td>
<td>450 million yen</td>
</tr>
<tr>
<td>Annual production capacity</td>
<td>2,000 tons/year</td>
</tr>
<tr>
<td>Investment interest</td>
<td>Hitachi Metals 51%, Zhong Ke San Huan 49%</td>
</tr>
</tbody>
</table>

The NMF™-15 series also has the advantage of outstanding temperature characteristics, rendering it more resistant to magnetic loss at low temperatures than any ferrite magnet offered to date. Backed by such outstanding traits, expectations are high that the new NMF™-15 series will make an impressive contribution to lowering the size and boosting the energy efficiency of all types of different motors, while excelling as a pivotal driver in expanding the overall ferrite magnet market.

New Soft Magnetic Materials introduced to the market in FY2014

HRM40 Metal Powder Core MB20D Mn-Zn Ferrite Material

“Metal powder core” soft magnetic material is a new magnetic core product created through the application of the company’s powder metallurgy and powder-processing technologies. Compared to the current soft ferrite material, this new type of core material not only shows around three times higher saturation flux density, it also keeps stable magnetic characteristics across wide temperature ranges. This breakthrough likewise offers outstanding mechanical strength and better corrosion resistance than other ferroalloy soft magnetic materials.

Made using the company’s original technologies for powder metallurgy, processing and heat treatment, the Mn-Zn ferrite material MB20D boasts low core loss and high saturation magnetic flux density. Such low core loss and high saturation magnetic flux density—especially in high-temperature environments—makes it possible to cut power consumption and heat generation. It is anticipated that using this product as the core for inductors and transformers will lead to electric circuits of automobiles that are smaller, more stable and more reliable.

NMF™-15 Series Features the World's Best Magnetic Characteristics for Ferrite Magnets Mass Production to Commence in FY2015

The Magnetic Materials Company recently announced its pioneering development of the NMF™-15 series—a high-performance ferrite-15 material that delivers the best magnetic characteristics of any ferrite magnet in the world.

The NMF™-15 series also has the advantage of outstanding temperature characteristics, rendering it more resistant to magnetic loss at low temperatures than any ferrite magnet offered to date.

Backed by such outstanding traits, expectations are high that the new NMF™-15 series will make an impressive contribution to lowering the size and boosting the energy efficiency of all types of different motors, while excelling as a pivotal driver in expanding the overall ferrite magnet market.
The origin of the name HERCUNITE™

The name HERCUNITE is an acronym for heat resisting cast materials for unit of exhaust parts. However, the name has another derivation. The suffix -nite, which stands for a metal compound, is preceded by the name “Hercules” - a hero in Greek mythology.

Financial Results (Sales)

Casting Components for Automobiles

Overall sales of casting components for automobiles increased for fiscal year ended March 31, 2015. While sales of heat-resistant exhaust casting components did not reach the previous year’s level due to the effects of the decline in demand in the leading market for these types of products under the economic downturn in Europe, sales of high-grade ductile iron products increased with the favorable demand for passenger vehicles in overseas markets, including the U.S. automobile market, and the brisk demand mainly for commercial vehicles in the Japanese automobile market. Sales of aluminum wheels fell below target and decreased in both the United States and Japan compared with those for the fiscal year ended March 31, 2014.

Piping Components

Sales of pipe fittings increased mainly because of the continued improvement in the U.S. housing market, as well as a sign of recovery in the housing starts in Japan. Sales of stainless steel and plastic piping components also increased since proven advantages in light of construction and earthquake resistance triggered demand for the gas-related products.

Construction Components

Sales of construction components increased because of the strong demand for steel construction supported by private capital expenditures in the domestic market and robust public investments. Further, gain on transfer of business resulting from transferring the Company’s entire shares in Hitachi Metals Techno, Ltd. largely contributed to the improvement in operating income of this segment.
The sake barrel-opening ceremony inspired cheers from all present.

On August 19, 2014, Hitachi Metals, Ltd. announced plans to acquire all shares in Waupaca Foundry, Inc., a supplier of iron castings to the transport machinery market in North America, which will effectively transform the company into a wholly owned subsidiary.

The iron-casting business has been a major focus of our operations for many years, particularly the production of items used in automobiles. We had already strengthened our global supply capacity in high-grade ductile cast iron products by building new production bases in Japan, South Korea and the United States, for example, as well as by acquiring an Indian automobile iron castings manufacturing subsidiary this April. To achieve further growth in this area, however, we need to expand our business domain and forge a solid foundation for establishing dominant competitive strength in the global market.

Waupaca Foundry operates an iron-casting business for transport machinery in the North American market. The company supplies a wide array of products, and while the focus is on automobile brake parts, it also casts products for use in industrial, agricultural and construction machinery. Utilizing its outstanding manufacturing technologies and production management expertise, Waupaca Foundry has the world’s largest iron-casting operation and claims the dominant market share of that business in North America.

Waupaca Foundry’s reliable supply track record over the years has earned it a solid customer base, which is the main source of its competitive strength. The global market for iron castings for transport machinery is projected to expand steadily over the years to come, driven largely by automobile demand in emerging countries. Against that backdrop, the company is positioned to chart continual growth thanks to its high competitive strength and stellar performance to date.

By transforming Waupaca Foundry into a subsidiary, Hitachi Metals gains a competitive advantage in the global market, taking a stronger position in the high-value-added field that we have long pursued. By acquiring Waupaca Foundry’s excellent production technology, we will also expand our business domain and customer base.

We will continue to strengthen our business foundations in the global market and aim for medium-to long-term growth.

### Waupaca Foundry, Inc. Corporate Profile

<table>
<thead>
<tr>
<th>Name</th>
<th>Waupaca Foundry, Inc.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Location</td>
<td>1955 Brunner Drive, Waupaca, Wisconsin, USA</td>
</tr>
<tr>
<td>Corporate Representative</td>
<td>Gary Gigante, chief executive officer</td>
</tr>
<tr>
<td>Established</td>
<td>May 4, 1955</td>
</tr>
<tr>
<td>Sales</td>
<td>US $1.735 billion (year ended September 2013)</td>
</tr>
<tr>
<td>Business Activities</td>
<td>Development, manufacture and sales of iron castings for transport machinery (automobiles and agricultural, industrial and construction machinery) in the North American market. Annual production capacity: 1.57 million tons</td>
</tr>
<tr>
<td>Principal Products</td>
<td>Brakes, engines, drivetrain parts, knuckle arms</td>
</tr>
<tr>
<td>Employees</td>
<td>Approx. 3,900 (as of the end of May 2014)</td>
</tr>
<tr>
<td>Acquisition Price</td>
<td>US$1.3 billion</td>
</tr>
<tr>
<td>Stock Acquisition</td>
<td>November 2014</td>
</tr>
</tbody>
</table>

A New Page in Iron-Casting Business History

On November 10, 2014, the final steps were taken to complete Hitachi Metals’ acquisition of the shares in U.S. iron-casting company Waupaca Foundry, Inc. A gala celebration was held the following day, November 11, in Waupaca City, Wisconsin to mark the launch of the “New Waupaca” as a member of the Hitachi Metals Group.

This integration is a critical process for us to become a global number one corporate group, and a significant turning point in the history of the Hitachi Metals Group’s foundry business. Instead of a simple merger of companies, it is absolutely essential to create and promptly maximize synergies between the two businesses. We strive to be a global number one corporate group both in name and reality, and continue to generate sustainable growth.

Our most important customers—automobile manufacturers—are strongly advancing the globalization of their businesses, so we need to view the market from a borderless standpoint and expand our business. We will be focusing on market share in the global market. In addition to expanding our business to emerging countries with rapidly growing demands, we will also take an aggressive management approach to M&A, establishing bases and businesses all over the world.

The sake barrel-opening ceremony inspired cheers from all present.
Wires, Cables, and Related Products

Sales in the Wires, Cables, and Related Products segment for the fiscal year ended March 31, 2015 were ¥327,992 million, an increase of 30.2% from the previous year. Operating income increased by ¥3,870 million to ¥19,845 million.

Financial Results (Sales)

Electric Wires and Cables
Sales of electric power and industrial wires and cables increased on strong demand for overseas railway projects and construction, including the construction of solar power facilities, in addition to the demand for construction investments. Sales of metals for electronic and communication products increased mainly because of the brisk demand for semiconductor manufacturing equipment. In materials for electronic devices, sales of magnet wires increased due to a recovery in demand, mainly for products for automobiles and remained steady, while sales of photovoltaic cells increased primarily because of the favorable domestic demand.

Automotive Products
Sales of automotive products steadily increased on solid demand, especially for electronic components, a focused product of the Group, backed by solid performance in North American markets.

Information Systems
Sales of information system devices and materials increased because of growth in sales of network products associated with increased capital investments in infrastructure by telecommunication carriers along with the widespread use of smartphones.

Review of Operations by Segment

Cable Materials Company

<table>
<thead>
<tr>
<th>Category</th>
<th>2014.3 (¥ billion)</th>
<th>2015.3 (¥ billion)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electric Wires and Cables</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Automotive Products</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Information Systems</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

MLFC™ Flame-Retardant Polyflex Insulated Wire
MLFC™ flame-retardant polyflex insulated wire has been widely used for electric wiring, including insulated wire inside switchboards and motor lead wires, because of its outstanding heat resistance, flame-retardant properties, and flexibility.

Probe cables for ultrasound diagnostic equipment
The cable connects the main body of ultrasound diagnostic equipment and the probe used for echographic investigation. It is lightweight, excels in elasticity and flexibility, and has high-quality electric characteristics, realizing ease of handling and high-definition images, thereby contributing to the development of medical equipment.

Magnet Wires for Heavy Electrical Machinery
These wires are used in large generators found in power plants, transformers in electrical substations, motors for railroad cars and other applications. Our product lineup spans glass, heat-resistant paper and other insulating materials keyed to heat resistance and dielectric strength demanded, supporting electrical power and transportation infrastructure.

Masato Hasegawa
Executive Officer
President, Cable Materials Company

Hitachi Metals, Ltd.
Annual Report 2015

Review of Operations by Segment

Revenues/Net Sales, Operating Income and Income Margin

Capital Expenditures, Depreciation and Amortization, and R&D expenses
Mexico Site Expands ABS Sensor Harness Production Capacity in June

The Cable Materials Company recently expanded production capacity at its Mexico business site, HC Queretaro, S.A. de C.V., to address the growing demand for anti-lock braking system (ABS) sensor harnesses. The newly expanded line began operations in June this year.

The ABS is a preventive safety system designed to keep vehicle wheels from locking up (failing to rotate) when the brakes are applied and bring the vehicle to a safe and controlled stop. These systems are considered highly effective in preventing accidents, and demand for them has been rising in recent years against the background of the intensified pursuit of automobile safety.

The Cable Materials Company manufactures and sells ABS sensor harnesses—a key component in the ABS mechanism. The surge in demand for ABS encouraged the move to expand the production line at HC Queretaro, a core site for the production of ABS sensor harnesses. The higher-capacity line began operations in June.

ABS sensor harnesses detect wheel rotation and relay the information to the engine control unit. To suit this task, the cables must be flexible, offer excellent thermal characteristics and otherwise be durable under various conditions. The sensor head components, meanwhile, must be available in a wide range of configurations to fit specific vehicle models. The ABS sensor harness pools an impressive selection of the Company’s brake hose know-how, along with the expertise to effectively combine electrical wire and cable materials.

The Company first moved into producing ABS sensor harnesses in 1996, with manufacturing launched at its Thailand base, Hitachi Metals (Thailand) Ltd. in 2008. Production began at HC Queretaro, the second Cable Materials Company overseas business base, in June 2013. An ever-growing number of automotive-related companies are moving their production and sales operations to Mexico and other nations in North and Central America. The line expansion has roughly doubled the production capacity at HC Queretaro. As a pivotal base for supplying South America—a region where market expansion is predicted—the importance of HC Queretaro is definitely growing. The increased production capabilities represent a significant step as we continue to expand sales.

Accelerating Global Business Development of Electrical Wires for Railway Cars

Capitalizing on the technological expertise we developed through manufacturing electric wires and cables of all types, the Cable Materials Company manufactures electric wires both for railway cars and onboard devices. In Japan, our various wires and cables have been widely used in cars for various railways, including the Shinkansen, traditional non-Shinkansen railways and underground railways, driving our market share to a level as high as around 80 percent. Meanwhile, we have also been manufacturing electric wires for export-bound railway cars since the 1980s. We have built up an excellent track record of delivering our products to railways in global markets, not least for the high-speed railways in the UK and China. Furthermore, as part of an effort to globalize our operations, we have been mass producing electric wires for railway cars at Hitachi Cable (Suzhou) Co., Ltd. located in Suzhou, China, since 2013.

The company was recently selected to supply the electric wires for railway cars for the Intercity Express Programme (IEP) in the UK, partly due to our strong experience in Japan and other global markets. This order, received from Hitachi Rail Europe Ltd. (HRE) through Hitachi Metals Europe GmbH (HME) is for electric wires for 866 Class 800 and 801 cars to be used on the Great Western Main Line and the East Coast Main Line. Shipments of this cable began from last March, and are scheduled to finish around 2019. HRE has designated the Cable Materials Company as a core supplier in supporting its contract with IEP.

Last year, in the interests of further expanding global sales of rolling stock cable, the company participated in InnoTrans 2014 between September 23 and 26 in Berlin, Germany. InnoTrans is an international railway technology trade fair held every other year, and we have exhibited at consecutive events in 2010, 2012 and 2014.

In 2014, at the first fair following the company’s merger with Hitachi Metals, we took advantage of the opportunity to showcase an impressive lineup of products and technologies. Those exhibits included electric wires and harnesses for railway cars adopted by IEP. FINEMET® from the Magnetic Materials Company, and ductile castings for railway cars made by the High-Grade Functional Components Company, which are anticipated to be used in rolling stock in the near future.

To make electric wires for railway cars a business that can beat out global competition, the Cable Materials Company will continue to invest in product development and strengthen its overseas bases. As the main driving force of Hitachi Metal’s railway business, we will also continue to accelerate global business development.