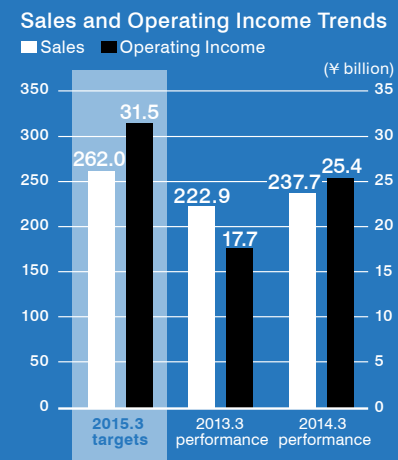


Review of Operations by Segment

High-Grade Metal Products and Materials

Sales in the High-Grade Metal Products and Materials were ¥237,664 million, an increase of 6.6% compared with those for the fiscal year ended March 31, 2013. Operating income increased by ¥7,757 million to ¥25,412 million compared with those for the fiscal year ended March 31, 2013.



Financial Results

Sales

Special Steels

Sales of molds and tool steels increased from the fiscal year ended March 31, 2013, as the demand in overseas markets has recovered and the demand in Japanese market has also improved in the second half of the fiscal year ended March 31, 2014, mainly because of the rebound in automobile production. Sales of alloys of electronic products increased compared with those for the fiscal year ended March 31, 2013. Strong demand for display-related materials in medium- to small-sized panels, as well as a recovery trend in semiconductors and other package materials contributed to sales increase compared with those for the fiscal year ended March 31, 2013. 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 fiscal year ended March 31, 2013, reflecting the recovery of demand in both domestic and overseas markets.

Amorphous Materials

Sales of amorphous materials increased from the fiscal year ended March 31, 2013. 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 dropped in the second half of the fiscal year ended March 31, 2014.

Cutting Tools

Sales of cutting tools increased because of steady demand in overseas markets supported by the improved export and the recovered domestic demand for industrial machinery.

Operating Income

Sales increased and operations were steady, reflecting the increase in domestic automotive production as exports increased thanks in part to the weakened yen, increasing demands for environment-friendly products for automobiles, and growing demands for aircraft and energy-related materials. In addition, manufacturing costs decreased in the year ended March 31, 2014. Operating income of this segment, thus, increased by ¥7,757 million or 43.9% to ¥25,412 million and operating income margin increased by 2.8 percentage points to 10.7% when compared with the fiscal year ended March 31, 2013.

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

Years Ended March 31	2012.3	2013.3	2014.3
Capital Expenditures	11.6	10.3	11.8
Depreciation and Amortization	13.9	11.4	11.9
Research and Development Expenses	5.3	5.2	5.7

Business Units	Principal Products
Specialty Steel	<ul style="list-style-type: none"> YSS™ brand high-grade specialty steel products (molds and tool steel, alloys for electronic products [display-related materials and semiconductor and other package materials], industrial equipment and energy-related materials, and razor and blade materials) Precision cast components
Rolls	<ul style="list-style-type: none"> Rolls for steel mills Injection molding machine parts Structural ceramic products Steel-frame joints for construction
Amorphous Metals	<ul style="list-style-type: none"> Metglas® amorphous metals
Hitachi Tool Engineering, Ltd.	<ul style="list-style-type: none"> Cutting tools

Business Overview

Our specialty steel business consists of the lineup of Yasugi Specialty Steel (YSS™) products—one of the world's premium specialty steel brands—as well as distinctive products based on YSS™ technology. For the automotive sector, we offer piston ring materials and CVT belt materials. For the infrastructure sector, our products include DAC-MAGIC™ die-cast tool steel, CENA1™ plastic mold steel and other molds and tool steel products under the MAGIC series. In the electronics sector, we provide metal materials for electronic devices such as display-related materials and packaging materials such as semiconductors. Sales of specialty steel represented approximately 70 percent of net sales in this segment.

Along with our top brands, including HINEX™ rolls for steel mills, our roll business includes injection-molding machine cylinders, ceramics and products that employ them, and structural steel for construction purposes as well as processing related components. Sales of rolls represented approximately 10 percent of net sales in this segment.

In amorphous metals, we are promoting our Metglas® amorphous metals that contribute to energy conservation worldwide. Amorphous metals lack a crystalline structure and are manufactured by rapidly quenching molten metals before they form a crystalline structure. These materials are increasingly being employed in electric power transformers because they

have excellent magnetic properties and robust mechanical strength. We have two manufacturing operations, in Japan and the United States, and the need for our products has increased year on year as energy-related demand has grown in various regions around the world. We are working to expand this business worldwide in the high-grade functional components and equipment, and to obtain synergies with metal materials. Sales of amorphous metals represented approximately 10 percent of net sales in this segment.

The Hitachi Tool Engineering Group has specialty steel and carbide alloy tips, cutting tools, and other abrasion-resistant tools, boasting the world's top end mill development technology, which has served as the impetus for high-speed processing.

Sales of cutting tools represented approximately 10 percent of net sales in this segment.

Akitoshi Hiraki
Vice President and Managing Officer
President, High-Grade Metals Company



High-Grade Metal Products and Materials

Hitachi Metals MMC Superalloy Seeks to Dominate Aircraft and Energy Materials Markets

Tokyo, Japan (July 1, 2014)—Hitachi Metals, Ltd. announced that, as of today, it has acquired shares equivalent to 51 percent of the issued shares in MMC Superalloy Corporation, which had been a wholly owned subsidiary of Mitsubishi Materials Corporation, for the purpose of strengthening its aircraft and energy materials business. With the acquisition, the company name has been changed to Hitachi Metals MMC Superalloy, Ltd. and it starts operations as a member of the Hitachi Metals Group.

MMC Superalloy was incorporated in July 2010, assuming the ability to deliver high-quality products, as well as advanced technological and development capabilities cultivated over the span of half a century, from the Mitsubishi Materials' Okegawa Plant. Its world-class unique technologies for processing nonferrous metals date back to 1944, having created high-performance products such as heat-resistant alloys, corrosion-resistant alloys, and special copper alloys for key industries, including the aircraft, industrial gas turbine, and automobile sectors for over 70 years.

Hitachi Metals MMC Superalloy will operate businesses with Hitachi Metals' internal High-Grade Metals Company, which develops and provides high-functional materials, such as specialty steel. Hitachi Metals will fuse the strengths of each company, aiming to grow globally in key industries, such as aircraft and energy, which are expected to experience increasing development on a global scale. Furthermore, it will facilitate business operations jointly with Mitsubishi Materials with the aim of strengthening international competitiveness. It will also provide the new products, services, and solutions expected by markets and customers so that its customer bases will be further strengthened and expanded in the future.

Outline of Hitachi Metals MMC Superalloy

Company name	Hitachi Metals MMC Superalloy, Ltd.
Location	1230 Kamihideya, Okegawa, Saitama, Japan
Representative	Tsutomu Oka
Business details	Business related to manufacturing, R&D, and sales of heat-resistant alloys, corrosion-resistant alloys, special copper alloys and other nonferrous metal materials and other business incidental to these.
Stated capital	3.8 billion yen
Date of incorporation	July 1, 2010
Shareholders	Hitachi Metals: 51%, Mitsubishi Materials: 49%

Yasugi Works Installing Cutting-Edge 20-ton VIM Furnace to Strengthen Competitiveness in Environmentally Friendly Products

We will install a cutting-edge vacuum induction melting (VIM) furnace—Japan's largest at 20 tons—as well as a vacuum arc remelting (VAR) furnace for long products at Yasugi Works—our manufacturing base for specialty steel, which is located in Shimane Prefecture, Japan. The furnaces will further strengthen the company's competitiveness in environmentally friendly products such as CVT belt materials and energy-related and industrial equipment.

The Yasugi Works already has electric arc furnaces to melt steel scrap and alloy materials, as well as special melting facilities that include VIM, VAR and electro-slag remelting (ESR) furnaces. Steel materials melted in electric arc furnaces are remelted in these special melting facilities to eliminate impurities and unwanted gases and improve performance and quality. These facilities are indispensable to the manufacture of environmentally friendly products such as CVT belt materials and ultra-heat resistant steel for aerospace equipment—products that face stringent quality standards.

Installation of the state-of-the-art 20-ton VIM furnace and the VAR furnace for long products will give Yasugi Works special melting capabilities per batch and allow it to aggregate existing facilities. This will improve the quality of environmentally friendly products as well as productivity and yield rates, and enable us to cut costs, thereby bolstering competitiveness.

The two furnaces will be finished in fiscal 2014, and we plan to have them fully operational by fiscal 2015. Once they are online, our production volume and market share of CVT belt materials—for which we already have the top share—will rise significantly. We are also seeking to strengthen our alliance with Japan Aeroforge, Ltd. to broadly expand our share of products for the energy-related and industrial equipment sectors.

The Ministry of Economy, Trade and Industry, which is promoting investments in cutting-edge facilities to counteract the rising yen and energy restrictions, selected this operation for its subsidy program. We will continue our efforts to reinforce our domestic manufacturing capabilities and raise the competitiveness of the products we roll out in global markets.

High-Grade Metal Products and Materials

YSS™ and Hitachi Roll—Supporting the Sound Progress of Industry

Highly Pure Steel—A Passion for Steelmaking Unchanged for More Than 100 Years

Hitachi Metals steel sustains the global industry.

Yasugi Specialty Steel (YSS™) is the oldest steel brand in Japan with the longest heritage. *Tatara*, Japan's traditional steelmaking method, flourished from the days of old in Yasugi, particularly in Izumo, thanks to the high-quality iron sand available there. Steel produced in this region was used in fashioning the highest grade of Japanese swords. This traditional steelmaking technology and spirit are alive and well today at the Hitachi Metals Yasugi Works in Shimane Prefecture.



SLD-MAGIC™ cold-working die 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. (Specialty Steel)

1. CVT Belt Materials
2. Piston Ring Materials
3. Metglas® Amorphous Metals
4. Materials for Aircraft Components
5. Engine Valve Materials



CVT Belt Materials *CVT: Continuously Variable Transmission

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. (Specialty Steel)

Piston Ring Materials (Engine Materials and Parts)

With the call for more compact yet more powerful engines, steel piston rings have come to be widely employed. Controlling metal texture at the nanoscale has made it possible for Hitachi Metals to provide piston ring materials with increased abrasion resistance and improved sliding friction in the form of deformed wires that have undergone plastic working and heat treatment. (Specialty Steel)

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. (Amorphous Metals)

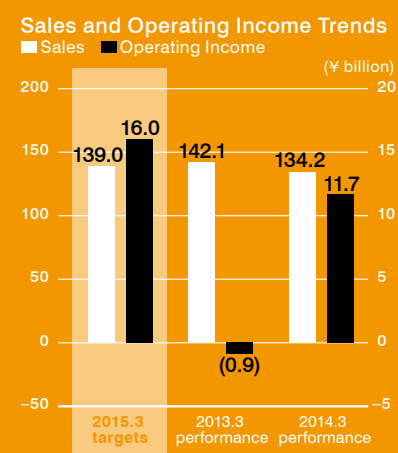
Rolls for Steel Mills

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. (Rolls)



Magnetic Materials and Applications

Sales in the Magnetic Materials and Applications segment were ¥134,249 million, a decrease of 5.6% compared with those for the fiscal year ended March 31, 2013. Operating income increased by ¥12,582 million to ¥11,718 million when compared to the fiscal year ended March 31, 2013.



Financial Results

Sales

Magnets

Sales of rare earth magnets decreased from the fiscal year ended March 31, 2013. 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 drive and the impact of 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 Magnetic Materials and Applied Products

Overall sales of soft ferrite materials increased with 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, 2014, with robust demand for parts for solar power generation systems in the European markets.

Operating Income

While sales decreased in the fiscal year ended March 31, 2014 due to a decrease in raw material prices, the profitability in the segment rose dramatically as productivity improved, the cost reduction effort continued, and a negative factor related to write-offs associated with a decrease in raw material prices reported in the previous fiscal year was minimal. The profitability for soft magnetic materials and applied products improved under the structural reform continuing from the previous year, which includes the Company's effort to carefully select products and to improve its financial strength through cost reductions.

As a result, compared with the year fiscal ended March 31, 2013 when operating loss was reported, operating income of this segment increased by ¥12,582 million to ¥11,718 million and recorded operating income margin of 8.7% in the fiscal year ended March 31, 2014.

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

Years Ended March 31	2012.3	2013.3	2014.3
Capital Expenditures	6.4	8.4	7.3
Depreciation and Amortization	6.2	5.4	6.3
Research and Development Expenses	4.2	3.5	3.2

Business Units	Principal Products
Magnets	<ul style="list-style-type: none"> Magnets (NEOMAX® rare-earth magnets; ferrite magnets; and other magnets and applied products)
Soft Ferrite and Other Soft Magnetic Materials, and Their Applications	<ul style="list-style-type: none"> Soft magnetic materials (soft ferrite; FINEMET™ nanocrystalline magnetic material; and Metglas® amorphous metals) and applied products Components for information and telecommunication equipment IT materials and components Materials and components for medical equipment

Business Overview

Our magnet business boasts a product range that includes magnets made with different materials, including the NEOMAX® brand's rare-earth magnets and our distinctive ferrite magnets. We underpin the foundations of industry by supplying a broad spectrum of products to the automotive, electronics, home appliance and industrial machinery sectors, among others. We pioneer magnetic materials and production technologies and launch them on the market.

In 2011, for example, we moved quickly to devise our DDMagic™ Dy vapor deposition and diffusion technology. This technology uses dysprosium (Dy), a raw material that is in limited supply. Our process substantially cuts the amount of Dy needed, and we have achieved volume production of neodymium magnets with this technique. Along with factory automation, these magnets are widely employed in hybrid electric vehicles (HEVs) and other vehicles. Using our materials development capabilities to promote ways of dealing with raw materials, we respond to customer requirements and contribute to making motors smaller while also increasing their performance.

In the area of soft magnetic materials and applied products we boast many years of achievements with soft ferrite, as well as our Metglas® amorphous metals and FINEMET™ nanocrystalline magnetic materials. We provide products made of exclusive materials in a wide range of industry sectors, including everything from portable handsets, IT devices, and other electronic components to car antennas, electronic compatibility and noise reduction components as well as components for solar power generators.

Hitachi Metals meets a variety of social needs in this way with our combinations of unique magnetic materials, helping society save energy.

Shigekazu Suwabe
Managing Officer
President, Magnetic Materials Company



Magnetic Materials and Applications

Use of NEOMAX® Dysprosium-free Nd-Fe-B Sintered Magnets Increases Due to New Technology

Our NEOMAX® Nd-Fe-B sintered magnet product line has captured the top share globally since 2004, after our magnet business and that of the former Sumitomo Special Metals Co., Ltd. merged. Since Sumitomo Special Metals developed these magnets back in 1982, uses for them have expanded rapidly. Demand is also expected to rise, since they are indispensable in environmentally friendly products such as motors for hybrid cars, air conditioners, and others requiring higher efficiency and smaller size.

NEOMAX® magnets are primarily composed of the elements neodymium (Nd), iron (Fe), and boron (B). Dysprosium (Dy) was added to boost heat resistance. To further enhance this product, Hitachi Metals have been accelerating the development of low-dysprosium and dysprosium-free products.

Under these circumstances, we developed the DDMagic™ diffusion method to cut down the amount of dysprosium used. This method involves applying dysprosium vapor to the surface of a NEOMAX® magnet, which then diffuses to the magnet's interior. This improves magnetic properties while simultaneously cutting the overall volume of dysprosium by distributing the required amounts to the required locations. We have been using the DDMagic™ method in volume production since 2009, and usage is steadily increasing.

Along with DDMagic™, Hitachi Metals has developed NEOMAX® magnets that incorporate even less dysprosium or are dysprosium-free through such processes as improving coercivity by optimizing elemental additives, microstructural control, and refining. Customers are now evaluating these products, and we are planning to begin mass production.



NEOMAX® rare-earth magnets

SACLA Device Wins the 42nd Japan Industrial Grand Prix (MEXT Prize)

Hitachi Metals and NEOMAX ENGINEERING Co., Ltd. (NXE)—along with several other companies and research institute RIKEN—received the 42nd Japan Industrial Grand Prix (Ministry of Education, Culture, Sports, Science and Technology [MEXT] Prize) for developing the Spring-8 Angstrom Compact Free Electron Laser (SACLA) facility. Nikkan Kogyo Shimbun Ltd. sponsored the contest.

The SACLA X-ray free electron laser (XFEL) facility in Sayocho, Hyogo Prefecture, Japan is able to detect the swift movements of atoms and particles. Expectations are that it will significantly improve our lives in such areas as revealing the causes of incurable diseases, drug creation, establishing ways to control substances that degrade the Earth's environment, and materials development.

Powerful X-ray lasers with extremely short wavelengths are needed to detect extremely small objects such as atoms and particles. NXE's in-vacuum undulator is what oscillates the X-ray laser. An in-vacuum undulator has precisely aligned neodymium magnets inside vacuum ducts, and when an accelerated electron beam is passed through even low-speed energy generates a powerful X-ray laser with the shortest wavelengths. SACLA succeeded in creating an X-ray laser with the world's shortest wavelength—just 0.06 nm.

More than five hundred firms helped construct the SACLA device. Thermal electron guns, C-band accelerators, and in-vacuum undulators contributed greatly to SACLA's stellar performance. Hitachi Metals and NXE shared the prize with RIKEN; Japan Synchrotron Radiation Research Institute; Sumitomo Heavy Industries, Ltd.; Konoike Construction Co., Ltd.; Takenaka Corporation; Toshiba Electron Tubes and Devices Co., Ltd.; Nichicon Corporation; Mitsubishi Heavy Industries, Ltd.; and Mitsubishi Electric TOKKI Systems Corporation.

Switzerland, Sweden, South Korea, and other countries are continuing to investigate whether they should build XFELs, with expectations that the Hitachi Metals Group's technologies and products will contribute even more to society.



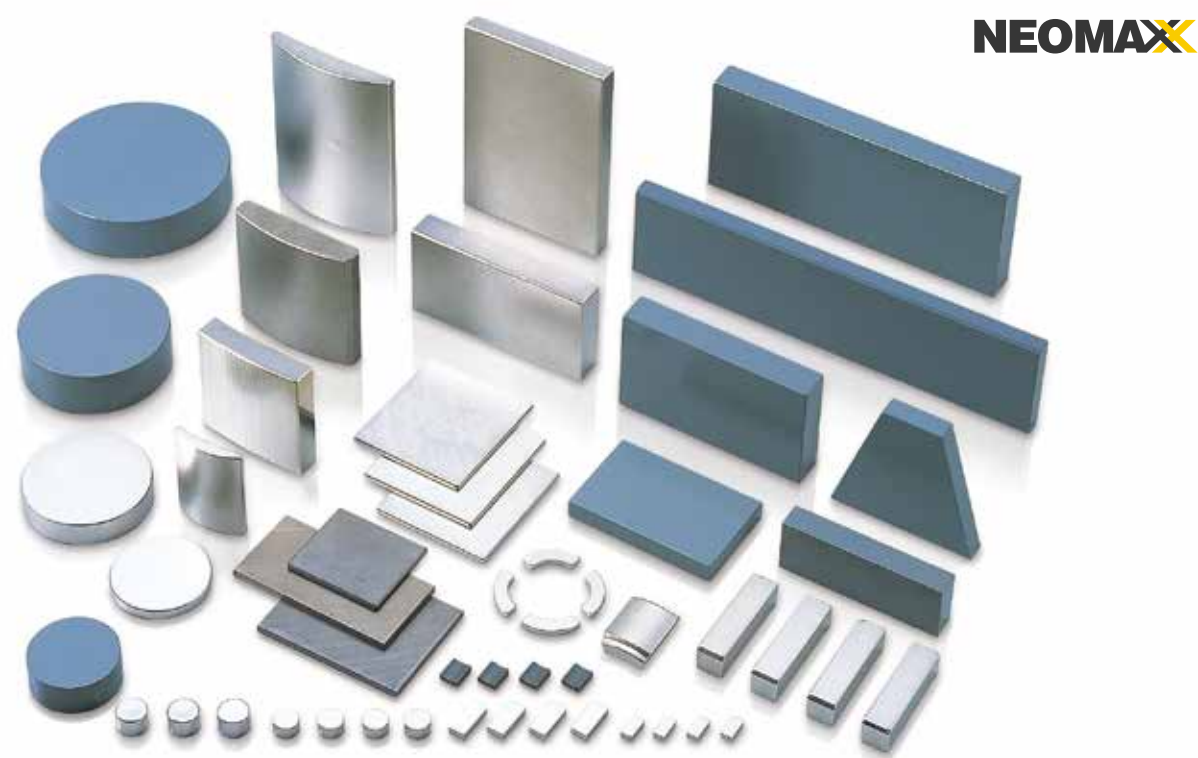
An in-vacuum undulator

Magnetic Materials and Applications

1. NEOMAX® series Nd-Fe-B sintered magnets
2. Soft Ferrite with Superior Magnetic Properties
3. FINEMET™ Nanocrystalline Magnetic Materials
4. Amorphous Metal Cut Cores

Hard and Soft—Magnetic Materials Give Form to Tomorrow's Potential

Hitachi Metals has long been engaged in manufacturing various types of magnets, and its products are used in electric generators, transformers, motors, electronics devices, etc. They have a truly broad range of uses. Hitachi Metals has both magnets (hard magnets) and soft magnetic materials (soft magnets).



Smaller Motors with Better Performance

In addition, there is NEOMAX®, which has the world's highest level of magnetism. Consisting of iron, neodymium, and boron, it is a sintered magnet with the strongest magnetic properties of all magnets. It was developed in 1982 and put into mass production. Because of this very strong magnetism, it is a key component to size reductions and performance enhancements in numerous devices. Affecting motor strength, magnets have been important core components in robots and machinery equipment as well as hybrid, electric, and other types of vehicles in recent years.

Nanotechnology Used in Developing Magnetic Materials

The soft magnetic materials that Hitachi Metals deals with include FINEMET™, which the Division developed independently, along with ferrite used in various kinds of electronic equipment and Metglas®. FINEMET™ is a new material with magnetic properties greatly enhanced by reducing grain size to around 10 nanometers. Additionally, especially as energy conservation efforts have been carried out worldwide, Metglas® has been increasingly employed in transformers that distribute electric power and inverters for solar power generation on the strength of its amorphous properties.

NEOMAX® Series Nd-Fe-B Sintered Magnets

These rare earth magnets have world-leading magnetic properties. They serve an important role as materials indispensable in making smaller, lighter, more energy-efficient motors used in the automobile, IT, household appliance, medical equipment, environmental, energy, and other industrial sectors.

Soft Ferrite with Superior Magnetic Properties

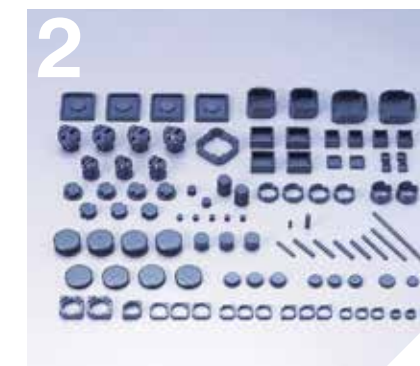
These soft magnetic materials are mainly composed of iron oxide. While their saturation magnetic flux density is somewhat low, these materials feature high electrical resistance and excel in magnetic characteristics at high frequency domains. They enjoy widespread use as the coil cores in communications devices, TVs, refrigerators, PCs and other products.

FINEMET™ Nanocrystalline Magnetic Materials

Developed by Hitachi Metals, FINEMET™ is the world's first nanocrystalline soft magnetic material. This new Fe-based soft magnetic material is composed of nanocrystals and has excellent temperature characteristics and temporal stability because it has high saturation flux density and magnetic permeability. FINEMET™ is employed in a wide range of applications, such as in manufacturing magnetic head cores, power supply units, and electromagnetic-noise-suppression components, because it is easily formed and processed. It contributes to the realization of low-noise electronic devices that are smaller, lighter, and more energy-efficient.

Amorphous Metal Cut Cores

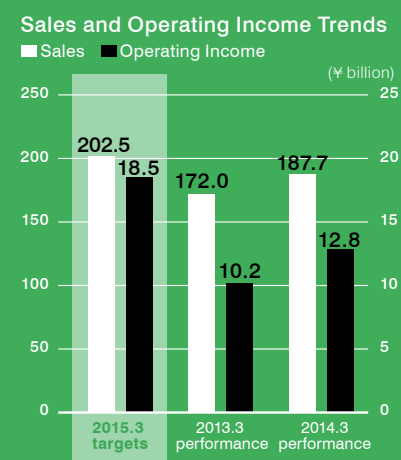
These products are attracting keen attention as materials oriented for use in power conditioner inverters. In the solar and wind power generation fields, demand is for high conversion efficiency for the electricity that is produced. Thanks to their outstanding magnetic properties, Hitachi Metals amorphous cut cores make a solid contribution to raising power conversion efficiency in such applications.



Magnetic materials that contribute to energy conservation—FINEMET™, Metglas®, and NEOMAX®—are adding a new page to the illustrious history of Hitachi Metals.

High-Grade Functional Components and Equipment

Sales in the High-Grade Functional Components and Equipment segment were ¥187,691 million, an increase of 9.1% when compared to the fiscal year ended March 31, 2013. Operating income increased by ¥2,643 million to ¥12,831 million when compared to the fiscal year ended March 31, 2013.



Business Units	Principal Products
Casting Components for Automobiles	<ul style="list-style-type: none"> High-grade casting components for automobiles (HERCUNITE™ heat-resistant exhaust casting components and HNM™ high-grade ductile cast iron products) SCUBA™ aluminum wheels and other aluminum components Forged components for automobiles
Piping Components	<ul style="list-style-type: none"> Piping and infrastructure components (Gourd™ Gourd brand pipe fittings, stainless steel and plastic piping components, water cooling equipment, precision mass flow control devices, and sealed expansion tanks)
Hitachi Metals Techno, Ltd.	<ul style="list-style-type: none"> Construction components (floor access systems, structural systems, and roofing systems) Chain (for material handling systems)

Financial Results

Sales

Casting Components for Automobiles

Overall sales of casting components for automobiles increased. 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 this type 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 U.S. and Japan compared with those for the fiscal year ended March 31, 2013.

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 in Japan.

Operating Income

While production in casting components for automobiles decreased due to a decline in demand from key customers and the economic downturn in Europe, sales and operations of high-grade ductile iron products, one of its core products, remained steady. Further, demand for piping components increased and operations were steady, backed by a sign of recovery in the housing market in Japan and North America. Favorable effects of cost reductions were also seen during the year. Operating income of this segment, thus, increased by ¥2,643 million or 25.9% to ¥12,831 million, and operating income margin increased by 0.9 percentage points to 6.8%, compared with the fiscal year ended March 31, 2013.

Business Overview

Our automotive castings business traces its origins back to our predecessor, Tobata Foundry Co. We applied our malleable cast-iron manufacturing technologies to produce casting components for automotive use, developing our environmentally friendly HERCUNITE™ series of heat-resistant cast components and focusing our efforts on environmentally friendly products. We also boast a global manufacturing organization—primarily based in Japan, North America and South Korea—for high-grade ductile cast-iron products. We produce aluminum wheels in Japan and North America as well. We employ this global network in a product development, production and sales organization that flexibly responds to the requirements of individual markets. Sales of automotive castings represented approximately 60 percent of net sales in this segment.

The forerunner of our piping components business was also Tobata Foundry, which sold malleable cast-iron pipefittings under its Gourd™ brand. Our Gourd™ brand pipefittings are leading products used all over, from industry sectors to the average household. We

continue to develop industry-leading products, moving quickly to incorporate new, highly durable materials that are easy to work with. Sales of piping components represented approximately 30 percent of net sales in this segment.

The Hitachi Tool Engineering Group manufactures and sells construction components, including dual-flooring systems, steel frame structural components used in building foundations, hydraulic damping apparatuses, and chains for industrial machinery. Sales of construction components represented approximately 10 percent of net sales in this segment.

Eiji Nakano
 Managing Officer
 President, High-Grade Functional
 Components Company
 General Manager,
 Automotive Components Business Unit



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

Years Ended March 31	2012.3	2013.3	2014.3
Capital Expenditures	5.7	7.0	6.4
Depreciation and Amortization	6.6	6.3	7.2
Research and Development Expenses	2.7	2.4	2.7

High-Grade Functional Components and Equipment

Company Takes Equity Stakes in RPS VIKAS Castings and Garima Vikas Metals to Strengthen Its Automotive Casting Manufacturing and Supply Organization in India

Namyang Metals Co., Ltd. and Hitachi Metals Singapore Pte. Ltd. have taken equity stakes in Indian automotive castings manufacturers RPS VIKAS Castings Pvt. Ltd. and Garima Vikas Metals Pvt. Ltd.—with whom they already had a technical and sales tie-up—to strengthen the organization's ability to manufacture and supply the high-toughness ductile iron casting HNM™ series in India.

The number of cars manufactured in India is expected to climb from 3.9 million in 2013 to over seven million in 2020, and the importance of the Indian market for automotive castings operations has been rising. With this in mind, the High-Grade Functional Components Company and Namyang Metals formed a technology and sales partnership for automotive castings with RPS VIKAS and Garima Vikas in February 2013.

After forming the partnership, technical and other support was provided to form the foundations of a manufacturing and supply organization in India. Namyang Metals and Hitachi Metals Singapore later formed a joint venture in March 2014 with RPS VIKAS and Garima Vikas to reinforce those business foundations. The High-Grade Functional Components Company acquired 51 percent of the shares in RPS VIKAS and Garima Vikas, turning them into consolidated subsidiaries and accelerating the development of high-toughness ductile iron casting HNM™ series operations in India.

By adding India to the locations already producing the HNM™ series—Japan (Moka Works), Korea (Namyang Metals) and the U.S. (Hitachi Metals Automotive Components USA, LLC)—we will have four global manufacturing and supply bases. This will enable us to dynamically respond to worldwide automotive demand as we strive for additional worldwide growth.



HNM™ high-toughness ductile iron castings

Bold Advances into Emerging Markets with Original Made-in-Japan Technology and Sales Strategies Promoting CSST (Flexible Pipe and Joint) Systems in Turkey

The Piping Components Division of the High-Grade Functional Components Company is promoting its system featuring corrugated stainless steel tubing (CSST) for gas piping meant for use in general residences in Turkey, and is looking to expand sales of these outstanding systems on a global scale.

Among the world's emerging markets, Turkey is notable for staging a quick recovery from the severe economic recession that hit the country in 2008. Along with this, Turkey's population—which is sizable when compared to other nations close to the European Union—is prompting positive expectations for robust consumption by the Turkish people far into the future.

Recent years have witnessed healthy numbers of new housing starts in Turkey against a backdrop of solid economic growth. Combined with the nation's decision to begin using natural gas from the latter half of the 1980s, that has helped spur a rapid rise in the demand for gas piping. With Turkey also known as an earthquake-prone nation, local gas associations and companies have developed a keen interest in the superbly safe and reliable piping systems made in Japan.

Based on such factors, the Piping Components Division has targeted the Turkish market with the marketing launch of CSST—piping systems that effectively combine flexible piping and connecting joints. Incorporating flexible pipe in these systems has resulted in fewer joints required and ensured a considerable degree of latitude during the installation phase. Compared to conventional pipe joints, these systems therefore excel in onsite workability. The lower number of joints also reduces the potential of gas leaks when an earthquake occurs, another feature that has led to high assessments of these systems in Turkey.

For Turkey, meanwhile, it is also important to secure construction technology capable of raising the level of local safety in piping systems. Taking that need to heart, the Piping Components Division is targeting Turkish gas associations and companies with workshop-format programs to help them better understand the overall conditions and needs related to piping systems, laying the groundwork for expanded local use of CSST system technology.

Steady progress is being made in getting CSST adopted in Turkey, with increased recognition of the system's advantages also on the rise. We are pursuing sales expansion activities in leading Turkish metropolitan areas, fueling optimism for redoubled sales growth in this vital national market over the years to come.



A CSST installation example

High-Grade Functional Components and Equipment

- 1. SCUBA™ aluminum wheels
- 2. HNM™ high-toughness ductile iron castings

Automotive Castings Are Instrumental in Realizing the Fuel Efficiency, Performance, and Weight Reduction Demanded Today

Cast Components That Withstand Ultrahot Exhaust Gases

Fuel-efficient car engines require two things: the introduction of new combustion technologies and the downsizing of the units (reduction of engine displacement). However, there have been problems in achieving these goals. Exhaust gases reach extremely high temperatures in engines that incorporate new combustion technologies (approximately 1,000°C in gasoline engines). Exhaust manifolds, the components that collect exhaust, must be able to withstand these ultrahigh temperatures. On the other hand, a turbocharger or supercharger is required to maintain sufficient output in a smaller engine. Housings are cast to keep these forced induction devices compact, but castings characteristically have low heat tolerance.



MANITURBO™

Solving Difficult Problems Is in Hitachi Metals' DNA

HERCUNITE™ is a series of cast iron and cast steel materials that are highly heat resistant and strongly resistant to oxidation, heat deformation, and thermal shock. Hitachi Metals boasts exhaust system components that are manufactured using HERCUNITE™. The parts are used in the world's high-performance, fuel-efficient car engines. Besides this, Hitachi Metals supplies suspension components engineered to contribute to automobile stability, aluminum wheels in pursuit of lower weight and chic designs, and other products in support of the ongoing evolution of motor vehicles.

Origin of the Name HERCUNITE™

Our developers came up with the name HERCUNITE™, 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 *Hercu*, representing "Hercules"—a hero in Greek mythology. The DNA of Hitachi Metals, supplier of diverse metal solutions, is embedded in the HERCUNITE™ name as well.



HERCUNITE™ series
heat-resistant exhaust casting components
(Casting Components for Automobiles)

Aluminum Wheels

Our SCUBA™* aluminum wheels were created by employing high-precision CAE technology. They are very strong, rigid, and light (15% lighter than our previous products) and contribute to fuel savings as well as reduced CO₂ emissions. Chic, delicate designs are possible thanks to the use of advanced aluminum casting techniques.
(Casting Components for Automobiles)

*Origin of the name SCUBA™:
SCUBA™ stands for *sharp-styled casting* and an *uncompromisingly bright appearance*.



High-Toughness Ductile Iron Castings

The HNM™ series of castings have excellent low-temperature toughness and extremely accurate dimensions and can be delivered in a near-net-shape state. They contribute to the production of thin-walled automobile components that are lighter.
(Casting Components for Automobiles)



High-Grade Functional Components and Equipment

1. Eco-friendly Pipe Fitting
2. SOFLEX™ Corrugated Stainless Steel Tubes and Fittings
3. Polyethylene Gas Piping Systems

The Gourd Brand—Supporting Our Everyday Lives

Symbolizing Our Corporate Spirit since Inception

The Gourd brand symbolizes the true underlying roots of Hitachi Metals' DNA. Electric current flows through metal, and liquids and gases are transported through metal pipes in most cases. Hitachi Metals' varied product lineup ensures an uninterrupted flow. The showpiece of this series consists of components for piping and related facilities and equipment, including pipes and joints used to transport hot and cold water and gas in homes and businesses. The applications of this extremely diverse product lineup include hot and cold water taps, drainage, disaster prevention equipment, waterworks and gas lines, as well as a wide range of other uses.



Eco-friendly pipe fitting

Pipe Fittings for General Use

The high-purity zinc plating in these fittings dramatically reduces lead and cadmium content. The fittings are used primarily in pipes for firefighting and air-conditioning applications. (Piping Components)

SOFLX™ Corrugated Stainless Steel Tubes and Fittings

SOFLX™ is the name of our line of flexible stainless steel gas tubes and fittings. They are easy to install and maintain because the tubes require few connections along the way. (Piping Components)

Polyethylene Gas Piping Systems

Our complete line of products for gas piping systems includes electrofusion (EF) fittings, polyethylene pipes and valves, various transition joints, and EF controllers. Piping systems that use polyethylene pipes are very flexible and typically do not suffer much damage compared to conventional systems that use steel or cast iron pipes when ground displacement occurs due to ground subsidence, earthquakes, frozen ground, etc. Our systems include a wide spectrum of joints and pipes in diameters from 25A to 300A. Characterized by superior corrosion resistance and the exceptional ease with which they can be installed, they contribute to cutting overall installation costs. (Piping Components)



Gourd Brand

When Hitachi Metals' forerunner, Tobata Foundry Co., introduced its first product in 1910, the product was embossed with the image of a gourd (*hyotan*), suggesting its toughness while having smooth and beautiful lines like a gourd. The Gourd brand is also well-known overseas.

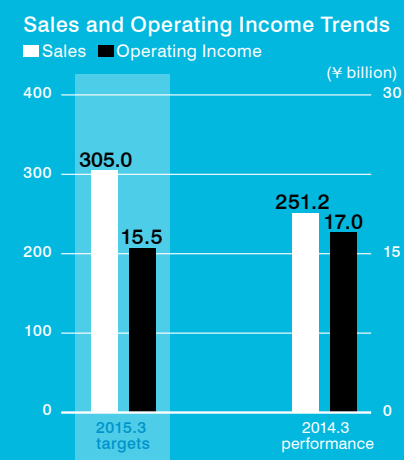


Wires, Cables, and Related Products

This new business segment was established in association with the merger with Hitachi Cable, Ltd., on July 1, 2013. The operating results of the Group include those of this segment starting from the three months ended September 30, 2013.

Sales in the Wires, Cables, and Related Products segment for the fiscal year ended March 31, 2014, were ¥251,154 million.

Operating income was ¥17,047 million.



Business Units	Principal Products
Electric Wires and Cables	• Electric power and industrial wires and cables; electronic wires, cables, and wiring devices; fiber optic and telecommunication cables; magnet wires; and industrial rubber products
Automotive Products	• Electronic components and brake hoses
Information Systems Devices and Materials	• Information networks, wireless systems, and compound semiconductor products
Metal and Component Products	• Brass products, etc.

Financial Results

Sales

Electric Wires and Cables

Sales of electric power and industrial wires and cables increased with the strong demand for overseas railway projects and constructions, 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. For materials for electronic devices, sales of magnet wires increased due to a recovery in demand mainly for products for automobile and continued to hum along, and sales of photovoltaic cells increased primarily because of the favorable domestic demand.

Automotive Products

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

Information System Devices and Materials

Sales of information system devices and materials increased because of a growth in sales of network products associated with increased capital investments in infrastructures by telecommunications carriers along with the widespread use of smartphones.

Operating Income

Profitability of the segment substantially improved in the fiscal year ended March 31, 2014, reflecting the favorable effect of structural reform and ongoing cost reductions as well as steady demands in areas such as automobiles, construction, communication, and public investment. As a result, operating income of this segment was ¥17,047 million and operating income margin was 6.8%.

Business Overview

In the field of electric wires and cables, we have constantly pursued technologies demanded by the era in the fields of energy and information. Our wires, cables and related products draw from our long track record and rich experience in this domain, ranging from products that contribute to the social infrastructure and are used in electric power facilities, to those developed for general construction and industrial applications. We also offer items that support greater reductions in size and more sophisticated function in a wide range of machinery, working to provide our customers with the optimal solutions for their needs.

For automotive products, our stance is to utilize the strengths of materials best geared to the needs of the marketplace. Working from that foundation, we are engaged in global-scale development, production and sales of diversified types of sensors built to convey energy and signals with maximum efficiency and

accuracy; power source harnesses; and brake harnesses, hoses and other parts engineered to contribute to greater safety, energy efficiency and convenience in motor vehicles.

In the information system devices and materials domain, we supply information network machinery, antennae systems for mobile phone base stations and other distinctive products and solutions customized for use in the telecommunications infrastructure.

We will continue to mobilize superior technology in support of customers around the world and contribute to society.

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

Years Ended March 31	2012.3	2013.3	2014.3
Capital Expenditures	—	—	5.6
Depreciation and Amortization	—	—	7.2
Research and Development Expenses	—	—	5.2

On July 1, 2013, the Company merged with Hitachi Cable, Ltd. and established a new company called the "Cable Materials Company." The operating results of the Group include those of the new company in the "Wires, Cables, and Related Products" segment starting from the second quarter ended September 30, 2013.

Masato Hasegawa
Managing Officer
President, Cable Materials Company



Wires, Cables, and Related Products

Scaling Up Production and Sales of Electric Power Steering Torque Sensors

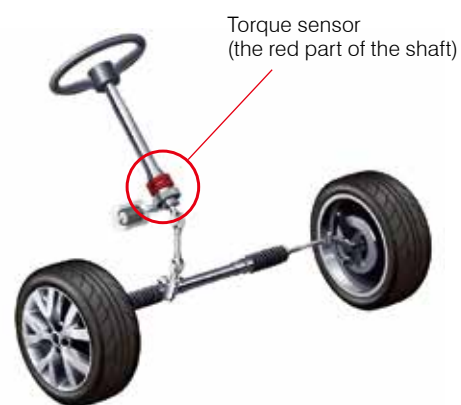
The Cable Materials Company is moving to expand the scale of its production and global supply system for the torque sensors used in electric power steering (EPS) systems—a component shaping up as a key growth driver for the company's automotive parts business.

Recent years have witnessed a steady shift in EPS systems used from hydraulic ones to electric-powered varieties—a reflection of the push for greater energy conservation and onboard space savings. EPS systems use torque sensors to detect the torque generated between the steering wheel and the tires. Torque sensors are a core component indispensable to steering transmission and control, as well as steering force assistance.

The torque sensor business started out with coil assemblies based on the coil-winding technology conventionally perfected at the Cable Materials Company. With the production launch of noncontact bobbin torque sensors equipped with coil assemblies, the scale of this sector expanded steadily. The rapid acceleration of the switch to electric-powered electrical and control systems and the shift to superior vehicle fuel economy brought increasing demands for sensors offering higher sensitivity and functionality. This has prompted joint development with buyers of Hall IC torque sensors, which are engineered for superior detection precision and temperature characteristics. That has resulted in an expanded product lineup in this area.

At present, the Cable Materials Company mass-produces torque sensors at two sites—one in Japan and at the Thai manufacturing subsidiary AHCL (Thailand) Co., Ltd. Work has been under way to beef up AHCL's manufacturing facilities since October 2012, with a plan to more than triple 2011's output capacity by the end of 2014. The Cable Materials Company is also probing the feasibility of producing these sensors in other regions as a strategic phase of a global supply system.

Forecasts are for continued swift development of the torque sensor market, with expectations running high for redoubled growth of this business.



Torque sensors for electric power steering



Noncontact bobbin torque sensor

Cable Materials Company Accelerates Development of Global Operations Related to Rolling Stock Cables

The Cable Materials Company is working to develop new products and upgrade its overseas locations as a way to accelerate the growth of its global operations related to rolling stock cables.

Drawing upon its diverse technologies for developing and manufacturing wires and cables, the company produces rolling stock cables used in body panel wiring and onboard equipment. Domestically, our cables have been used for bullet trains, conventional trains and subway trains, and we hold the top market share in Japan. We also began manufacturing rolling stock cables for export in the 1980s, steadily building a sales record that includes supplying cables for Taiwan's 700T High Speed Rail and British Rail's Class 395.

Expectations are that Japan's domestic market will mature, with replacement representing the primary demand as rolling stock ages. On the other hand, stable growth rates are anticipated in overseas markets for large rail projects and infrastructure needs in emerging markets.

In response, the company has begun targeting Europe and Asia for technology development and manufacturing organizations in an effort to expand its global operations. In response to requirements for uniform European standards that emphasize fire safety in both Europe and Asia—called "EN" standards—we have developed a line of EN-compatible cables. Hitachi Cable (Suzhou) Co., Ltd. also began mass production of cables primarily for Chinese high-speed rail projects restarted in FY2013. In FY2014, Hitachi Cable (Suzhou) will begin the mass production of EN standard products, laying down the foundations for an overseas production site. Furthermore, we intend to expand our scope of operations with plans for new businesses involving the design and processing of harnesses for rolling stock.

The company's major achievements in FY2013 included an order for test rolling stock for the U.K.'s large Intercity Express Programme and a large order for Chinese high-speed rail projects, among others. We will accelerate our worldwide business expansion plans by strengthening product development and overseas bases, allowing us to go from a business that is strong domestically in rolling stock cables to one successful worldwide.

Wires, Cables, and Related Products

Supplying the Technology Needed to Transmit Energy and Information to the Global Market

Broad-Based Development of Technology Cultivated Through Electric Wires and Cables

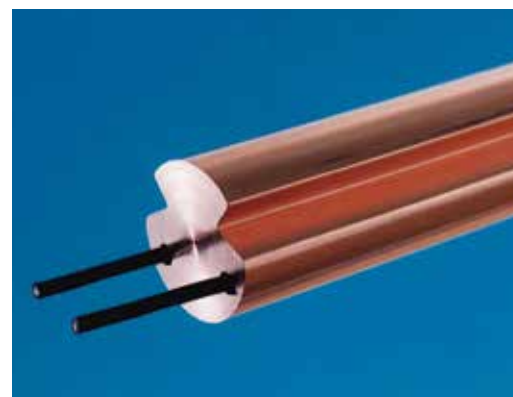
In the realm of wires, cables, and related products, we continually pursue technologies related to energy and information technology. Our business scope is expanding to areas such as wires and cables, automotive products, information systems devices, and metal materials. Our lineup is diverse, from wires and cables used for data transmission and supplying electric power that support social infrastructure to internal wiring products designed to achieve miniaturization and increased functionality in devices of all kinds. We also provide automotive brake hoses and electrical components that improve automotive safety, energy conservation, and over all convenience, as well as IT network devices to support telecommunications infrastructure, thereby contributing to society with superior technologies.

Wires and Cables for Rolling Stock

For bullet trains and many other trains, operated both in Japan and overseas, our wires and cables are used in cabs, underfloor wiring, and wiring between rolling stock. We also provide railway vehicle cables and trolley wires as well as signal cables, thus supporting power supply and information transmission for railways.



Wires and cables for rolling stock



Trolley wires with abrasion detection line for bullet trains

1. MLFC™ Flame-Retardant Polyflex Insulated Wire
2. Probe Cables for Ultrasound Diagnostic Equipment
3. Magnet Wires for Heavy Electrical Machinery
4. Harness for Electric Parking Brakes
5. Torque Sensor Coils



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.

National Invention Awards for Fiscal 2014 Winning the “21st Century Invention Award” Copper Alloy (High-Functional Pure HiFC™) Utilizing Titanium Particles Comparable to High Purity Copper

A copper alloy that has achieved high purification of the copper material by reducing the solid sulfur, with a completely reversed angle from the approach that removes impurities. It not only features softening characteristics equivalent to high purity copper (purity of 99.9999%), but it also boasts excellent characteristics, such as bending fatigue resistance, and production at an economical manufacturing process is achievable. Application across a wide range of fields, including automobiles, industrial infrastructure, and electronics, is expected.

