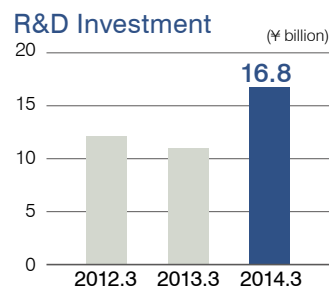


Research and Development

Within its *Fiscal 2015 Medium-Term Management Plan*, ending March 31, 2016, the Group is striving to raise the sales ratio of new products to 30 percent or more, and to bolster new product creation and new technology development capacity.

The basic policies for R&D

- ① Maintaining sustained growth through the ongoing creation of new products
- ② Strengthening global competitiveness in new core product lines
- ③ Generating new products and businesses that will emerge as pillars for the new generation



The Group performs R&D activities through market-oriented divisional laboratories. Each internal company also pursues development activities at its own R&D section in line with its own business strategies.

The Group actively conducts and utilizes joint research with external domestic and foreign institutions, such as universities, to cultivate new materials and technologies that will lead to the development of new products. Top management is involved in these development activities, particularly for products and technologies that promise to have a substantial impact on the Group.

For the year ended March 31, 2014, the Group invested ¥16.8 billion in R&D. This accounted for 2.1 percent of its aggregate net sales, roughly on a par with the preceding fiscal year. The sales ratio of new products constituted 26 percent of net sales.

High-Grade Metal Products and Materials

We develop high-grade specialty steel for molds and tools and industrial equipment, as well as for use in the energy sector; amorphous metals and nanocrystalline magnetic materials; rolls for steel mills; ceramic products for structural applications; ceramic filters for catalytic converters (diesel particulate filters); and cutting tools. Our key achievements during FY2013 in this area included producing 50-inch titanium turbine blades for use in steam turbines and high-performance amorphous cores for use in distribution transformers.

High-Grade Functional Components and Equipment

We develop high-grade automotive casting components and related manufacturing technologies and design evaluation systems; total piping systems—including pipe joints, valves, and other parts—as well as related construction methods and peripheral technologies; and construction materials and components. Our key achievements during FY2013 in this area included expanding our lines of both heat-resistant cast steel products for downsized engines with higher fuel efficiency and ductile products for use in lightweight suspension components, as well as the commercialization of Z-type meter units for use in gas piping.

Magnetic Materials and Applications

We create high-performance magnets, high-frequency components for information terminals and other applied products using soft magnetic materials. Our key achievements during FY2013 in this area included developing the low Dy series of sintered rare earth magnets, an environmentally friendly method for recovering rare earth elements from sludge, and high-performance ferrite magnets.

Wires, Cables, and Related Products

We are active in the development of wire and connection technology for industrial, vehicle and communications use; electronic wire; wire and connection technology applied to automobile and magnet wires; electronic components and hoses for automobiles; industrial rubber; information network equipment; mobile phone base station antennas; and compound semiconductors products and other products. Our key achievements during FY2013 in this area included the development of wiring for railroad car use in compliance with European standards and harnesses for automobile electric parking brakes.

R&D by Business Segment

Years ended March 31	2014.3	2013.3
High-Grade Metal Products and Materials	5.7	5.2
Magnetic Materials and Applications	3.2	3.5
High-Grade Functional Components and Equipment	2.7	2.4
Wires, Cables and Related Products	5.2	—
Total	16.8	11.1

The Hitachi Metals Group views materials development as the springboard for change and progress in industry as well as the source of our contributions to society and our continued existence. We will strive to raise the sales ratio of new products to 30 percent or more and to revitalize our product lines to ensure our position as an advanced materials manufacturer.

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.