

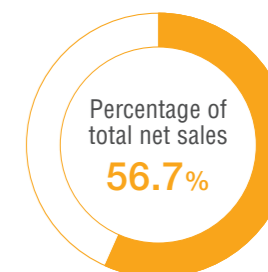
Business Report

Transportation Systems Segment

Supporting safe, secure, and comfortable rail transportation through a variety of products

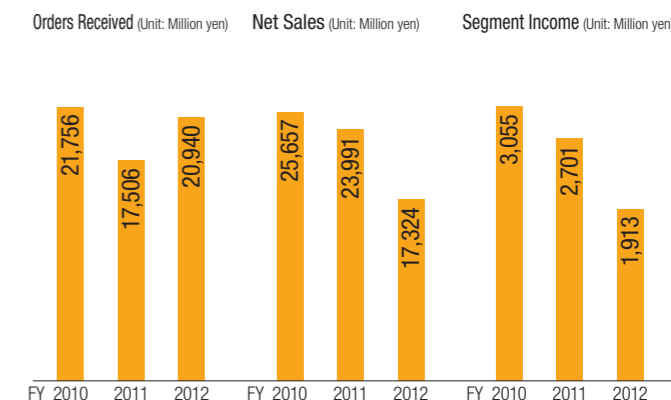
Business Overview

We contribute to the advancements of railway systems worldwide and to safe, secure, and comfortable rail transportation through the development and manufacture of electrical equipment for rail vehicles, including propulsion inverter (VVVF inverter), traction motor, driving gear unit and current collectors (pantographs).

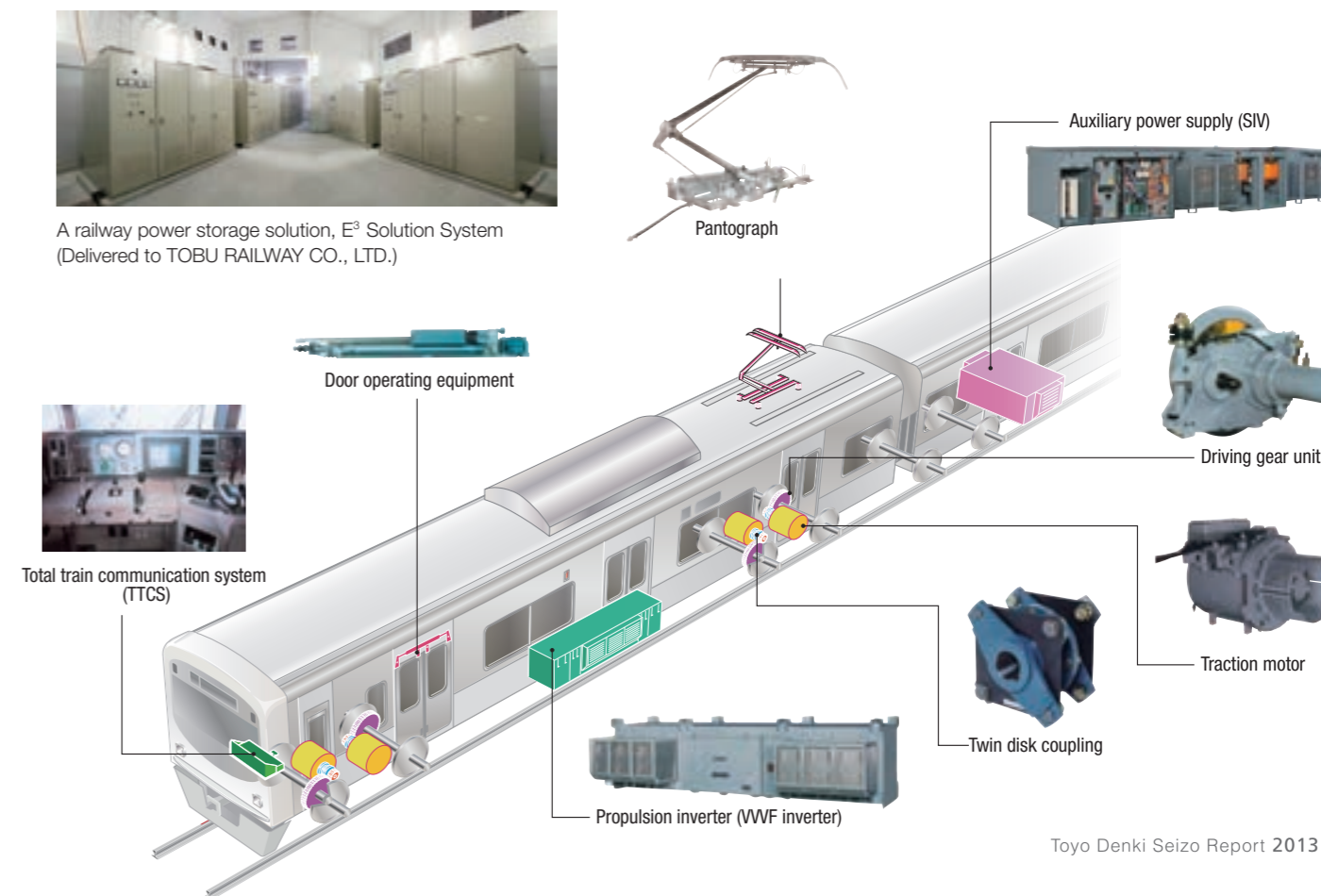


Results for fiscal 2012

<p>■ Orders Received</p> <p>20,940 million yen (Up 19.6% year on year)</p>	<p>Although domestic orders only grew slightly, overseas orders including electrical equipment for the LRV in Los Angeles, U.S. increased.</p>
<p>■ Net Sales</p> <p>17,324 million yen (Down 27.8% year on year)</p>	<p>A slowdown in demand for renewals reduced sales in Japan and there was a great decline in sales of products for high-speed railroads and subway systems in China.</p>
<p>■ Segment Income</p> <p>1,913 million yen (Down 29.2% year on year)</p>	<p>Profits fell due to the impact of reduced revenues.</p>



A railway power storage solution, E³ Solution System (Delivered to TOBU RAILWAY CO., LTD.)

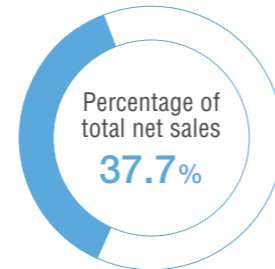


- 10 Transportation Systems segment
- 11 Industrial Systems segment
- 12 Information Equipment Systems segment
- 13 Expansion of EVs and HEVs
- 14 Research and Development/Intellectual Property

Achievement of efficient energy usage with our advanced power electronics

Business Overview

We leverage our advanced motor drive technology to develop and manufacture products and systems that achieve efficient energy usage and meet our customers' needs in a wide range of fields, including testing equipment for automobile development, systems for production facilities, and various power generation systems.



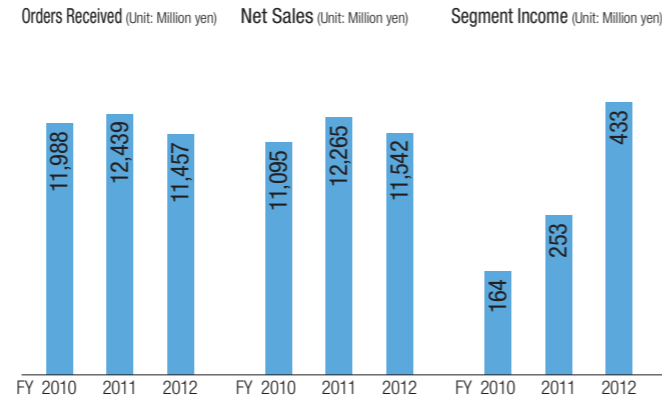
Results for fiscal 2012

- Orders Received**
11,457 million yen
 (Down 7.9% year on year)
- Net Sales**
11,542 million yen
 (Down 5.9% year on year)
- Segment Income**
433 million yen
 (Up 71.1% year on year)

Despite strong orders of infrastructure related products such as testing equipment for automobile development and power generators, there was a large decrease in orders overseas.

As with orders, despite the strong sales of products such as testing equipment for automobile development, sales for production facilities and overseas sales declined.

Profits increased due to improvements making plants more profitable.



Testing Equipment for Automobile Development

Power Generation Systems

Systems for Production Facilities

Water Supply Equipment Systems

Systems for Printers

Electric Propulsion Ship Systems

Developing and manufacturing railway station operating equipment and remote monitoring systems to contribute to improvement of operational efficiency

Business Overview

Our Information Equipment Systems segment helps our customers make their operations more efficient by developing and manufacturing advanced "railway station operating equipment" compatible with IC cards and "remote monitoring systems" that monitor status and position and facilitate visualization of power consumption.



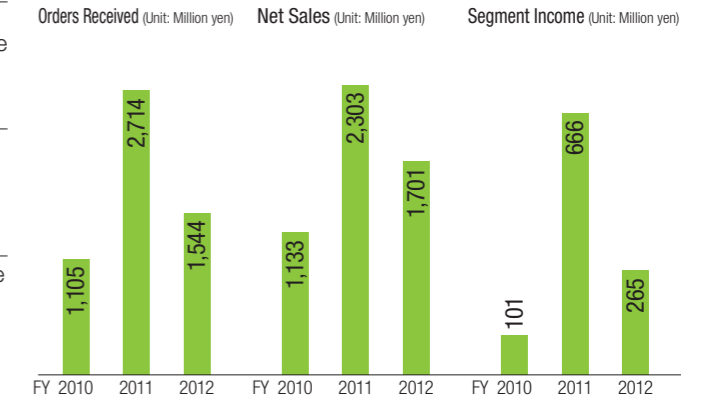
Results for fiscal 2012

- Orders Received**
1,544 million yen
 (Down 43.1% year on year)
- Net Sales**
1,701 million yen
 (Down 26.2% year on year)
- Segment Income**
265 million yen
 (Down 60.2% year on year)

Orders decreased in this fiscal year as a repercussion to increase in orders of ticket issuing handy terminal for railway companies in Japan for the previous year.

Sales fell for the same reason as orders received.

Profits declined greatly due to the impact of reduced revenues and development costs for new products.



Railway station operating equipment



Remote monitoring systems



Developing and manufacturing hybrid construction machinery and electric traction systems for EVs and HEVs

Business Overview

We develop and manufacture “automotive electrical equipment” such as motors and inverters which support electric vehicles (EVs), hybrid electric vehicles (HEVs), and electrification of construction machinery as a new core business for the Company alongside our Transportation Systems and Industrial Systems segments.

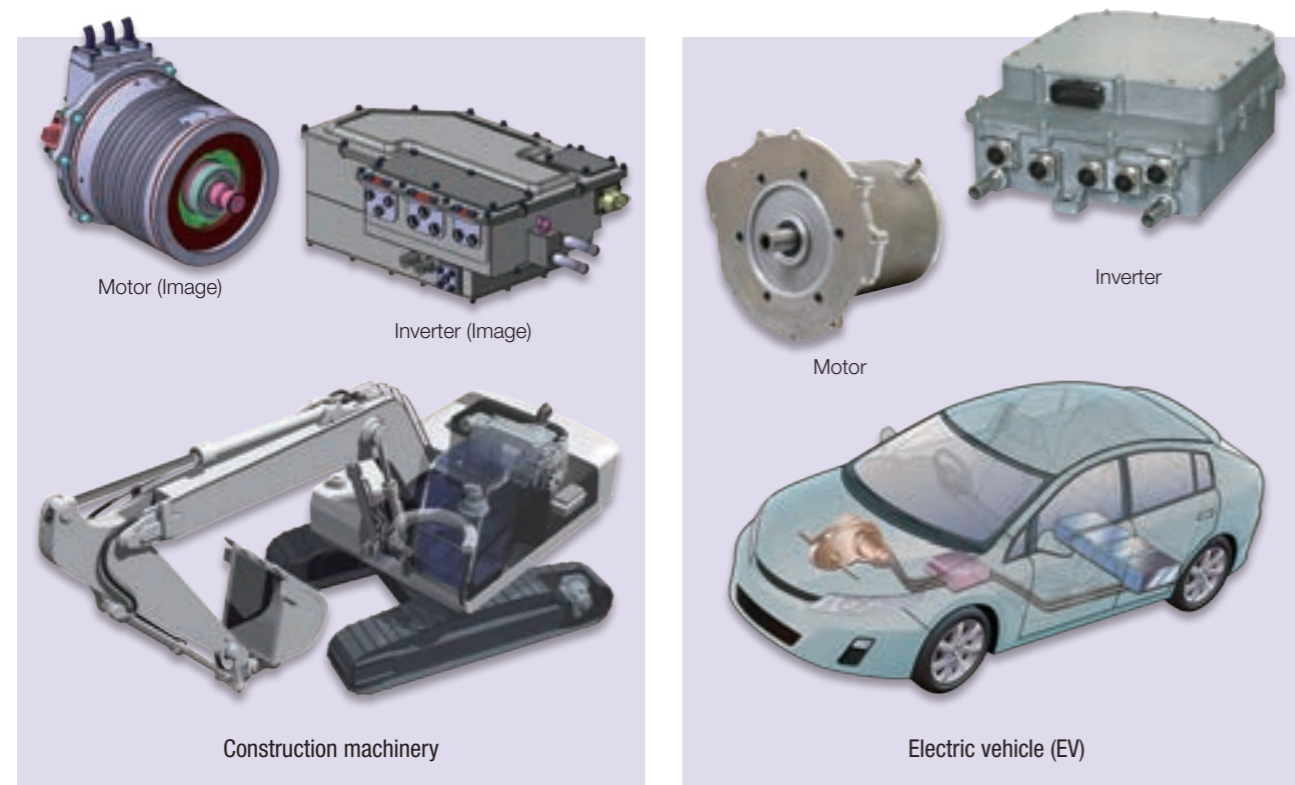
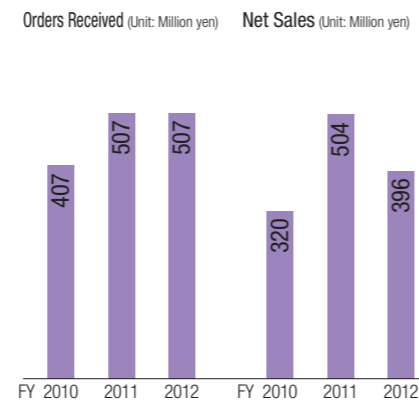
Currently, the orders received, net sales, and profits and losses of these products are included in our results for the Industrial Systems segment. As stated in the principal measures of the DASH 2015 Medium-Term Management Plan, this business will drive the expansion of our businesses by establishing a mass production structure for automotive electrical equipment, firmly capturing demand for a shift to hybrid construction machinery and quickly entering the international market for electric vehicles.

Reference: Orders received and net sales

Our automotive electrical equipment business starts with the receipt of orders of the development and design of prototypes from manufacturers of construction machinery, automobiles, industrial machinery, and other products.

After thorough testing, if the manufacturer decides to take the trial product into mass production, we begin manufacturing at our industrial motor and inverter factories in accordance with the mass production plan provided by the customer.

Below are our orders received and net sales for the past three years for reference.



Committed to technological innovation in the fields of railway and industry

Research and Development

Our research and development system consists of the research laboratory and the development divisions in each business unit. With regard to our R&D activities, we seek to create products that fully satisfy our customers in Japan and overseas and challenge the creation and expansion of these products. We actively develop technologies of our existing businesses and core technologies that support this development as well as new products

that expand our businesses.

Furthermore, we created a project team including people from our sales, development, and design divisions in April 2013. This team has studied the theme of “new businesses and products” in a cross-company manner and is committed to commercializing unique products in the future.

Results and topics from fiscal 2012

Segment	Project	Description
Transportation Systems	Fully enclosed induction traction motor	Commercialized traction motor that contributes to reduction of maintenance labor.
	Information control systems for rolling stock	Completed an information control system for next-generation rolling stock which was developed jointly with FUJI ELECTRIC.
	Compact and lightweight control system	Completed power supply for light rail cars.
Industrial Systems	Inverter with isolated control unit	Developed a unique inverter with separate control and power units.
	Programmable controller (PLC) with increased functionality	Made PLC with higher reliability by using dual-CPU architecture, and added Internet communication features.
	Expanded line of motors for automotive test equipment	Developed new models to expand lineup, including ultra-fast motors for EVs and HEVs.
Information Equipment Systems	Air conditioning instrumentation system (E-SAVE)	Developed energy management system for central air-conditioning systems.
	Next-generation all-in-one ticketing machines (railway station operating equipment)	Developed a ticketing machine that is more compact, more energy efficient, and issues tickets faster than current models.

Intellectual Property

Our intellectual property is placed as a key corporate resource for the present and the future. Our intellectual property department is responsible for the management of intellectual property at our research laboratory and the development divisions in each business unit actively apply for patents and utility models.

In the overseas markets which we expect to further expand our businesses, we will actively engage in activities concerning our intellectual property in order to protect our technologies.

Patent applications

