

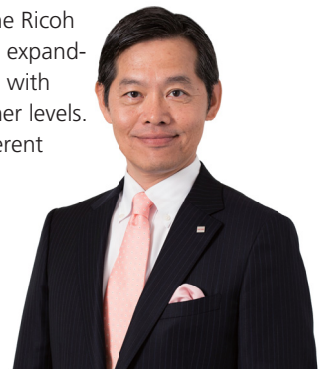
A hub of innovation

Domain topics

Reorganizing the Group’s management resources into separate companies to accelerate growth

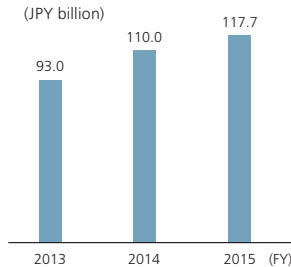
In the industrial business domain, we anticipate higher demand for industrial business products and services and are keen to utilize core strengths cultivated within the Ricoh Group, specifically technological expertise and close customer contact, to meet expanding market interest. Factory automation (FA) is in a particularly bright spotlight, with demand buoyed by manufacturers who seek to boost productivity to even higher levels.

We will draw on our strengths, make up for weaknesses and integrate inherent capabilities to create value that no other company could possibly replicate, and in so doing, we will build the industrial business into a new pillar of operations at Ricoh.



Katsunori Nakada
Corporate Senior Vice President,
General Manager of Industrial Business Division, Ricoh Company, Ltd.
President, Ricoh Industrial Solutions Inc.

• **Net sales in the industrial products domain**



* CAGR: Compound annual growth rate

• **MTP target**

Sales
CAGR*
12%

• **SWOT analysis**

<ul style="list-style-type: none"> • Technology, particularly optics and image-processing technologies • Global sales/service platform for office business • Production/service know-how acquired as a manufacturer 	<ul style="list-style-type: none"> • Underdeveloped global customer base
Strengths	Weaknesses
Opportunities	Threats
<ul style="list-style-type: none"> • Production automation demand (increasing use of robots), spread of IOT (Internet of Things) 	<ul style="list-style-type: none"> • More competitors

Focusing on industrial business domain with an eye to the future

The Ricoh Group leverages the integration of new ideas and external resources with expertise in optics and image-processing technologies cultivated from our earliest days, to anticipate customer needs and create new value for all. The industrial business domain showcases products and solutions for industrial applications, where we will fully demonstrate the technological strengths honed within the Group. Currently, efforts to expand business center on three areas: on-board automotive applications, security systems and FA.

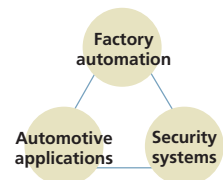
The current of innovation has reached this domain, sweeping into production methods, inventory control and logistics systems. The times thus require swift decision making and efficient management infrastructures attuned to business activities, and so we are reorganizing management resources

scattered throughout the Group, spinning operations into companies, and priming the Group for accelerated growth.

In on-board automotive applications, we have recorded results, notably, a rear-view automotive camera as well as sensors that pick up on dangers and bring the vehicle to a stop. In security systems, we are responding to various needs, such as surveillance cameras using sensor technology and cameras with high-power magnification required at airports and other facilities where public safety is a priority. In factory automation, our products, including special cameras used in manufacturing and inspection processes, cover all aspects of automation on the factory floor.

The Ricoh Group will hone a sharper edge in optics and image-processing technologies—areas of expertise—as well as laser technology, and promote development of modules boasting advanced, stand-out features.

• **Three main areas in industrial business domain**



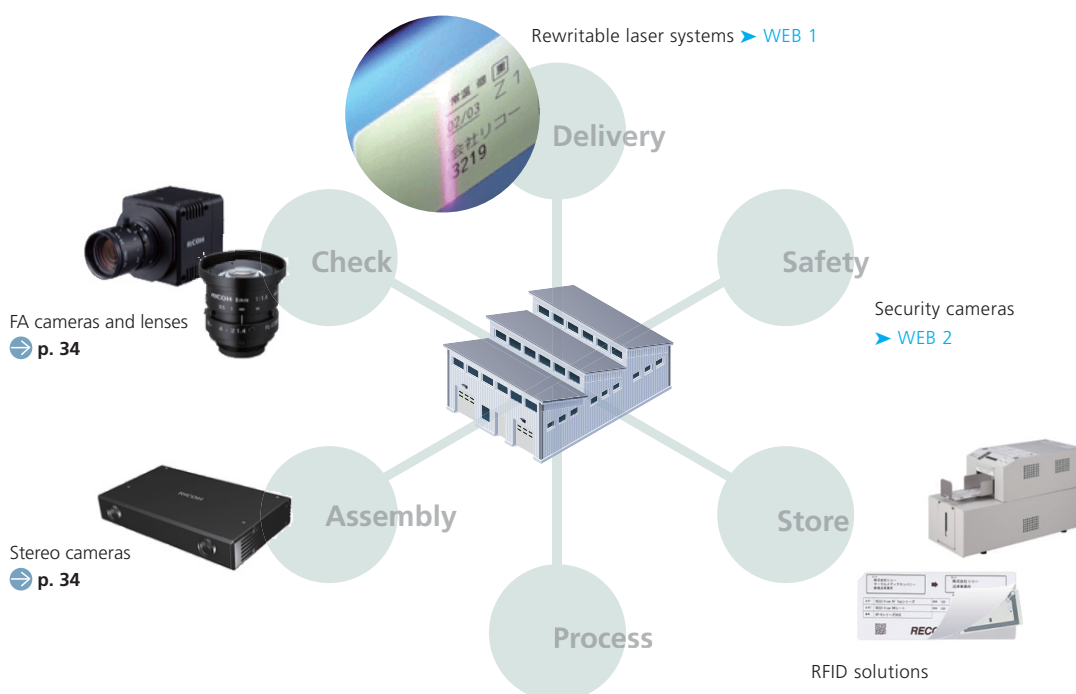
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Providing FA solutions to customers in the manufacturing industry

Customers in the manufacturing industry have embraced automation and approaches to boost productivity, and at Ricoh, we support these efforts by providing FA solutions built on know-how—namely techniques for checking quality and designing manufacturing processes with the flexibility to respond to production changes—that we have

cultivated through the production of proprietary core modules and MFPs. Among our core modules are special cameras and sensors that pinpoint the position of subjects and perceive color tones, as well as rewritable laser systems that generate delivery labels and radio-frequency identification (RFID) solutions that issue instructions and control assembly-stage operations. In the FA area, we will promote one-stop services and support and provide “products + services” value fine-tuned to customer needs.

• Products and solutions that support factory automation



Key businesses in the industrial products domain

We are focusing on the following businesses in the industrial products domain.

Key businesses in industrial products domain	Principal products and services	Summary
Industrial	<ul style="list-style-type: none"> FA cameras Embedded units Super telephoto/fog-reduction cameras Sensors 	Develops special cameras that make it possible to pinpoint position of subject, perceive color tones and acquire information the human eye cannot pick up, and supports factory automation
Thermal media ► WEB 3	<ul style="list-style-type: none"> Thermal sheets of POS devices Thermal transfer ribbon 	Establishes thermal transfer ribbon production and sales offices in emerging countries
Inkjet-related ► WEB 4	<ul style="list-style-type: none"> Inkjet heads and ink 	Boasts technology combining inkjet heads and ink Expanding output applications to diverse media
	<ul style="list-style-type: none"> 3D printer sales/3D output services and consultation ► p. 29 	Supports innovation at customer manufacturing sites based on accumulated 3D design technology
Semiconductors ► WEB 5	<ul style="list-style-type: none"> Power source ICs 	Scope of applications expanding with widespread use of smartphones. Sale of ICs for on-board automotive devices

- WEB 1 Rewritable laser system: www.ricoh.com/technology/tech/062_laserrewritable.html
- WEB 2 Security: industry.ricoh.com/en/securitylens/
- WEB 3 Thermal media: industry.ricoh.com/en/thermal/
- WEB 4 Industrial inkjet: industry.ricoh.com/en/industrialinkjet/
- WEB 5 Electronic devices: industry.ricoh.com/en/lisi/