

**NIRECO**

Company Profile

# Technology & Trust

Nireco Corporation's corporate philosophy is "Technology & Trust." Since our founding in 1950, we have supported the manufacturing and business activities of our customers by providing production line controls, measurement and inspection equipment for production and processing lines. In today's market environment, our products face significant international competition due to economic globalization. In this environment, we have built a strong position as a leading provider of control, measurement, and inspection equipment by rapidly adopting new technologies and utilizing our extensive portfolio of existing technologies to seek new business opportunities. By providing advanced "Technology" that meets the needs of our customers, we have gained their "Trust" and are able to grow with them as their partner of choice. Nireco is committed to using the value of these partnerships to create a better life and a better world, and to bring joy and excitement to everyone who uses our products. We deeply appreciate the many years of support we have received from our customers, business partners, shareholders and other stakeholders, which has enabled Nireco to become a leading company in its field. We look forward to continuing to work with you to enable you to improve your business and build a better society.



## Our Major Strengths

Three keywords describe our products: "control," "measurement" and "inspection". Our products, which also include customized devices, match the unique characteristics of each customer's production line. This eliminates waste in the production process and contributes to improved quality. Along with our long track record of successful products, our other strength is our after-sales service that provides customers with worldwide support for their manufacturing.

## Business Segments and Markets

Segment	Process Control	Web Control	Inspection Systems	Optics
Steel / Nonferrous Metal	●	○	●	○
Chemical / Printing	○	●	●	○
Electrical / Electronic	○	●	●	○
Food / Agriculture	○	●	●	○
Semiconductor	○	○	○	●
Others	○	○	●	●

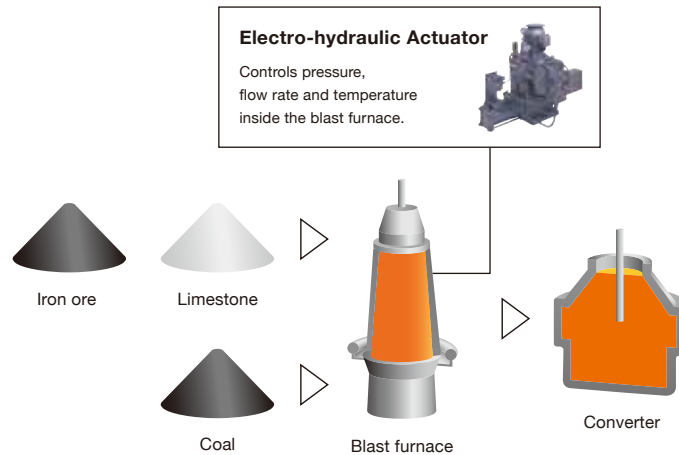
## Process Control Business

Our Process Control Business provides products mainly used for steel and nonferrous metals production processes. Process Control has been a core business for Nireco since the company's beginning. We started by providing process control equipment that use hydraulic power to control operating conditions such as temperature and pressure in the steelmaking process. Today, our equipment products play an important role in supporting quality and efficiency in a wide range of steel-product manufacturing processes. In addition to providing products, our after-sales services such as maintenance and replacement of parts and factory components play an important role in supporting steel-product production. The strengths of this business rest on our solid track record of reliability built up over many years of experience enabling customers to keep production lines running smoothly and our extensive system of support services.

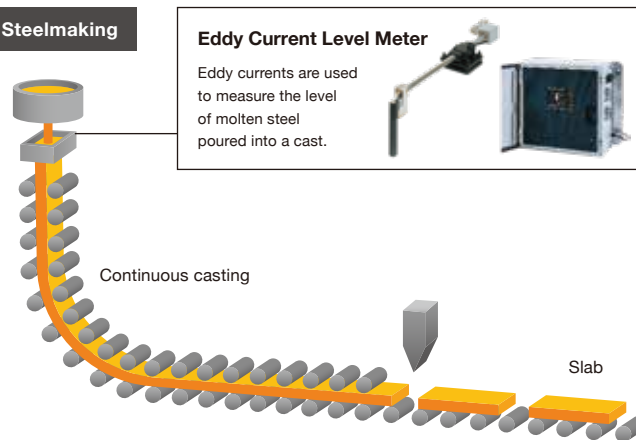


### ■ Nireco products used in the steel-manufacturing process

#### Raw Materials / Pig Iron



#### Steelmaking



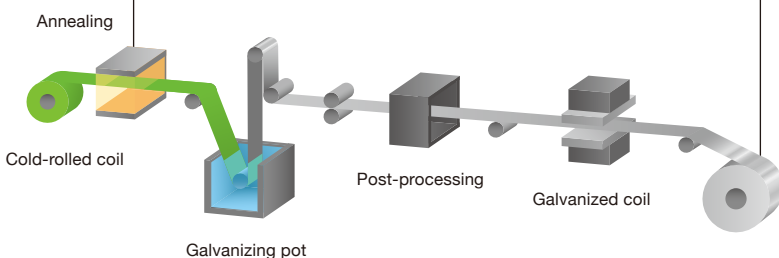
#### Surface Treatment

#### Edge Position Control System

Controls the meandering of the steel strip traveling along the production line.

#### Automatic Marking System

Imprints various information on the finished metal product.



## Web Control Business

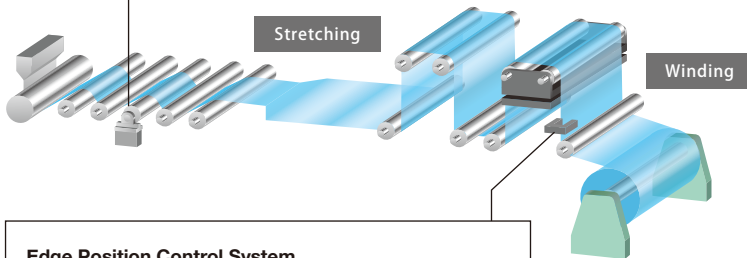
In the thin products industry (large strips of metal, paper etc.), “web” refers to thin objects in a sheet or rolled form. Examples of thin objects used in daily production in different industries are paper for newspaper and magazine printing, resin sheets for making liquid crystal panels for notebook computers and smartphones and food packaging films. “Web control” is the process of controlling such thin objects during manufacture to prevent shifting, sagging or wrinkling during the production process. Specifically, “aligning”, “pulling” and “adjusting” are the main kinds of controls required in the production of thin objects. Nireco cultivated this technology through our development of strip controlling equipment in our Process Control Business. By combining this technology with our “inspection” technology later developed in our Inspection Systems Business, we have become an all-in-one provider of web control equipment and inspection services that can meet a wide range of customer needs.



Nireco products are used to control web edge position and web tension

### Tension Control System

Keeps the web tension constant and enables stable, high-precision production.



### Edge Position Control System

Controls the meandering of various types of webs.



### Gluing Inspection System

Inspects the length, position and other measurement conditions of applied gluing from the glue image captured by camera.



### Automatic Register Control System

Controls the color-to-color registration on rotogravure printing laterally and on the circumference.

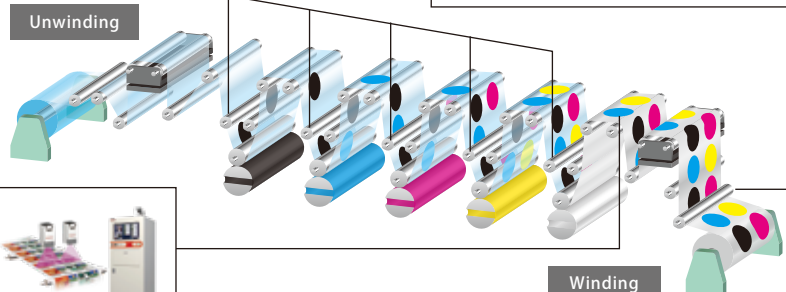


### Edge Position Control System (Pattern matching)

Visualization eliminates mistakes! Web guiding based on pattern matching using images captured in real-time!

Design Position Control System

**DPC**



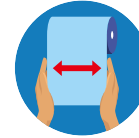
### Printing Quality Inspection System

Detects blemishes on the surface of printed products such as food packaging and automatically recognizes them as defects.



Winding

## Product Features



Aligning

### Edge Position Control System

This system is installed at the winding, intermediate and/or unwinding phase along the roll-to-roll production line to control the meandering of various types of webs.



Pulling

### Tension Control System

Keeps the web tension constant and enables stable, high-precision during various phases of production.



Adjusting

### Automatic Register Control System

This system is used with multicolor printing machines to control the color-to-color registration on rotogravure printing laterally and on the circumference.



Inspecting

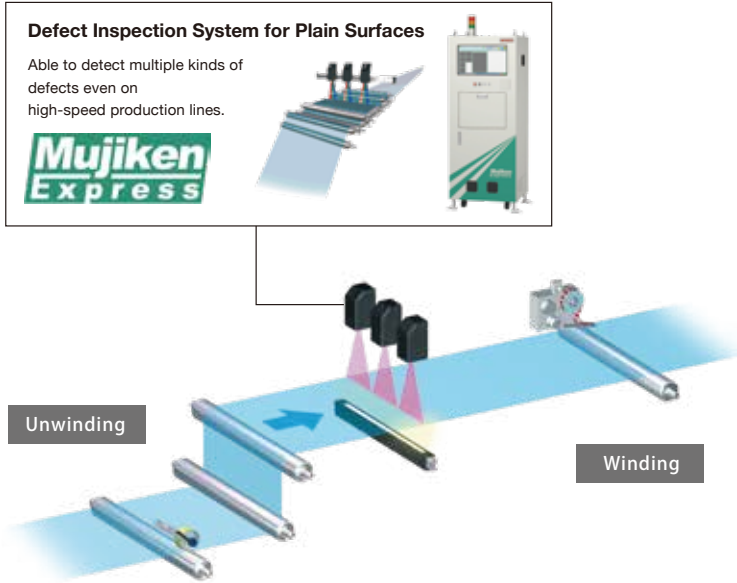
### Printing Quality Inspection System

This inspection system detects blemishes on the surface of printed products such as food packaging and automatically recognizes them as defects.

## Inspection Systems Business

This business segment utilizes our core technologies of sensing and optics to provide vision systems that inspect at high speeds and high resolution to detect tiny scratches, blots and other irregularities almost invisible to the human eye. The technologies in this segment were originally developed for the steel industry to measure crystal grains of steel by mathematical analysis of captured images of steel surfaces. Another application is accurate measurement and management of printed dot matrices. We eventually accumulated a rich stock of image processing technology through years of providing assistance to universities and research institutes engaged in basic research and testing of samples in such fields as medical science, biology and industrial applications. Today, Nireco offers inspection systems for a number of products ranging from highly functional films used in various industries to food and agricultural products. In addition, we continuously update our inspection systems in response to new demands from customers.

### Inspection systems for the surface of plain materials

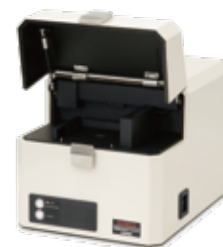


### Inspection System for Food and Agricultural Products



Sorting system AP8770 series

### Near-infrared (NIR) Analyzer



Desktop NIR Analyzer A8850

## Optics Business

Our Optics Business provides laser equipment and optical components for applications in a variety of advanced technology fields. Due to their special characteristics, lasers are widely utilized in industrial and medical fields for marking products and as light sources for various types of inspection technologies. We provide laser equipment utilizing our storehouse of solid-state laser and fiber laser technologies for application in a wide range of devices such as semiconductor inspection devices, industrial processing devices and medical diagnostic devices. Our ability to manufacture high-quality optical components comes from a combination of high-level optical design technologies, high-precision processing technology and measurement/evaluation technology, skillful engineers and state-of-the-art production facilities that exists within Nireco Group companies. We provide a wide selection of optical components, such as wave plates and polarizers, customized to the needs of our customers in industrial and academic fields.



### Laser light sources for semiconductor inspection devices



Deep UV fiber laser Cygnus

### Nonlinear crystals used in semiconductor inspection devices



CLBO crystals

### Laser light sources for marking and microfabrication



Green Laser HR-G10

Processed sample

### Optical components



Polarizers

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**NIRECO**



**NIRECO CORPORATION**

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## Company Profile

Company name	NIRECO CORPORATION	
Established	November 1950	
Capital	JPY 3,072 million	
Stock	Tokyo Stock Exchange Standard Market	
Head office	2951-4 Ishikawa-machi, Hachioji-shi, Tokyo 192-8522, Japan TEL: +81-42-642-3111 FAX: +81-42-644-5815 URL: <a href="https://www.nireco.com">https://www.nireco.com</a>	
No. of employees	449 (As of March 31, 2023)	
Net Sales	JPY 9,155 million (Fiscal Year 2023)	
Business overview	Development, production and sales of control and measurement systems along with system maintenance services.	
Business segment	Process Control	Process Control Systems, Automatic Marking Systems, Edge Position Control Systems (Metal industry related), Eddy Current Level Meter, etc.
	Web Control	Edge Position Control Systems (Printing, Film-related), Tension Control Systems, Automatic Resister Control Systems, Gluing Control Systems, Printing Quality Control Systems, etc.
	Inspection Systems	Defect Inspection System for Plain Surfaces, Image Processing and Analysis Systems, Near-infrared Analyzer, Agricultural Product Quality Inspection Systems, etc.
	Optics	Laser Equipment, Optical Components, etc.
Management	President and CEO	Shinichi Nakasugi
	Director and Executive Officer	Toshiharu Kubota
	Director and Executive Officer	Takuya Sasada
	Director, Audit & Supervisory Committee Member	Fujiro Shinohara
	Director, Audit & Supervisory Committee Member	Toshiyuki Takagi*
	Director, Audit & Supervisory Committee Member	Naoko Ohki*
	*Outside Director as provided for in Article 2-15 of Japan's Company Act.	

## Offices

- Hachioji Office (Head Office)  
2951-4 Ishikawa-machi, Hachioji-shi, Tokyo 192-8522, Japan  
TEL: +81-42-642-3111 FAX: +81-42-644-5815
- Tokyo Office (Process Control Business)  
2-2-7 Shinkiba, Koto-ku, Tokyo 136-0082, Japan  
TEL: +81-3-5534-0585 (Sales) +81-3-3522-2020 (Services)  
FAX: +81-3-3522-2002
- Osaka Office  
18-33, Tarumicho 3-chome, Suita-shi, Osaka 564-0062, Japan  
TEL: +81-6-6190-5550 (Representative/  
Web Sales Division, Service Division)  
+81-6-6190-5552 (Inspection Systems Sales Division)  
FAX: +81-6-6190-5551
- Akashi Office (Process Control Business)  
1065-6 Futami-cho, Higashifutami, Akashi-shi, Hyogo 674-0092, Japan  
TEL: +81-78-942-5488 (Representative) FAX: +81-78-942-5487
- Kyushu Office (Process Control Business)  
2-5-12 Aoba, Kokurakita-ku, Kitakyushu-shi, Fukuoka 803-0822, Japan  
TEL: +81-93-953-8631(Sales) +81-93-953-8672(Services)  
FAX: +81-93-953-8632(Sales) +81-93-953-8673(Services)
- Optical Technology Research Laboratory  
Nerima Kitamachi Building 1F, 1-24-15 Kitamachi,  
Nerima-ku, Tokyo 179-0081, Japan  
TEL: +81-3-6906-8020 FAX: +81-3-6906-8030

## Group Companies

Japan	<ul style="list-style-type: none"> <li>■ MIYOTA Co., Ltd 1675-2 Shimokuzawa, Sagami-hara-shi Midori-ku, Kanagawa, 243-0134</li> <li>■ Kogakugiken Corp. 135 Nurumizu, Atsugi-shi, Kanagawa, 243-0033</li> <li>■ SEIBU Electric Corp. 1458-7 Hazama-machi, Hachioji-shi, Tokyo, 193-0941</li> </ul>	China	<ul style="list-style-type: none"> <li>■ Nireco Automatic Controller (Shanghai) Co., Ltd. Room101, First Floor, Building 7, No.8, Lane 449 Nujiangbei Rd, Putuo District, Shanghai 200333 China</li> </ul>
		Taiwan	<ul style="list-style-type: none"> <li>■ Nireco Taiwan Corporation No.2, Ln.12, Qingle St., Tucheng Dist., New Taipei City236, Taiwan</li> </ul>
		Korea	<ul style="list-style-type: none"> <li>■ Nireco Korea Corporation #920-37, Cheongang-Ro, Gangdong-Myeon, Gyeongju-Si, Gyeongbuk, 780-912 Korea</li> </ul>
		Germany	

# Pioneer of Automatic Control Systems

Reviewing Nireco's history, our company started in 1931 as the Askania Joint Stock Company established by Askania Werke A.G. of Germany. In 1936, Askania manufactured hydraulic-jet-pipe automatic control devices and was at the time reliant on imports. In the same year we reorganized to become a joint-stock company. Askania dissolved as a corporation, but the former employees of the company played a central role in the establishment of Nihon Regulator Company, which came into existence in 1950 with the capital participation of several business partners. In order to meet the diverse needs of customers in the continuously evolving steel and chemical industries, we integrated the technologies we developed in-house with technologies sourced from overseas to produce new types of process automation equipment. This approach has been central to our business since our founding and through our partnerships with domestic and overseas customers has contributed to the growth and advancement of many different industries. Starting with the manufacture of process automation devices for makers of steel and nonferrous metal products, Nireco gradually expanded into new fields by applying the technologies we developed to new and existing markets. Our product and service expertise in our four main business areas, Process Control, Web Control, Inspection Systems and Optics, makes us a technology leader and an important partner for companies both in Japan and globally.

## History

1931	German enterprise Askania Werke AG establishes the Askania Corporation in Japan		1996	Construction of research center at the Hachioji site completed	
1936	Askania reorganized as a joint-stock corporation		1998	Acquired Nireco Taiwan Corporation by underwriting a capital injection	
1945	Askania in Japan is dissolved	Automatic control device made by Askania at the time		ISO9001 certification acquired for all web controllers	
1950	Nihon Regulator Co., Ltd. established with the head office located in Chuo-ku, Tokyo		2000	50th anniversary of the Company's founding	
1951	Nihon Regulator's "Meguro" plant begins production in Shinagawa-ku, Tokyo		2003	Nireco Automatic Controller (Shanghai) Co., Ltd. established in Shanghai, China	
1956	The "Rokugo" plant begins production in Ota-ku, Tokyo		2004	Terminated OTC company listing and listed on the JASDAQ Securities Exchange	
1965	The Hachioji site opens in Hachioji-shi, Tokyo		2012	Closed our Kyobashi Office and merged it with Hachioji site	
1969	Head office relocated to Minato-ku, Tokyo		2013	Merged with and absorbed subsidiary Nireco Keiso Co., Ltd.	
1971	Meguro Plant operations transferred to the Hachioji site		2014	Nireco Process Korea Co., Ltd. established in Korea.	
1972	Subsidiary Nireco Service Co., Ltd (later Nireco Keiso Co., Ltd.) established		2015	Upgraded the aging Hachioji site by constructing a new building and seismic retrofitting, and added newly constructed ancillary facilities	
1979	Head office relocated to Ishikawa-machi, Hachioji-shi, Tokyo		2017	Acquired the Japanese company Megaopt Co., Ltd. and converts to a subsidiary	
1984	Company name changed to Nireco Corporation Rokugo plant operations transferred to the Hachioji site		2018	Nireco Process Korea Co., Ltd. expands by acquiring land and buildings, establishes localized production system	
1989	Nireco is listed on the OTC share market with the Japan Securities Dealers Association (currently JASDAQ)		2019	Nireco International GmbH established in Germany Merged with and absorbed subsidiary Megaopt Co., Ltd. Acquired the Japanese company Kogakugiken Corp.	
			2021	Acquired the Japanese company SEIBU Electric Corp.	
			2023	Nireco Process Korea Co.,Ltd. changed company name to Nireco Korea Corporation	