

NIPPON KAIYO CO.,LTD. Facing you and the sea



User-oriented Support | Environment Technology

The strongest system

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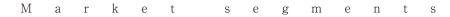
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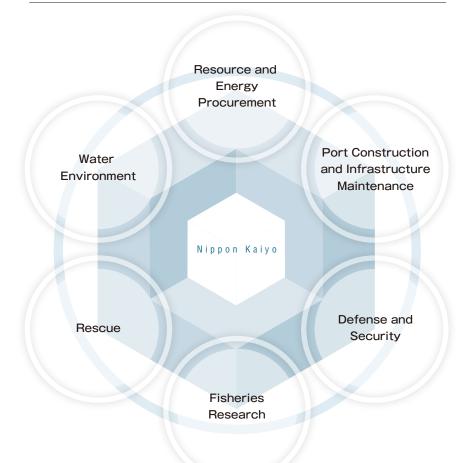
NIPPON KAIYO has participated in numerous oceanic projects as the supplier of research, surveillance and diving equipment, and also as a project supporter to explore the sea in all its phases. After half a century of exploration, the working of nature is still full of mysteries.

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Yet, we have come to a firm conviction through experience that the sea opens up itself to an approach built upon wisdom and elaboration. It begins to talk to us. Easy concession has no place above, under or at the bottom of the sea. With this conviction as our business guideline, we procure only the best equipment and systems of the time from around the world. The sourced products are then customized carefully to meet the specific waters and purposes of activities. The company also plays a role of a product developer by providing feedback for the manufacturer about the market needs and how their products may be improved.

We believe that it is a mission of mankind to consistently challenge the mysteries of the ocean and reveal them toward the goal of using waters efficiently and exploring the road to coexistence. This is why we have the best scientific approach at all times that will help us convey the feeble voice of the ocean to the future.





integrator with full expertise in oceanology

### Providing only the latest measuring instruments in the world

Multibeam echo sounders, scientific echo sounders and other world-standard underwater acoustic equipment, biotelemetry systems in global networks, and underwater optic systems. These are only some of the diverse array of measuring instruments that Nippon Kaiyo has chosen from around the world to meet study and research needs of our customers.

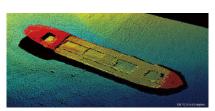
### Well-established technical competence backed by full knowledge of the survey site

Nippon Kaiyo has track records for thru-hull installation of underwater acoustic equipment on large to small research vessels. Our engineers, having full understanding of the specific equipment and years of research experience, will propose the best configuration of equipment to meet the customer's study and research needs and provide full support through the life of research.

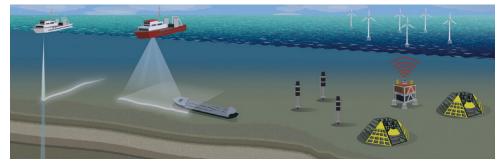
### Seamless collaboration with customers

We provide measuring instruments to our customers as optimal solutions, comprising hardware and software as well, for their study and research activities. A seamless collaboration is maintained to keep improving our solutions and to realize the best study and research environment.

#### Market Segment-1

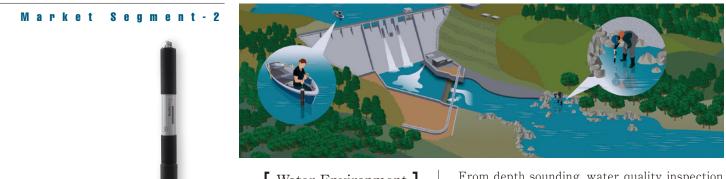


Data taken with EM712 multibeam echo sounder

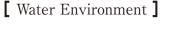


### [ Resource and Energy Procurement ]

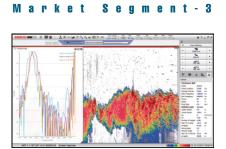
Only the cutting-edge equipment is sourced from around the world, such as the multibeam echo sounders and underwater acoustic equipment as well as underwater optics and communication equipment. Nippon Kaiyo coordinates and customizes them into systems to meet the customers' specific needs in seabed resource mining, power generation and other research activities.



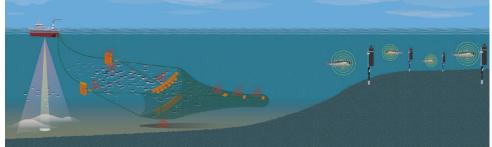
Bentho torch (for benthic algae concentration)



From depth sounding, water quality inspection and underwater surveillance to biotelemetry systems in which a transmitter is attached to a sea creature and images and data are captured by a video camera and sensors. Nippon Kaiyo can meet customers' needs in a broad range of areas.



Scientific echo sounder (EK80)



[ Fisheries Research ]

The sea is the stage for a wide variety of fisheries research projects. Nippon Kaiyo has a lineup of the latest equipment that ensures highest safety, precision and efficiency in research activities. We also have a large lineup of the world's cutting-edge scientific echo sounders. Adding to the conventional underwater systems, new formations have been developed that enhance anti-terrorism and risk management measures.

In addition to the conventional underwater systems, we have available the state-of-the-art underwater acoustic communication, diving and other systems. The best systems are chosen to meet the customer's specific needs and Nippon Kaiyo's underwater systems have been admired by specialists engaged in disaster prevention, coastal security, port construction, journalism and other industries. Yet, we are living today in the age of growing risks best describable by such keywords as "anti-terrorism" and "risk management."

Nippon Kaiyo is capable of providing a comprehensive set of tools that serve needs effectively as well as safely in all conditions thinkable. The tools range from the advanced underwater surveillance systems and precise surveillance systems in all environments, whether shallow or deep waters, on land or underwater, to diving systems in waters with the risks of contamination by chemicals and radioactive material and drones and unmanned airframe systems for reconnaissance, surveillance or surveying operations. Nippon Kaiyo is committed to sharing with its customers the ultimate mission of safeguarding lives and assets from various threats under waters and from the sky.



### Market Segment-4



Underwater navigation for divers (ArtemisPRO system)

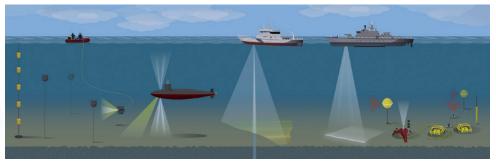
[Rescue]

An advanced formation is formed with acoustic, optical, communication and surveillance systems to support rescue and relief activities. Nippon Kaiyo is capable of sourcing a broad variety of diving and submerging equipment from around the world and customizing them as an emergency system.





AUV, ROV, underwater scooter hybrid model (FUSION)



[ Defense and Security ]

The political and economic globalization leads to more frequent calls for anti-terrorism and disaster preventive programs. Nippon Kaiyo responds to such social changes with a global coordination of systems that constantly monitor the safety and security in waters, quickly detect any unwanted incidents and smoothly exchange information with other systems.

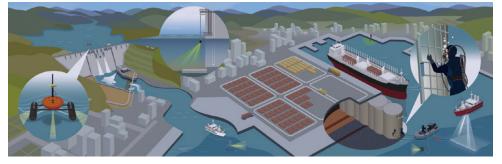
#### Market Segment-



Autonomous, remotely operated USV (SONOBOT)

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[ Port Construction and Infrastructure Maintenance ] Various items can be assorted, from multibeam echo sounders to underwater acoustic equipment, underwater communication equipment, diving and submerging as well as drone-based aerial surveillance, to meet specific needs for port and dam construction and their maintenance.

## Main Customer

#### **Government Agencies**

### Japan Ministry of Defense

Japan Maritime Self-Defense Force

Japan Ground Self-Defense Force Japan Air Self-Defense Force

Japan Coast Guard

Japan Oil, Gas and Metals National Corporation

Japan Fisheries Research and Education Agency

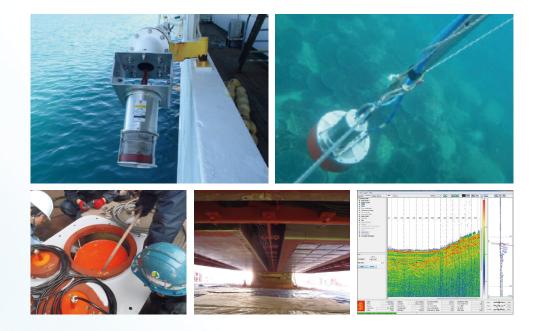
Japan Agency for Marine-earth Science and Technology Universities

**Private Company** 

Mitsubishi Heavy Industries, Ltd. Kawasaki Heavy Industries, Ltd. PENTA-OCEAN CONSTRUCTION CO., LTD. TOYO CONSTRUCTION CO.,LTD.

# THE STRONGEST S

# Bringing the world's best to the forefront.



# YSTEM INTEGRATOR

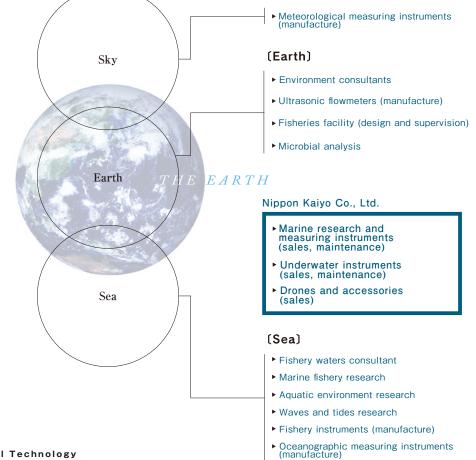
# Tachyonish g r o u p

### Tachyonish Holdings Co., Ltd.



### Aspiring for the preservation and harmony of the global environment

Tachyonish Holdings Co., Ltd. is formed by companies each playing a specific role with new ideas and scenario. Nippon Kaiyo, one of the group companies, is committed to making social contribution as a partner in the creation of safe and rich environment and technological progress through a steadfast pursuit of "FACTS" backed by technology.



(Sky)

User-oriented Support and Environmental Technology

### Company Profile

Nippon Kaiyo Co., Ltd.

### Profile

Corporate nome	Niener Krief Co. I. I.
Corporate name	Nippon Kaiyo Co., Ltd.
Representative	Tatsuo Yamashita, President
Founded	June 21, 1960
Capitalized at	80 million yen
Offices	Tokyo Head Office, Kure Branch Office,
Line of business	Sales and maintenance of measurement equipment for marine environment Design and assembly of diving-related products Drone-related business
Bank references	MUFG Bank, Ltd. Mizuho Bank, Ltd.
Shareholders	Tachyonish Holdings Co., Ltd.
Related companies	Techno Suruga Lab. Co., Ltd. Sonic Corporation Coastal Ocean Research Co., Ltd. Kaiyo Engineering Co., Ltd. SANEI MARINE Co., Ltd. ABYSSAL Co., Ltd.

### History

- 1948 Founded
- 1960 Honchigo Co., Ltd. founded
- 1995 Corporate name changed to Nippon Kaiyo Co., Ltd. Diving and ocean surveillance equipment business started
- 1999 Kure Branch Office opened
  2000 Merged with Asahi Senken Co., Ltd. Environmental surveillance equipment business started
- 2001 Recycling equipment business started
- 2012 Environmental surveillance and recycling equipment business transferred to Kaiyo Engineering Co., Ltd. (then Fuyo Kaiyo Engineering Co., Ltd.) after absorption-based company split
- 2016 Tokyo Head Office moved to the current location





Tokyo Head Office	5-13-4 Towa, Adachi-ku, Tokyo 120-0003 Japan
Sales and Marketing Div.	TEL. +81-3-5613-8902 FAX. +81-3-5613-8210
Technical Div.	TEL. +81-3-5613-8904 FAX. +81-3-5613-8209
Administration Dept.	TEL. +81-3-5613-8901 FAX. +81-3-5613-8209
Kure Branch Office	4-3-12, Sanjo, Kure-shi, Hiroshima, 737-0821 Japan TEL. +81-823-32-5431 FAX. +81-823-32-5432