



CORPORATE PROFILE

## Message from the President

### 進取発展 FRONTIER SPIRIT

I would like to express my sincerest gratitude to our customers, shareholders, business partners, and the regional society, with whom we work every day, and without whom our company could not exist. Since our founding in 1930, we have striven, under the corporate motto of "Frontier Spirit," to provide a one-stop reply to all of our customers' needs, from development, to manufacture, to maintenance, when it comes to fluid control systems, centered on valves.

However, as the world is constantly changing, we have adopted the new theme of "challenge" with regard to taking on new opportunities while also clinging on to the "now." Our goal is to continue to refine our product development that has up until now put our customers' requests into a concrete shape, while taking up new technology development and providing our customers with new value and convenience. We at Nakakita Seisakusho Co., Ltd. will take our spirit of enterprise into new arenas, and we hope that we can rely on your unchanging understanding and support going forward.

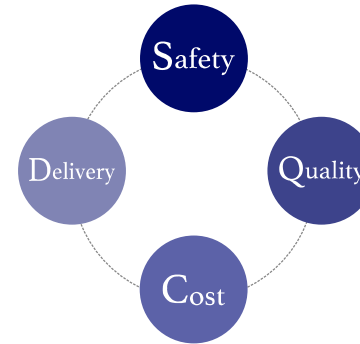
Teruhisa Miyata, President



## Quality Policy

### Nakakita Quality Policy (SQCD)

Nakakita is dedicated to supply products that meet the requirements of our customers. In other words, our quality policy (SQCD) is to satisfy customers by supplying products as ordered in a safe environment (Safety), at a reasonable cost (Cost), free of defects (Quality), and on time (Delivery).



### Quality Control Activities

In accordance with our quality policy, Nakakita has formed QC Circles to conduct quality control activities with the goal of improving quality in each department. We are committed to improve the quality according to our official basic policy of "Incorporating Quality into Each Process," from Manufacturing to Accounting.

Each QC Circle presents its efforts to improve quality at Nakakita's Annual Quality Control Meeting. Many employees have also passed a quality control test sponsored by the Japanese Standards Association. We are proud of those who have passed this test, and we encourage others to obtain certification.



## Corporate History

- 1930 Commenced production of automatic control valves at Matsugae-cho, Kita-ku, Osaka, under a private enterprise owned by Mr. Benzo Nakakita, the first president of Nakakita Seisakusho Co., Ltd.
- 1937 Moved to Imai-cho, Kita-ku, Osaka, and incorporated.
- 1950 Reopened Tokyo office and opened Kyushu office.
- 1960 Completed first-phase construction of the Daito Plant and transferred the machining shop to this location.
- 1961 Completed second-phase construction of the Daito Plant and used the new plant as an assembly shop.
- 1965 Mr. Hiroshi Nakakita was inaugurated as the new president.
- 1968 Obtained High-Pressure Gas Class 2 certification.
- 1970 Completed construction of the Daito Plant and consolidated all relevant divisions into the new plant.
- 1971 Increased capital to ¥370,000,000 and listed shares on the Osaka Securities Exchange.
- 1972 Completed a new office building at the Daito Plant to integrate company operations and relocated head office offices.
- 1975 Increased capital to ¥1,150,000,000.
- 1976 Expanded the scope of high-pressure gas and Ministerial Certification (Ministry of International Trade and Industry).
- 1979 Obtained American Society of Mechanical Engineers (ASME) Certificates of Authorization to use safety valve V and UV stamps.
- 1988 Expanded the scope of high-pressure gas and Ministerial Certification (Ministry of International Trade and Industry).
- 1994 Obtained certification for the "Quality System" for product design and manufacturing based on International Standards (ISO 9001). (Certifying body: LRQA)
- 1997 Mr. Hiroshi Nakakita was inaugurated as the chairman and Mr. Osamu Nakakita as president.
- 2003 Obtained CE marking certification for Pressure Equipment Directive (PED) products. (Certifying body: LR)
- 2004 Mr. Kenichi was inaugurated Nakakita as president.
- 2005 Collaborated with Sasakura Co., Ltd. for the manufacture and sales of cryogenic butterfly valves for LNG ships.
- 2009 Completed the Nuclear Valve Assembly Shop.
- 2011 Obtained certification from Korea Gas Safety (KGS) Corporation for safety valves.
- 2013 Obtained KCs mark certification for safety valves. (Certifying body: KOSHA)
- Listed shares on the Tokyo Stock Exchange in conjunction with the merging of the Tokyo Stock Exchange and Osaka Securities Exchange.
- 2014 Obtained environmental management system (EcoAction 21) certification for the head office plant.
- 2015 Obtained MED mark Certification from DNV GL for cargo Hold Water Ingress Alarm Systems.
- 2015 Obtained IECEx Certification for intrinsically safe explosion-proof solenoid valves.
- 2019 Mr. Kenichi Nakakita was inaugurated as the chairman and Mr. Teruhisa Miyata as president.
- 2020 Recognized by Japan New Energy and Industrial Technology Development Organization (NEDO) for participation in the Development of Technologies for Realizing the Hydrogen Society project.

## Certifications

Nakakita has acquired number of certifications in line with global requirements.

To meet the needs of customers around the world, Nakakita has obtained various certifications, including ISO 9001—the international standard for Quality Management Systems (QMS).

**ISO9001 Certification**  
ISO9001 certification obtained from the LRQA certifying body.



**Ministry of Economy, Trade and Industry-approved Testing Body of High-Pressure Gas Equipment**



**Ships Classification-oriented Approval Certification**  
(LR, BV, ABS, DNV/GL, NK, CCS, CR, KR)

**Safety Valves V/UV Certification Stamp**  
Obtained ASME approval to use Safety Valve V and UV stamps.



**CE Marking Certification**  
Obtained CE marking Certification from LR for Pressure Equipment Directive (PED) products.

**Obtained registration Certification from Korea Gas Safety Corporation (KGS) for manufacturing safety valves.**



**KCs Mark Certification for Safety Valves**  
Obtained KCs mark Certification from the Korea Occupational Safety and Health Agency (KOSHA) for safety valves.



## Factory Layout

- 1. Main Building
- 2. Hydraulics Warehouse
- 3. Hydraulics Assembly Shop
- 4. Hydraulics Inspection Shop
- 5. Large Valve Assembly/Inspection Shop
- 6. Hydraulics Equipment Warehouse
- 7. Hydraulics Painting Shop
- 8. Safety Valve Assembly Shop
- 9. Safety Valve Inspection Shop
- 10. Cryogenic Valve LNG Butterfly Valve Assembly Shop
- 11. Cleaning Shop
- 12. Main Plant
  - 1F: Machine Shop
  - Control Valve Shop
  - Cylinder Valve Shop
  - Self-Regulating Valve Shop
  - Quality Assurance Dept.
  - Paint Shop
  - 2F: Instrumentation Shop
  - Level Switch Shop
- 13. Multi-Story Parking Garage
- 14. East Plant
  - 1F: Welding/Heat Treatment Shop
  - Materials Warehouse
  - 2F: Sales Division
  - Fitness Club
- 15. Automated Storage
- 16. Information Systems Bldg.
- 17. Automated Storage
- 18. Nuclear Valve Assembly Shop
- 19. General Offices Bldg.
  - 1F: Production Dept.
  - Procurement Dept.
  - General Affairs Dept.
  - 2F: Engineering Dep.
- 20. Butterfly Valve Assembly Shop
- 21. Butterfly Valve Inspection Shop
- 22. General Valve Assembly Shop
- 23. Electric Motor Valve Inspection Shop
- 24. Shot/Grinder Shop
- 25. Testing Shop
- 26. Machine Shop No. 2
- 27. Casting/Parts Warehouse
- 28. Shipping Section Warehouse
- 29. Parking
- 30. Butterfly Valve Paint Shop
- 31. Parts Warehouse
- 32. Shipping Section Packaging/Shipping Shop

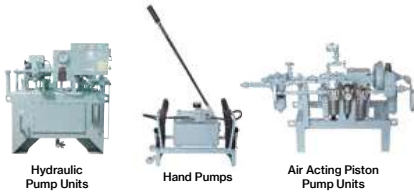


Nakakita's Valve Remote Control System (VRCS) for ships – consists of electrical, hydraulic, pneumatic equipments and various valves. It integrates entire related devices by operating and monitoring the main valves and pumps within the vessel along with measuring fluid levels in main tanks and the ship positions, thus constituting an optimal, yet centralized remote control and monitoring system. The result is streamlined cargo handling operations (i.e. swift and safe cargo handling), reduced crew labor (reduced personnel and improved working conditions), and improved safety (prevention of oil-mixing accidents due to human errors, avoidance of risks associated with transportation or cargo handling stoppages due to equipment failure).

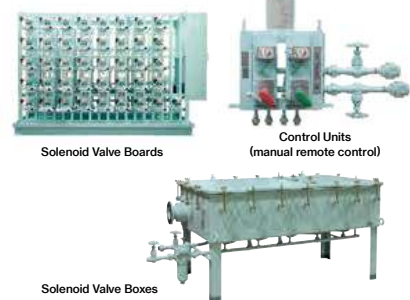
### Cargo / Ballast Valve Remote Control Systems

#### Hydraulic and Pneumatic Equipment

##### Hydraulic Power Source



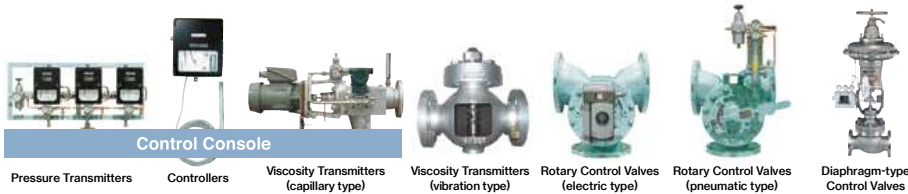
##### Hydraulic Direction Change-over Valves



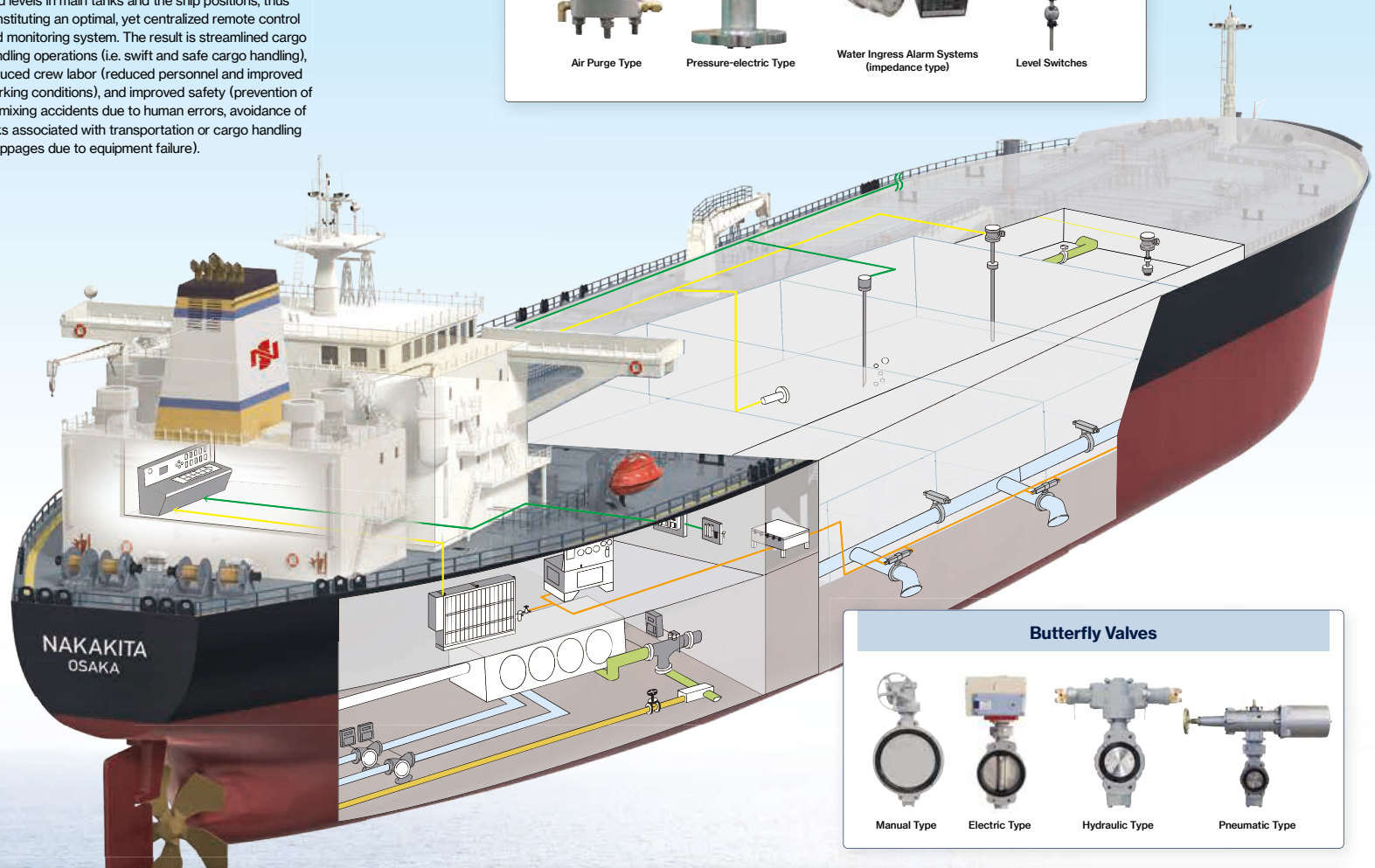
##### Control Console



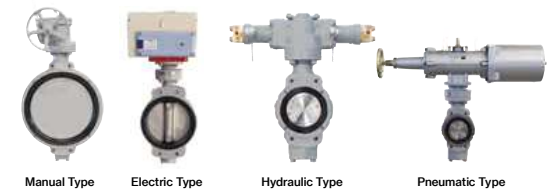
### Automatic Control Equipment (engine rooms, pump rooms)



### Fluid Level Measurement Systems



### Butterfly Valves



### Special Equipment for Ships



Nakakita's valves and remote control devices are used in various industrial fields. We take pride in the high quality of our products, highlighted by our strong track record. Each product is specially designed, so we can provide a wide range of services to ensure customer satisfaction, including design, manufacturing, and after-sales services that fulfill any type of needs.

### Control Valves

Control Valves which receive signals from Controllers, and actuate using auxiliary power (pneumatic, hydraulic, electric, etc.).



Rotary Plug Type Control Valves

Automatic Control Valves

3-way Control Valves

Fuel Control Valves

### Regulating Valves

Regulating Valves which control parts receive the fluids pressure, and actuate.



### Butterfly Valves

Butterfly Valves open and close through the rotation of a Valve Disk.



### Cylinder Valves / Gate Valves

Cylinder Valves/Gate Valves which receive ON-OFF signals, and operate using auxiliary power (pneumatic, hydraulic, electric, etc.).



Cylinder Valves

Gate Valves

### Safety Valves / Relief Valves

Safety Valves/Relief Valves automatically activate when the pressure in a pressurized vessel or piping reaches the preset pressure and release the fluid in the vessel and piping to maintain the internal pressure rated value or less.



Safety Valves  
(open bonnet type)

Relief Valves  
(closed bonnet type)

### Accessories

#### Level Switches

Level Switches generate output signals according to the detected level of fluid in Tank or Vessel.



#### Twin Power Actuator

The reciprocating motion of an air motor is converted into rotary motion for remote or automatic operation of a valve drive. Adding such devices to manual valves, enables them to be remotely controlled.



#### Controllers

Controllers detect the temperature, pressure, liquid level, or fluid process conditions then generating output signals for automatic adjustments to the desired optimum values.



Automatic Controllers

Level Controllers

## ~Creating Fluid Control Equipment to Support Global Infrastructure~

PROCESS  
**1**

### Sales

#### Customer-oriented Manufacturing



For roughly 90 years since the company's founding, Nakakita has been deeply intertwined with various industries, including the shipping industry. Our Sales staff apply this established network to fulfill customers' requirements. Paying careful attention to details by our Sales personnel, is another aspect of Nakakita's greatest strengths.

PROCESS  
**2**

### Design

#### Custom-made Manufacturing that meets the customers' needs



Each of Nakakita's products is unique. Engineers design each product based on specifications provided by the Sales staff. This is the cornerstone of all of our manufacturing efforts.

PROCESS  
**3**

### Machining

#### Advanced Manufacturing for high variety and small quantity production



Fluid control equipments include valves, indicators, and control panels, while with each equipment type requiring diverse manufacturing processes. Nakakita utilizes state-of-the-art processing equipment to meet complex high variety and small quantity manufacturing needs, and we actively challenge our employees in acquiring various skills through testing to further develop our human resources.

PROCESS  
**4**

### Assembly

#### Manufacturing with an eye on ultimate efficiency



Assembling a wide variety of small-lot products—each of different shapes—can be extremely difficult. As such, we are constantly looking for ways to improve assembly efficiency. As a result, the outcome of above eventually appears in form of our finished products.

PROCESS  
**5**

### Inspection

#### Manufacturing that enhances the Nakakita brand



At Nakakita, our motto is "Incorporating Quality into Each Process," therefore the inspection process by itself, is the final step to ensure superb manufacturing quality. Our Inspections involve state-of-the-art equipment and facilities developed in-house for their exclusive use with our products.

PROCESS  
**6**

### After-sales Services

#### Manufacturing the Nakakita Way

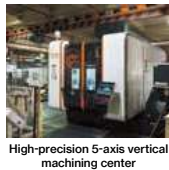


At Nakakita, "Manufacturing" doesn't end with finished product's shipment. We are also dedicated to providing After-sales Services for the shipped products until the end of their service life. We also value feedback from customers as a means of ensuring the continued advancements of manufacturing at Nakakita.

## Major Equipment

### Manufacturing equipment

- NC lathes
- Vertical machining centers
- High-precision 5-axis vertical machining centers
- Horizontal machining centers
- NC boring machines
- NC drilling machines
- NC milling machines
- Semi-NC lathes
- Regular lathes
- Face lathes
- Turret lathes
- Tabletop lathes
- Radial drilling machines
- Upright drilling machines
- Horizontal boring machines
- Face milling machines
- Horizontal milling machines
- Universal milling machines
- Turning lathes
- Surface grinding machines
- Cylindrical grinding machines
- Slotters
- Broaching machines
- Vertical milling machines
- Threading machines
- Corner cutting machines
- Keyway processing machines
- Valve seat tightening machines (Developed by Nakakita)
- Carbide tool grinding machines
- Valve seat wrapping machines
- Tabletop grinding machines and belt sanders
- Automatic sewing machines



High-precision 5-axis vertical machining center



NC lathe

### Heat treatment / welding machines

- Electric casting/forging furnaces (25 Kw, 1100°C)
- Electric casting/forging furnaces (90 Kw, 800°C)
- MIG/MAG (CO<sub>2</sub>) semi-automatic welding machines
- Arc welding machines (AC)
- TIG welding machines (DC)
- TIG welding machines (DC/AC)
- Welding rod drying machines
- Spot welding machines
- Powder plasma automatic cladding machines
- Air plasma cutting machines
- Robotic automatic valve disc SUS plating machines
- Automatic TIG welding machines
- Shot blasting machines



Electric casting/forging furnace



Powder plasma automatic cladding machine

### Inspection equipment

- Single-tube through-flow boilers (16.2 MPa, 600°C)
- Boilers (4.9 MPa Sat, 1 t/h)
- Steam headers (4.9 MPa, 0.5 to 2m<sup>3</sup>)
- Steam headers (16.2 MPa, 0.28 m<sup>3</sup>)
- N<sub>2</sub> gas, He gas compressors (49.03 MPa)
- Air compressors (29.41 MPa)
- Air compressors (4.9 MPa)
- Air blowers (0.08 MPa)
- Air reciprocators (4.9 to 0.7 MPa)
- Helium leak detectors
- LN<sub>2</sub>/CE Liquid nitrogen storage tanks (2.9 t)
- Ultra-low constant temperature test chambers (equipped with controls, stirring, and recording devices)
- Liquid nitrogen test chambers
- Vacuum pumps
- 3D measuring machines (measurement range: 905 × 1005 × 905 mm)
- Electric Cv machines (large)
- Solenoid valve testing machines
- Oscilloscopes
- Surface roughness measuring machines (surf test)
- Universal testing/hardness testing machines
- Water pressure testing pumps (100 MPa or less)
- Water pressure testing pumps (200 MPa, manual)
- Mobile water purification machines
- Mobile cartridge-type water purification machines
- Hydraulic inspection pump units
- Variable piston pumps
- Hydraulic solenoid valve testing machines
- Pump units
- Hydro testers
- Trip pilot valve actuator hydraulic testing machines
- Servo valve testing machines
- Hydraulic testing machines
- Instrument testing panels and machines
- Ultrasonic thickness gauges (12 to 300 mm, for steel)



Single-tube through-flow boiler



3D measuring machine

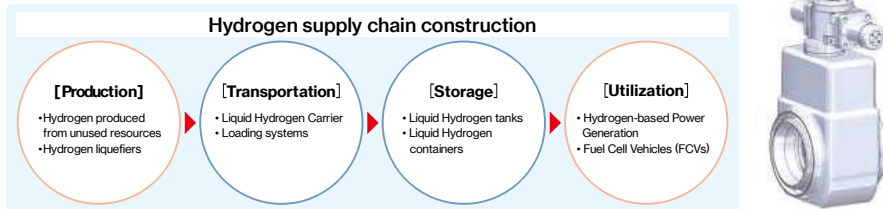
The following is a brief introduction to the new technologies and products being developed at Nakakita.

As of 2021

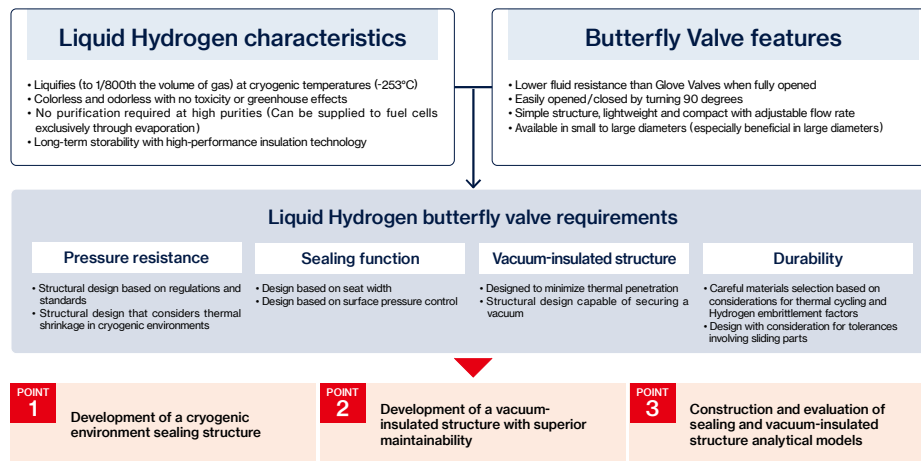
### NEDO Development of Technologies for Realizing a Hydrogen Society Project

## Technical Development of Large-Diameter Butterfly Valves for Liquefied Hydrogen

The upcoming transition into a Hydrogen Society, has increased demands for Hydrogen, prompting Nakakita to develop the technology for liquefied Hydrogen large butterfly valves, alongside the construction of a supply chain for its storage and transportation. In 2020, Japan New Energy and Industrial Technology Development Organization (NEDO), a national research and development corporation, rigorously reviewed the ongoing projects and selected certain ones including grants for subsidizing Nakakita's liquefied Hydrogen large butterfly valves.



### Development highlights



### Recognized by Japan Ministry of Economy, Trade and Industry (METI) as a company taking on the Zero-Emissions Challenge

Nakakita has been recognized as a company taking on the Zero-Emissions Challenge for its undertaking of national projects related to the 39 themes set forth in the Environment Innovation Strategy.



## Company Overview and Offices



### Company Overview

<b>Trade name</b>	NAKAKITA SEISAKUSHO CO., LTD.
<b>Established</b>	May 28, 1930
<b>Representative</b>	Teruhisa Miyata, President
<b>Business description</b>	Manufacturing and sales of automatic control valves, butterfly valves, and remote control systems
<b>Number of employees</b>	700 (including on-site subcontractors)



### Sales and Service Offices

**[Head Office and Plant]** 1-1 Fukuoninamicho, Daito, Osaka 574-8691, Japan  
 Tel: +81-72-871-1331 (main)  
 +81-72-871-7871 (sales)  
 +81-72-871-1341 (sales)  
 Fax: +81-72-870-1865 (main)

**[Tokyo Office]** 2F, Sanwa Building, 1-27-17 Hamamatsucho, Minato-ku, Tokyo 105-0013, Japan  
 Tel: +81-3-3431-7201 (main)  
 Fax: +81-3-3431-5594

**[Kitakyushu Office]** No.416, Kokura Kosan KMM Annex, 2-11-15 Asano, Kokurakita-ku, Kitakyushu, Fukuoka 802-0001, Japan  
 Tel: +81-93-531-5481 (main)  
 Fax: +81-93-521-4993



### Overseas Agencies

<b>[Netherlands/Europe]</b>	Ravebo B.V.
<b>[Singapore/Malaysia]</b>	Yokosin Marine Co.,(PTE) Ltd.
<b>[China]</b>	Health Lead Development Ltd.



### Other

Nakakita has agencies around the world with service staffs. Contact a sales representative for more information.