





MEIDEN PROFILE

https://www.meidensha.com





Top Message

Meidensha began business in 1897 when founder Hosui Shigemune was inspired "to enrich the world with the power of electricity." In the Meiji era, he believed that the era of Japanese-made electrical equipment was coming and he gathered people who shared the same belief to form a company.

For over 120 years since then, manufacturing company Meidensha has contributed to the sustainable development of society through the creation of various technologies, products and services. I would like to thank all of our valuable customers for their continued trust and support extended to us over so many years.

We at the Meiden Group will never forget our DNA of "social contribution" and "innovative spirit" that we have passed on from the day of our foundation and "integrity" and "responsibility" toward customers that have supported social infrastructure for more than 120 years, and we will continue to evolve and advance those.

As a "sustainability partner" aiming to create a sustainable global environment and a better future for various stakeholders, we will continue to contribute to the creation of a new society full of hope and vitality.

Representative Director & President and Executive Officer Akio Inoue

MEIDEN Quality connecting the next



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For us, our "quality" is not only about the quality of our products and services. There are two things that make our quality: "people" and "technology". People at Meiden strengthen ties with customers around the world by being truthful and flexible. Meiden technology contributes to society with truly original products and reliable services created with expertise. These two attributes make Meiden's unique quality, and create new connections with the future. Making connections with our customers, society, and people living in it. These connections will expand, and the power we have built will become the energy for the next generation.

For the peace of mind and joy of our customers, and the precious lives of people beyond them, Meiden Group quality will connect with a more prosperous tomorrow. This is our never-changing mission.

Company Overview

| Corporate Name | | |
|----------------|--|--|
| Established | | |
| President | | |
| Head Office | | |

Capital Consolidated Sales Consolidated Number of Employees Shareholders Common Stock Consolidated Subsidiaries Stock Listing MEIDENSHA CORPORATION December 22, 1897 Representative Director & President and Executive Officer Akio Inoue ThinkPark Tower, 2-1-1 Osaki, Shinagawa-ku, Tokyo, 141-6029 Japan

¥17,070 million* ¥287,880 million* 9,810* 13,107* 45,527,540 shares issued* 39 (20 in Japan, 19 overseas)* Tokyo Stock Exchange, Nagoya Stock Exchange*

*as of March 31, 2024

Key Business Regions





Power Infrastructure Business

We provide power generation and transformation equipment and monitoring and control systems that support a stable supply of electric power, as well as solution services related to power quality and renewable energy.



Public, Industrial & Commercial Sector Business

We provide power generation and transformation equipment and monitoring and control systems for water supply and sewage systems, railroads, public facilities, commercial facilities, buildings, factories, and other facilities that support social infrastructure.



Mobility & Electrical Components Business

For the private sector, we provide motor drive application systems using motors and inverters, electric vehicle drive units, automotive testing systems, automated guided vehicle systems, and components for semiconductor manufacturing equipment, etc.

Financial Highlights





Number of Employees





Field Service Engineering Business

Centering on maintenance of products delivered by our company, we provide services including proposals for life extension of facilities and energy conservation measures, as well as remote facility monitoring services.



Real Estate

We offer property leasing, including office space at ThinkPark Tower (Osaki, Shinagawa-ku, Tokyo).



Other

This includes business that does not belong to the above five segments, such as the manufacture and sale of chemical products, employee welfare services, and sales of products.



A Snapshot of our Product Offerings

Our products are found in these places, operating for benefits of the society.







Dry air insulation method that does not use SF₆ gas, which has a high greenhouse effect.

Power Transmission & Distribution (T&D) Systems Products and systems for the stable supply of power and the efficient operation of power system facilities





Power transformer

Power Generating Systems

Products and systems for high-quality power supply suitable for various power generation methods





Turbine generator

Biomass power generation facility using rice husks as fuel (Thailand)

Energy Systems





for energy storage

Photovoltaic power system with energy storage







Gas-Insulated Switchgear incorporating VCB (V-GIS)



SCADA system for power transmission & distribution



Engine generator



Mobile power generator



Hydroelectric power systems

Products and systems to provide a range of power supply solutions through the use of power conversion and storage technology



Uninterruptible power supply (UPS)



Instantaneous voltage drop/ short-time power outage compensator



Power conditioner for solar power generation

Public, Industrial & Commercial Sector Business

-02:

Products for

Railway Systems

Rail infrastructure technology developed over 100 years

Meidensha has rail infrastructure technology that has supported railways in Japan since they first began operation more than 100 years ago.

Since the first delivery in 1910, we supplied a "power feeding facility" crammed with Meidensha technology for the Tokaido Shinkansen high-speed train system that commenced service in 1964.

Since then, we have been supplying these facilities for the Shinkansen network throughout Japan, making a significant contribution to Japan's economic growth.

The technologies developed in conventional train systems and the Shinkansen high-speed train systems eventually crossed the seas for the world market.

We construct electrical facilities on a turnkey basis mainly in South East Asia.

Meidensha's accumulated experience and achievements are supporting safe rail operation around the world.

Funnes



We support railway infrastructure in various countries with turnkey solutions.

DC Power Feeding System

nstalled in JR conventional lines, public and private railways. Now meets requirements for ncreased power capacity and large current interruptions, as transport volume increases



DC high speed circuit breaker

Tsukuba Express (Metropolitan Intercity Railway)

AC Power Feeding System

sen network. Supporting high-speed rail with high reliability





transformer

(HSCB)

Hokuriku Shinkansen

Railway Systems for Overseas

A proven track record in South-East Asia and the Middle East. Contributing to creating ities and reducing traffic congestion and crowding in growing citie





MRT (Singapore)

Regenerative power storage system CAPAPOST (Hong Kong)





Heat-pipe natural cooling silicon rectifie



204kV tank type vacuum circuit breaker The world's highes

ir researc ansen as Hokuriku Shinka of May, 2020



Supports stable power supply and safe operation Pursuit of easy-to-use systems ough human-centered design



Central supervisory room



OCS Inspection System CATENARY EYE

Inspects catenary wire conditions using the latest image processing technology Contributes to more



Rooftop on-board system



Pantograph monitoring



Contact wire wear image

Public, Industrial & Commercial Sector Business



Water Infrastructure Systems



We support water utilities with our many years of experience and accumulated knowhow.

Monitoring and Control / Cloud Computing Handles a wide range of water and sewage plants, from small to large scale, and provides high-level operation management support





Monitoring and control system

IoT Water Disaster Monitoring Services Visualization of water level information using IoT technology





Smart manhole cover^{%1}

Maintenance Management Service Strengthened water supply operation base ded area co





Water utility third-party BPO/ comprehensive BPO

Water utility DBO^{%2}

*1 The manhole antenna is a product jointly developed by Meidensha, the Tokyo Metropolitan Sewerage Service Corporation and Hinode, Ltd. %2 DBO : Design Build Operate

(One method of providing public infrastructure that uses integrated ordering of design, build and maintenance management)

From solutions to innovations. Water infrastructure business that creates new value.

Meidensha's water infrastructure business began in 1922 with the installation of electric motors in Japan's first sewage treatment plant. For over half a century since then, we supplied many products to this plant, such as high-voltage substations, power distribution facilities, power generation facilities, and also water quality sensors, and monitoring and control devices. In recent years, we have expanded our business into new areas in the field of services, such as maintenance management of facilities and cloud-based services, and water disaster monitoring services with the use of IoT technology.

Additionally, our ceramic flatsheet membranes are in use for treatment and recycling applications for water supply/sewage and industrial wastewater.

From providing products and solutions to new fields of creating innovation. We aim for "safe and vigorous regional societies" through the creation of beautiful and clean water environments.





Stable filtration performance for a wide variety of water and long life



Ceramic flat sheet membrane



Ceramic flat sheet membrane water purification system

Power Infrastructure Business / Public, Industrial & Commercial Sector Business / Mobility & Electrical Components Businesss / Field Service Engineering Business

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ICT

We support the security and safety of social infrastructure through AI and IoT.

Since its founding, Meidensha has accumulated knowledge of equipment, facility operation, maintenance, while responding to customer requests and

Now, by linking such experience and knowhow with ICT with the use of IoT and Al, we provide improved productivity to customers through optimal operation of their facilities.

Our goal is not merely to optimize individual key infrastructure such as water supply and sewage facilities, power facilities and transport infrastructure, but to link them and optimize the regional society as a whole We aim to create a prosperous future society by contributing to the creation of stable social infrastructure that is safe and secure.



We create new value and provide security at a high level.

Applications (Examples)

Remote Facilities Diagnosis of Plants

Facility operation and diagnosis from remote locations



Checking the facility conditions to detect signs of failure and assessing the remaining service life Advice on facility operation and necessary updates provided by a Meidensha engineer

Optimized Operation of a Hydropower Facility

Maximizes annual power sales income using ICT



One stop service for installation, maintenance management, operation and renovation Proposal for optimal renovation plan using remaining service life diagnosis

Power Infrastructure Business

Public, Industrial & Commercial Sector Business

Mobility & Electrical Components Business

> Field Service Engineering Business



Lifecycle cost optimization

Efficient maintenance management using ICT

Mobility & Electrical Components Business





Increases efficiency of elevator rope inspection with image processing technology.

Motor and Drive Systems



PM servo motor

Ultra high-speed PM motor

Low voltage motor drive THYFREC VT350



drive unit for battery forklifts



Frameless motor

Controller

Vacuum capacitors

Electronics & Network Equipment

High quality, expandability and environmental durability that are trusted in the field

µPIBOC DS100



µPIBOC-1 model1100

High-quality, highly-reliable components used in a wide range of fields from industrial to public sectors. 2

Since our establishment as 'MEIDEN the Motor Expert', we developed a thyristor inverter in 1963 and a PM motor utilizing permanent magnet technology in 1967. The technology we have refined and the products born from it have been used widely in the industrial

sector and have proved essential to everyday life, as seen in such equipment as used for elevators and

In the field of electronic and communications products, since the development of the μ PORT-I industrial computer in 1984, Meidensha technology has continued to evolve, and our industrial controllers and communication products have now been used in semiconductor/FPD manufacturing equipment and in the fields of highly public nature, where high reliability is demanded.

We will elevate competitive advantages of our products with new technology and will combine them with IoT and AI technologies, thus providing high-quality solutions to our customers to solve their problems.

Mobility & Electrical Components Business



High voltage motor drive THYFREC VT730S

Customizable to customer's machinery Promotes energy conservation using high-efficiency control Comfortable ride with low noise and low vibration



Large capacity and high speed PM machine PM13T



high speed elevators THYFREC VT850H

Components for Thin Film Forming Equipment

Key components that support production line and advanced R&D facilities for semiconductors and FPD etc.



Pulse power supply unit



Pure ozone generator



Industrial analog modem MC144C

Components for Non-destructive Inspection For small size, light weight and power saving of non-destructive inspection s



Cold-cathode X-ray tube using carbon nanostructures

Mobility & Electrical Components Business

Mobility



Participates in joint development activities with customers and provides contract testing services.

Automotive Testing Systems

Provides testing systems and services for automotive R&D







FREC dynamometer Battery simulator

3D vehicle model (HILS[%] system)





Drivetrain system





Driving robot TYPE-i

Heavy-duty vehicle chassis dynamometer (environmental testing)

Electric Vehicle Drive Unit Trusted quality that supports state-of-the-art electric vehicle technology



MEIDEN e-Axle

Mitsubishi Motors, Outlander rear unit

* "Outlander" is a registered trademark of Mitsubishi Motors Corporation. * "NOTE" is a registered trademark of Nissan Motor Co., Ltd.

State-of-the-art mobility technology that moves with the times.

Meidensha mobility technology continues to contribute to the d evelopment of the automobile industry through products and services that meet the needs of the times.

The DC dynamometer we developed in 1920 was the first of its kind in Japan. Since then, we have maintained a top class share of the Japanese automotive testing systems market.

The history of our electric vehicle drive systems began with our participation in an EV development project in collaboration among industries, government and schools, and subsequently we started supplying motors and inverters to drive the world's first mass produced electric vehicle and the latest plug-in hybrid car.

We aim to achieve even smaller systems with higher output density. Through our advanced technology, we intend to continue supporting our customers's research and development activities into increased automotive performance and safety, and vehicle electrification.



Dynamometers for EVs and HEVs motor testing



Japan Automobile Research Institute



Chassis dynamometer system



MEIDACS II



Charging and discharging equipment for EV on-board battery testing



Nissan Motor, NOTE e-POWER generator



An AGV that uses Meidensha's unique motor technology to improve productivity in the field.

A BUT

Meidensha motor technology that has been continuously developed for over 120 years now supports the drive technology and guidance technology at the heart of AGV ed Vehicle in autor Meidensha AGVs are used in manufacturing industry, primarily advantage of the knowhow gained through various installations where technology is required.

We respond to the needs of society and times change with our technologies for simple transport and completely unmanned transport.

We will continue updating the technology for handy kit-type AGVs and automated navigation systems, and will develop an AGV that incorporates a picking robot and utilize IoT and AI technologies, thus providing solutions to meet the needs of our customers.



A cooperative robot from Funac Corporation is mounted on the vehicle to enable diverse work to be performed.

Truck Type AGV

Highly functional type that is excellent in travelling performance, stop accuracy and highly customizability



3MC Series (All-directional Type)

Forklift Type AGV

Operates even in narrow passageways due to its all direction travelling capability



for pallet transfer

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Autonomously Controlled AGV Instantly adapts to changes in work floor layout





a payloadof 250 - 6000kg

Applied in a truck type AGV with



Mobility & Electrical Components Business



Ultra-low platform forklift type AGV

AGV Kit (Automatic Guided Vehicle Kit) Low-cost and highly functional assembly-type AGV



Example of basic unit installation

Lengthy article carrying vehicle

Multi-Guided Method

Autonomous operation using automatic map generation technology. Easy to change routes

Autonomous travel by measuring the surrounding environment with a laser range finder. High-precision positioning together with magnetic and laser guidance.

• A map of the environment is automatically generated and the travel route is created on the map using a PC.

2 Changes to the travel route can be made easily on the PC. Power Infrastructure Business / Public, Industrial & Commercial Sector Business / Mobility & Electrical Components Businesss / Field Service Engineering Business

-08:

Plant Construction Engineering

Training systems to enhance the quality of 'safety,' and thorough 'quality' management capability.

Meidensha has expanded its plant engineering and construction business from post-war recovery through rapid economic growth in Japan as well as overseas, primarily in Southeast Asia.

Today, we provide total engineering services in the pursuit of safety and quality, not only for electrical equipment construction, but also civil engineering, construction, and mechanical work. To improve site safety, quality, and workability, we are developing Meidensha's own site management methods using digital devices and IoT, and providing education using VR (virtual reality) and a safety experience vehicle. We have set up training centers both in Japan and overseas to ensure thorough quality management at a global level. We ensure handing down of know-how we have cultivated, and enhance workers safety management and construction techniques, so that we can

provide engineering that is trusted by our customers.



Our motto is "Attempt everything and a spirit of service."

Safety







Safety training equipments on board

Hands-on safety experience training [electric shocks] Experience training with VR (Virtual Reality) [falling]

Quality

equisition of know-how on plant electrical facility construction through training programs using actual equipment





PCEBG^{*} training center *Plant Construction & Engineering Business Group

Construction Works





Gas turbine generator construction work

Extra-high voltage substation facility construction work (Malaysia)



Power Infrastructure Business

Public, Industrial & Commercial Sector Business

Mobility & Electrical Components Business

Field Service Engineering Business





Full turnkey services including civil engineering, construction and machine installation as well as electrical facility construction work



Hydroelectric power plant construction work



Automotive testing facility construction work

Field Service Engineering Business

Field Service Engineering

Life cycle engineering that enables stable facilities operation and reduction in management costs.

Electric facilities and other social infrastructure need to operate stably without raising concerns. maintenance technologies in an effort to operate facilities stably and reduce management costs. We also provide product and service integrations centered on responding to life-cycle engineering of facilities. In addition, we will continue to utilize diagnostic technologies d ICT, etc., to maintain quality and understand risk, thereby veloping into a customer solution business that maintains







We undertake the entire process from identification of problems to their resolution at our customers' facilities.

Preventive Maintenance / Maintenance Work Reduction in risk of unforeseen accidents





Partial discharge measurement

Auxiliary relay tester

Improvement Maintenance Performance improvement and energy conservation





Improvement and modification of inverters for energy conservation

Facility monitoring using M2M

Corrective Maintenance Prompt response to accidents and emergencies





Meiden Customer Center

Mobile power generating system



Field Service Engineering Business

Maintenance Support

Wide-ranging support from a technological aspect to an educational aspect



Web energy metering system



Maintenance training [Meiden Engineering Center]

Operation and Management

High-efficiency smart diagnostic services using IoT





Remote monitoring



Life expectancy diagnosis on an oil-filled transformer [Analytic Simulation and Material Evaluation Center]

Reliability Improvement measures Reduced risk of failure due to aging



Retrofit renovation of circuit breaker



Head Office https://www.meidensha.com ----



ThinkPark Tower, 2-1-1 Osaki, Shinagawa-ku, Tokvo, lapan

Production Bases in Japan



MEIDEN NUMAZU WORKS Site area: 350,953 m

Major products: HV & MV switchgears, power transformers, system equipment, computer equipment, relays, power conversion equipment, inverters, electronics devices,

surge arresters



MEIDEN OHTA WORKS Site area: 174,000 m²

Major products: Large and medium-capacity generators, Large and medium-capacity motors, Engine-driven generator, dynamometer-applied systems, engine testing systems, small-scale hydropower generating facilities, control equipment



MEIDEN NAGOYA WORKS Site area: 97,000 m²

Major products: Electric components for forklifts, AGVs, Ceramic membrane unit



KOFU MEIDENSHA ELECTRIC MFG. CO., LTD. Site area: 50.900 m

Maior products: PM motors, Motors for EV, elevator motors, motors for industrial vehicles, brushless motors, induction motors

Overseas Production & Contract Service Bases



MEIDEN SINGAPORE PTE. LTD. [Singapore]

Manufacture and sales of transformers, switchgear, assembly and sales of ceramic membrane units, and engineering services



THAI MEIDENSHA CO., LTD. [Thailand]

Electrical/mechanical engineering and construction, EPC contracting, and maintenance services



MEIDEN (HANGZHOU) DRIVE SYSTEMS CO., LTD. [China]

Manufacture and sales of special mote inverters for elevators and automatic guided vehicles (AGV)



MEIDEN (ZHENGZHOU) ELECTRIC CO., LTD. [China]

Manufacture and sales of surge arresters for power distribution and railway use, zin-coxide blocks for surge arresters and accessories for surge arresters





Manufacture and sales of transformers



TRIDELTA MEIDENSHA GmbH. [Germany]

Manufacture and sales of surge arresters for power distribution and railway use, and accessories for surge arresters



Production Bases in Japan —

MEIDEN NUMAZU WORKS MEIDEN OHTA WORKS MEIDEN NAGOYA WORKS KOFU MEIDENSHA ELECTRIC MFG. CO., LTD.

R&D Center -

MEIDEN R&D CENTER

Maintenance Network Service -

MEIDEN ENGINEERING CORPORATION Head Office

- East Japan Area Kanto Branch Office Kanagawa branch
- Kitakanto Branch
- · Ohta Sales Office
- · Niigatata Sales Office
- Higashi Kanto Branch · Ibaraki Sales Office
- · Morioka Sales Office
- Hokkaido Branch
- Central Japan Area
- · Nagano Sales Office
- Toyota Branch
- · Hamamatsu Sales Office
- Shizuoka Branch
- · Shizuoka Sales Office

- · Nagoya Sales Office
- Equipment Department

West Japan Area Kansai Branch Office

- · Osaka Sales Office
- Okayama Sales Office
- Hokuriku Service Office
- Shikoku Service Office
- Niihama Sales Office
- Chugoku Branch
- · Yamaguchi Sales Office Kyushu Branch
- · Kumamoto Sales Office
- · Oita Sales Office
- · Kagoshima Satellite Office
- · Okinawa Satellite Office

R&D Center



MEIDEN R&D CENTER

MEIDEN AMERICA SWITCHGEAR, INC. [The United States]

Sale of high-voltage vacuum circuit breakers and sale of vacuum interrupters

Meiden Group Companies in Japan

Power Infrastructure Business

EAML ENGINEERING CO., LTD. M WINDS CO., I TD. M WINDS HACHIRYU CO., LTD. NOTO COMMUNITY WIND POWER CO., LTD.

Public, Industrial & Commercial Sector Business

MEIDEN PLANT SYSTEMS CORPORATION MEIDEN SYSTEM MANUFACTURING CORPORATION MEIDEN SYSTEM SOLUTION CORPORATION MEIDEN AQUA BUSINESS COMPANY

Mobility & Electrical Components Business KOFU MEIDENSHA ELECTRIC MFG. CO., LTD. MEIDEN KIDEN KOGYO CO., LTD.

Field Service Engineering Business

MEIDEN ENGINEERING CORPORATION MEIDEN FACILITY SERVICE CORPORATION SADO MEIDEN SERVICE CORPORATION CHUO ENTERPRICE CORPORATION

Other

MEIDEN KOHSAN CO., LTD. MEIDEN CHEMICAL CO., LTD. MEIDEN HOKUTO CORPORATION MEIDEN NANOPROCESS INNOVATIONS, INC. MEIDEN UNIVERSAL SERVICE LTD. MEIDEN MASTER PARTNERS CORPORATION





MEIDEN TECHNO SYSTEMS CO., LTD.