KAJI TECHNOLOGY CORPORATION

Company Brochure





KAJI TECHNOLOGY CORPORATION

0707-1000E

OUR PRIMARY GOAL IS TO CONTRIBUTE OUR SPECIALIZED TECHNOLOGY TO THE GLOBAL SOCIETY.

Our main product line is compressors and textile machinery that have been developed with Mechatronics Technology, which is our core technology that fully utilizes traditional casting as well as metal working technologies. We support the daily life for people and contribute to society by continuously developing our technology based on our concept: Our priority is to satisfy our customers with first-rate products and services.





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SUSTAINING THE GLOBAL ENVIRONMENT

For many years, we have worked on developing products that help improve the environment, and have been able to produce a multiplicity of such products. We are proud of our achievements, and for the future, we are determined to contribute to protecting the global environment through further allocation of our business resources for the development and enhancement of machinery that contributes to environmental protection.



OUR AIM IS TO CONSISTENTLY AND CONSTANTLY CHALLENGE OUR BOUNDARIES OF KNOWLEDGE

We were established in 1905 as the manufacturer of textile machinery and casting products. Since 1905, we have expanded our product line, adding compressors and machinery used for environmental protection. Aiming at realizing a better society, we will continue our work to pioneer and develop cutting-edge technology.

Integrated manufacturing systems start with casting

- adaptable even to special specifications.

We take pride in what we do with our objective to maintain and develop the ability to satisfy all our customer needs, including ultrahigh-pressure and specialty gases.



Design (CAD)



Assembly



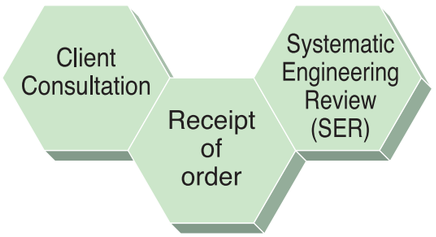
Testing

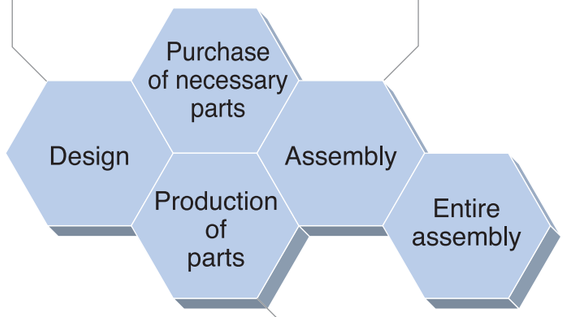


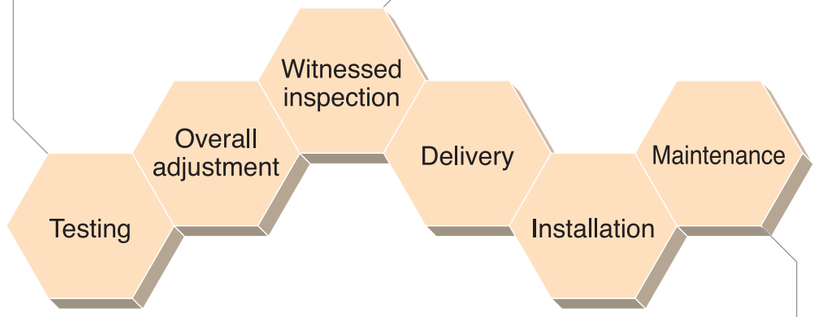
Witnessed inspection

Our strict quality control systems

We have adopted rigorous quality control systems and Systematic Engineering Review (SER), designed to realize the ideals of high quality, low cost, and rapid delivery.







R&D

PRODUCTION

QUALITY CONTROL



Welding



Processing



Casting

We select the best type of machinery for each customer by having several meeting with customer to seek their needs, and develop new types of machinery when necessary. Development period can be made shorter by making full use of two-dimensional as well as three-dimensional CADs and utilizing a broad array of ready-made parts and components. Here exists the secret of attaining a short delivery time for special compressors.



After passing very strict criteria, we were officially authorized as a High Pressure Gas Equipment Testing and Manufacturing Plant by Ministry of Economy, Trade and Industry (METI).



ISO9001



ISO14001

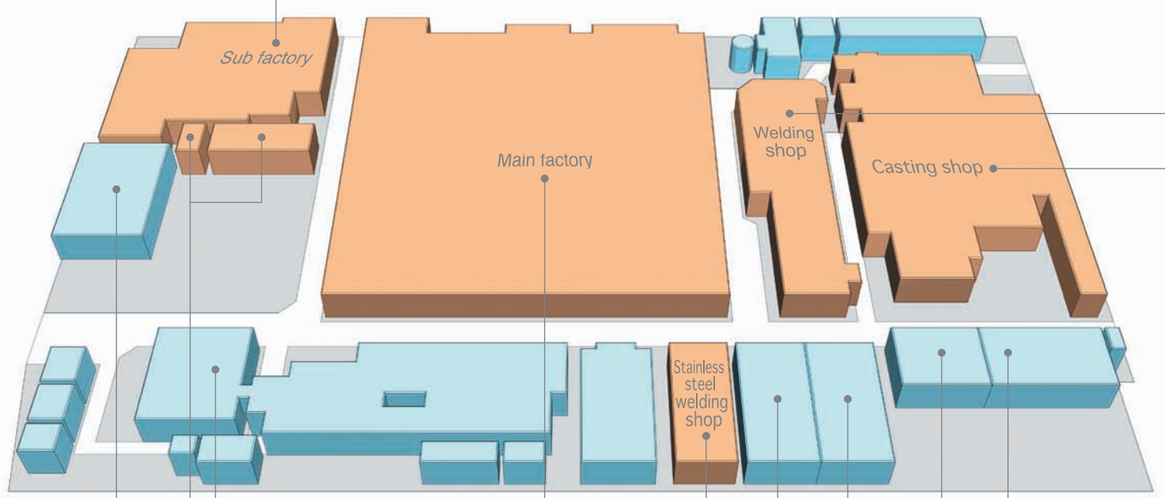


Maintenance

The products fully designed by our original technology are produced at this our plant.

One of our main accomplishments that we pride is that all of our production is performed in-house from the designing and casting to machinery processing, welding, assembly, and testing and inspection.

Layout of the head office and plant







The product development of textile machinery, as well as the testing and inspection of twisting, is performed at the sub factory. We have consistently improved upon traditional technologies to include the development of high-efficiency machines.



At our company, automatic cutting, automatic welding, and semi-automatic welding are performed by well skilled welders who understand both welding technology and professional skills that we have been cultivating.





Our casting section is proud to say that it has the highest level of technology in Japan. The annual production is about 600 tons; half is ductile casting or other high-end cast iron products.







In order to efficiently assemble a wide variety of compressors in small quantities, our production line is designed to separate the specialized areas, including machining, major component processing and assembly, body assembly, and unit set assembly areas.

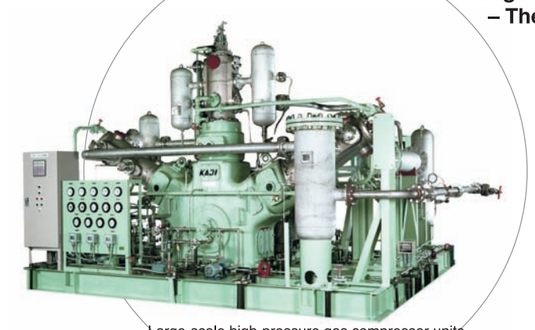


For stainless steel products, various types of welding are performed at our specialized shop. Heat exchanger is manufactured through TIG, as they require advanced production skills.

COMPRESSOR UNIT

Our company began manufacturing compressors in 1934, and since then, we have been actively tackling needs such as producing higher-capacity, higher-pressure, higher-efficiency, and smaller compressors.

High-pressure and oil-free, oil-less compressors – The embodiment of state-of-the-art technologies



Large-scale high-pressure gas compressor units for petrochemical plants

Our high-pressure, oil-free compressors are utilized for pumped-storage hydroelectricity, PET bottle molding, rocket fuel, and superconductive helium gas. Leading-edge technology featuring the high-pressure / ultrahigh-pressure oil-less compressor is also applied to compressors used at compressed natural gas vehicle filling station (eco stations), as well as at stations that provide fuel-cell powered vehicles with compressed hydrogen gas.

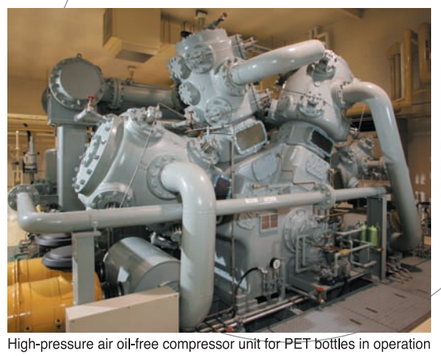
Gas collection / refinement apparatus – corresponding to multiple, sophisticated technologies

We have expanded this specialty into the gas collection and refinement apparatus by further developing technology and expertise cultivated with compressors. This technology boasts a variety of devices in Japan as well as overseas including “SF6 gas collection and refinement units for gas insulated switch-gears.”



SF6 gas collection device unit

Our technology – supporting the daily life



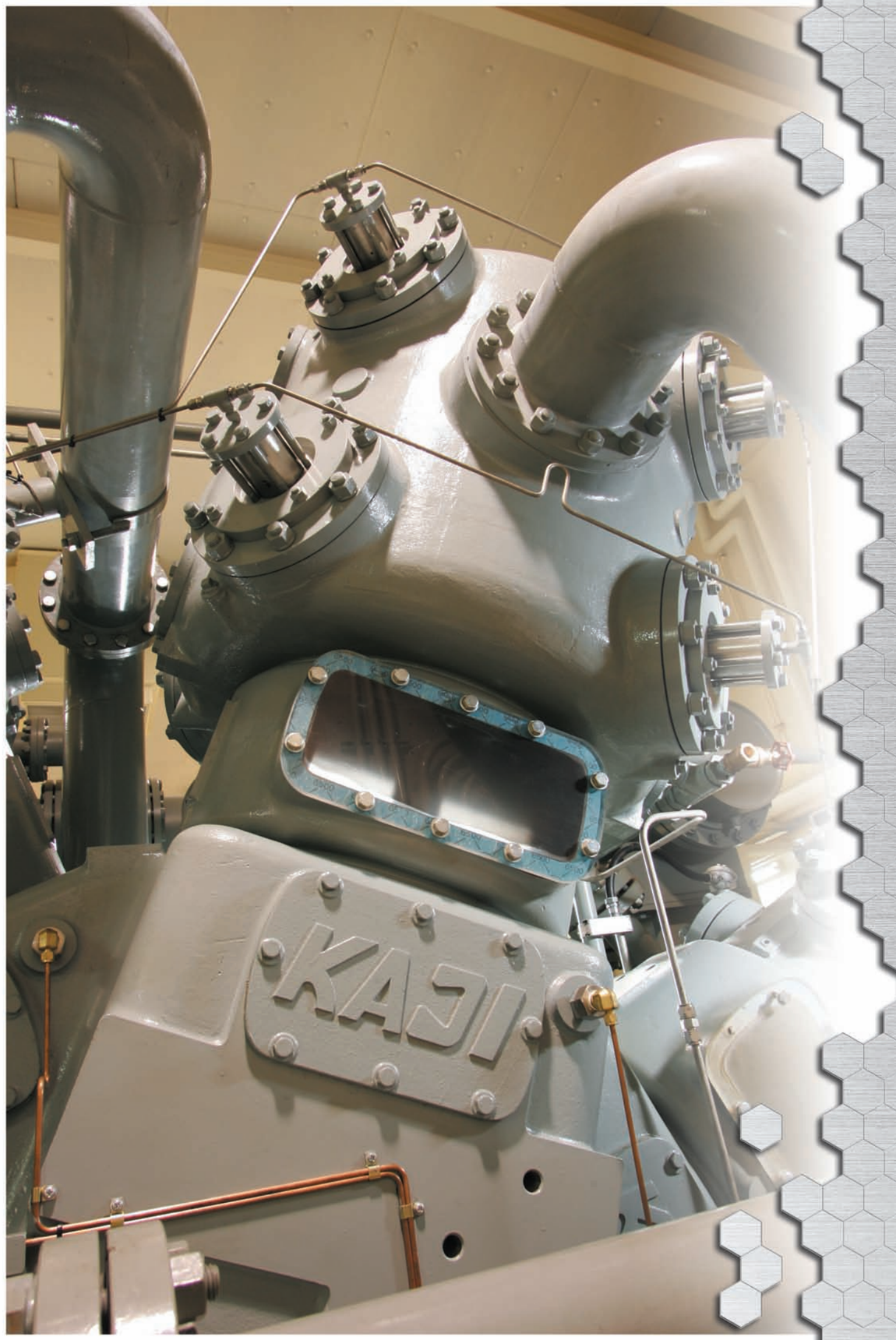
High-pressure air oil-free compressor unit for PET bottles in operation

Our oil-free technology ensures freshness and flavor of drinks in PET bottles.









Compressor

Casting Section



Molten iron pouring by machine



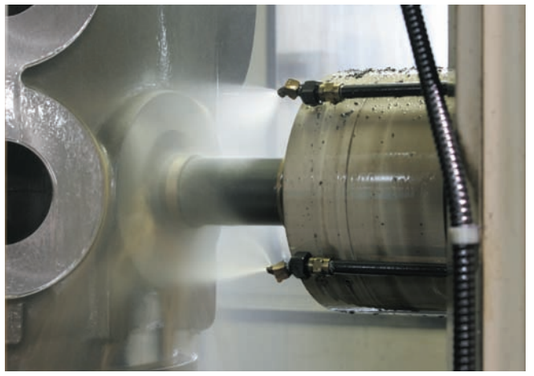
Large part casting by manual molten iron pouring





Independently providing necessary materials as well as technology: This idea is clearly shown in our casting section's attitude.

Machining Section



The Machining section supports processing technology. This technology is indispensable for producing high-accuracy, high-precision major components. As customers need larger and higher-pressure compressors, higher-accuracy and larger-scale machine tools tend to be installed. In-house processing technology is indispensable for manufacturing high-performance, highly efficient durable products.

Machining Center



Boring process



Welding Section



Gas welding



Gas/plasma cutting



TIG welding



Assembling





Assembling CNG compressor component



Assembling a SF6 gas collection device unit

Compressor

Textile Machinery

Twister for glass fiber – contributing to the IT sector



D-165G Ring Twister

Ring twister for tire cord – supporting world safety

D. T. Cabler



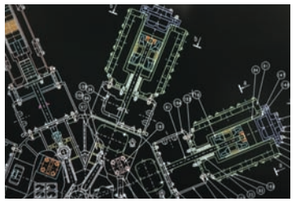
DC221D Direct Twister

Ring twister for textile materials – applying various uses

Engineering Department

Rising to the challenge of multiple, high-level needs at the forefront of our era

The Engineering Department, responds to our customers' multiple, high-level needs and provides tailor-made compressors; two-dimensional and three-dimensional CADs in full operation. The Technical Development section is tackling issues such as improving durability and three-dimensional analysis of structure, heat, fluid, and vibration, as well as conducting tests using demonstration machine.





Quality Assurance Department

Adopting rigorous quality control systems from designing to final products

We have established the first-rate quality control systems, and consistently conduct exacting inspections from designing and casting to machining and assembly. After product delivery, our aim is to ensure product maintenance and improvement through product history tracking.

Pressure proof test



MT inspection



Maintenance Department

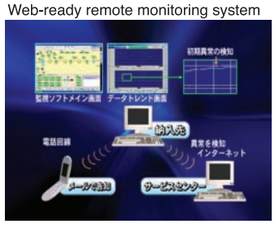
Supporting stable operation of customer's plant furnishing after-sales maintenance

The Maintenance Department, located at both the head office and at the Tokyo Service Center, has established the best maintenance service possible enabling prompt action through "product history tracking" and "technical drawings searches." In addition, we have certified the professional skillsets of about 40 service shops in Japan and abroad. These authorized service shops are in charge of maintenance work of our machinery.

Tokyo Service Center



Web-ready remote monitoring system



Toward the future

Eco Station – Natural Gas Vehicle filling station

Our company has already begun to take action to move us into the future.

There is a pressing need to increase the number of compressed natural gas stations, that is, eco stations, to make Natural Gas Vehicles (NGVs) available for general use. The NGVs, low-emission vehicles, will never become popular without such eco stations. We have successfully produced the world's first commercially viable oil-less compressor for eco stations, and have a large market share of this product as Japan's top manufacturer. Our company also built and operates KAJI Eco Station located in front of our head office.



CNG air-cooled oil-less compressors are used at eco stations all over Japan.



KAJI Eco Station



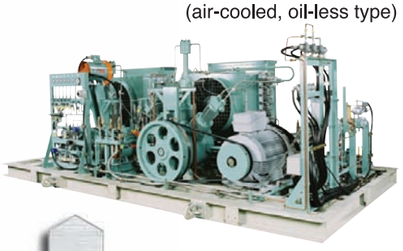
Natural gas station located at Tokyo Metropolitan Government Office building.

Hydrogen compressor used for next-generation fuel cell vehicles.

Toward the next generation - With our technology, we can support the next generation.

The global society yearns for fuel cell vehicles as the next-generations' clean automobile. We have already successfully developed a hydrogen gas compressor used at fuel supplying stations in preparation for the proliferation of the next-generation vehicle. In order to extend the travel distance, filling the fuel tank with high-pressure hydrogen gas is mandatory. For the first time in history, we have developed and marketed the 110MPa ultrahigh-pressure hydrogen gas compressor, an air-cooled all-stage piston, and oil-less compressor.

110MPa compressor unit for hydrogen (air-cooled, oil-less type)



The image of a hydrogen station



NEXT