

## Orders received

**160.5**  
billion yen

Composition ratio  
**70.7%**

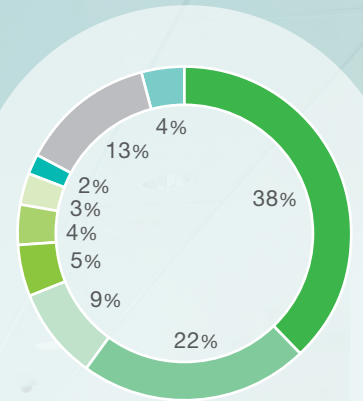
## Green Technology System Division

The Green Technology System Division, comprised of the Building HVAC System business sector and the Industrial HVAC System business sector, provides services in both Japan and overseas to help improve the environmental value of its clients.

In the Building HVAC System business sector, Taikisha designs and constructs air-conditioning systems for facilities that are used by many people, such as office buildings, schools, hospitals, hotels, museums, and airport terminals. It does so by conducting new construction and renovation work on facilities with the aim of providing people- and eco-friendly, comfortable spaces.

In the Industrial HVAC System business sector, Taikisha undertakes the role of optimizing air-conditioning systems for factories and R&D facilities in the electronic parts, pharmaceutical products, biotechnology, and other fields where a very clean environment is essential in the manufacturing process.

Taikisha also focuses on providing environment protection systems, such as exhaust-gas treatment devices and antipollution systems.



- Electrical, electronic and audio machinery manufacturing plants
- Business and government offices
- Chemical and pharmaceutical plants
- Technical research facilities and space development facilities
- Other plants
- Station and airport facilities
- Transport equipment
- Others
- Uncategorized orders-received by small-scale affiliates

## Paint Finishing System Division

The Paint Finishing System Division has employed advanced environment-related technologies based on Taikisha's core technologies cultivated in the HVAC business, such as exhaust treatment and air flow control. Taikisha also designs and constructs paint finishing systems for railway car and aircraft in recent years in addition to the mainstay automobile paint finishing systems that realize high painting quality and the enhanced use of energy-saving technologies.

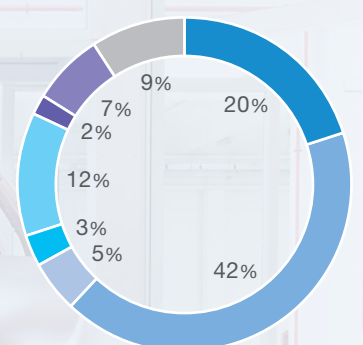
Taikisha has received orders for the automobile paint finishing systems of automakers not only in Japan but also globally, including in the U.S.A., Europe, South Korea, China, and India, and currently boasts the top-level of market share in the world. Taikisha's services range from painting robots, conveyor systems, and paint supply systems, expanding to cover total plant engineering services from design to construction of the whole plant.

In recent years, Taikisha pursues increasing painting efficiency to 100% and is making efforts to minimize the amount of paint used and VOC emissions. In addition, Taikisha contributes to the energy management of clients.

By market segment

Orders received

By region



- Japan
- China
- Other East Asia
- India
- Other Southeast Asia
- Thailand
- North America
- Other areas

### Major countries or regions

- Southeast Asia: Singapore, Malaysia, Indonesia, the Philippines, Vietnam, etc.
- East Asia: Taiwan, South Korea
- North America: U.S.A., Canada, Mexico,
- Other areas: Russia, South America, etc.





### Energy-saving air-conditioning system

Effective energy-saving operation is available for the entire air-conditioning system by implementing the Energy Plant Optimal Control System, which calculates optimal values at all times to enable operational settings in real time.



### Cleanroom

Taikisha's technology achieves the required clean level at the optimal ventilation count, and its cleanroom technologies provide a cutting-edge production environment with measures such as ultra-precise temperature control, noise control, microscopic vibrations control, and molecular contamination control.



### Pharmaceutical manufacturing-related

Taikisha meets a wide variety of requirements imposed by pharmaceutical manufacturers by introducing validation support, which is compliant with the latest GMP at factories and laboratories, optimum room pressure control, the hydrogen peroxide-based decontamination system, and others.



### VOC treatment and odor control systems

Organic solvents and malodorous gases are treated by the regenerative thermal oxidizer with high efficiency. Taikisha proposes optimum energy-saving systems combined with hydrophobic zeolite-based concentration equipment as required.



### Vege-factory

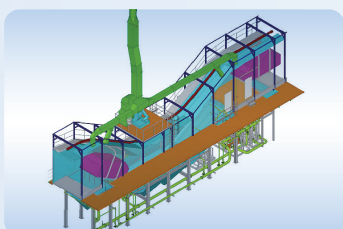
A fully artificial hydroponic plant factory which ensures cultivation with the optimal biological environment for the plant by precisely controlling the lighting, temperature, humidity, nutrient solution and other elements. It is the world's only facility that can produce crisphead lettuce in a large volume.



### Facility renewal

Renewal of heat-source, air-conditioning and electrical facilities, etc. increases the asset value of buildings, factories, etc., improves their productivity and reduces their life cycle costs such as operational management costs and lighting, fuel and water costs.

## Technologies and services provided by Taikisha



### Pretreatment system

Taikisha offers its paint finishing systems for pretreatment that are designed to improve processing quality and to conserve energy. Its unique lineup includes the iron powder removal system, high-performance washing system, counter-flow circulation tank in the degrease process, and high-pressure spray water washing processes.



### Electrodepositing system

Taikisha's counter-flow circulation system (C-FLOW Electrodepositing Circulation System) for electrodepositing tanks has been introduced in many lines. Furthermore, its multi-stage washer systems offer a high paint recovery rate using ultra filter (UF) membranes or reverse osmosis (RO) membranes.



### Paint booth

In combination with booth interior environments that realize high-quality painting, Taikisha proposes energy-saving leveraged by technologies such as CIRCULA scrubber which boasts high performance and low noise, dry scrubber, exhaust recycling, HVAC control and other technologies.



### Robot paint system

Utilizing simulations with CAD, the design of a robot paint system seeks the most efficient painting procedure and determines the optimal required number and layout of robots. Furthermore, as its solution, Taikisha configures a system to meet each client's tailored needs with an optimized choice for devices.



### Conveyor system

Taikisha's unique systems are available with overhead conveyors for pretreatment and electrodepositing lines, as well as floor conveyors for intermediate coat and top coat lines and help to design compact and highly efficient factory layouts for production.



### Aircraft and railway car painting

Taikisha delivers automated aircraft painting systems aimed at enhancing productivity and quality, decreasing material requirements and reducing hazardous work by applying know-how cultivated in the automotive painting business. Taikisha can accommodate a wide variety of diversified components and parts.