

# Power supply business

The Sansha Electric Manufacturing Group's development and manufacturing of power supplies began with its development of a power supply for projectors ensuring that stable images could be projected in movie theaters in 1933. Since then, we have been developing technologies for freely transforming and efficiently converting and controlling electricity. These technologies are utilized in a variety of sectors, including the environmental, energy, infrastructure, facility equipment, and entertainment-related sectors. As power supplies for a wide range of applications, they play important roles. With our integrated production system, which includes development, design and manufacturing, we are able to provide standard products and also customized products tailored to customers' requests with short delivery lead times. After delivering products to customers, we consistently provide maintenance and other support services, providing highly reliable products and services.

Contribution to net sales

77.0%

## Strengths and features

### ■ High-efficiency power conversion technology

This is a technology for converting power quickly with high precision while keeping power loss to a low level. We have developed power conditioners for fuel cells equipped with our silicon carbide (SiC) modules, power supplies for hydrogen generation, and other high-efficiency products.

### ■ Wide range of development from small custom-made to large industrial power supplies

We are ready to design and develop unique power supplies, ranging from small embedded power supplies to large industrial power supplies, in accordance with customers' specifications.

## Products

### ■ For general industries

These are high-capacity power supplies for industrial use. They are used in the production facilities of large steel, chemical, electrical machinery, and other manufacturing plants

### ■ For surface treatment, welding machines and cutting machines

Power supplies used for plating, coating, aluminum anodization, welding and cutting for smartphone, automobile component and other applications.

### ■ For light sources and dimming

Power supplies for light sources are designed for light source systems used in projection mapping, movie theaters, studios and other facilities.

Power supplies for dimming serve to control power for light source lamps. They are used for stage lighting in theaters, halls, TV studios and elsewhere.

### ■ Inverters

The applications of inverters include their use in uninterruptible power supplies (UPSs), solar power generation, fuel cells, and power conditioning systems (PCSs) that can be used with storage batteries. They are used at power plants, data centers, large factories, and other facilities.

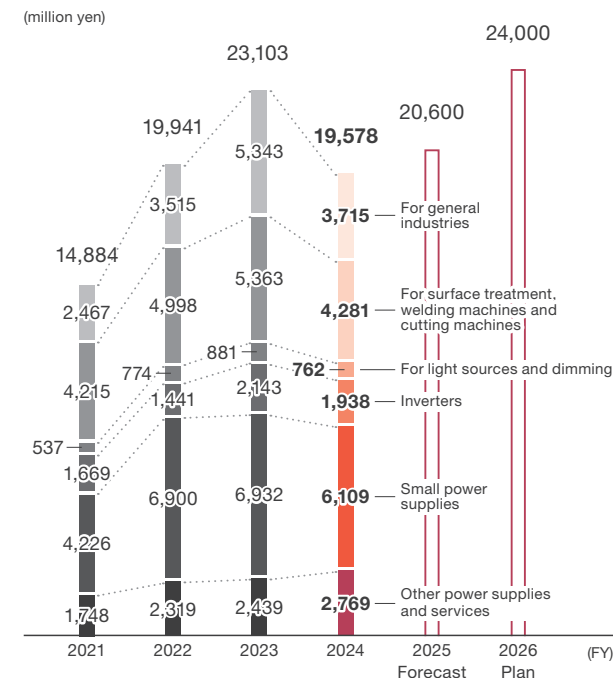
### ■ Small power supplies

Small capacity power supplies are incorporated into financial institutions' automatic teller machines (ATMs), medical equipment, communication equipment and printers.

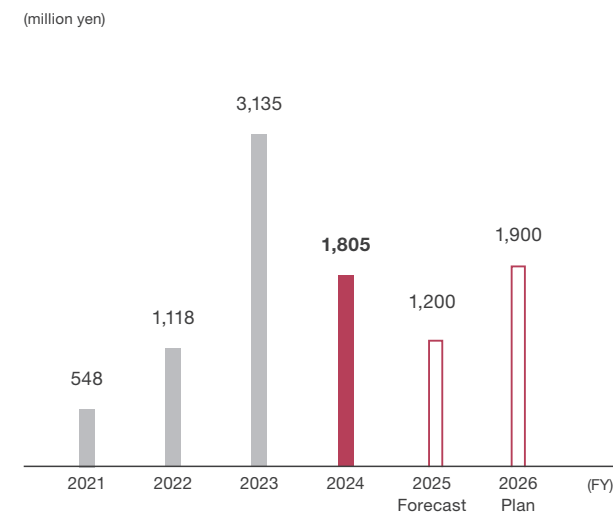
### ■ Other power supplies and services

Electric power regulators controlling the temperature of electric furnaces, power supply maintenance services, and other efforts

## Net sales by product



## Segment profit



## Power supply business

Growth strategy explained  
by the COO of Power Supply  
System Business

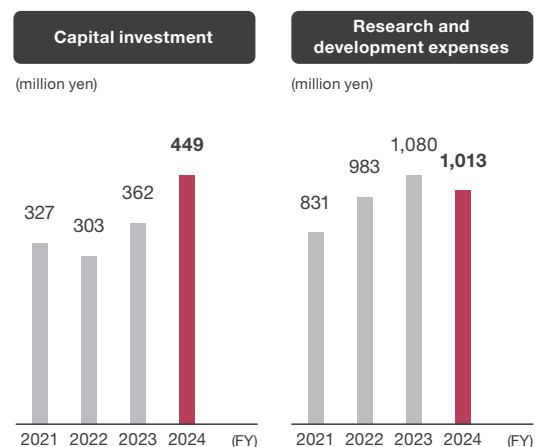
### Supporting the future using power supply solutions

#### Business overview and forecast

In FY2024 in the power supply business, there were no projects equal to the large special project received in the previous fiscal year for a power source simulator for the evaluation of large-capacity power conditioners. There was also a decrease in demand for power supplies for electronic components and printed circuit boards and sales of power supplies for surface treatment were sluggish. In addition, sales of small embedded power supplies for medical equipment and communication equipment also dropped. The power supply business was largely weak.

Sales grew outside Japan, mainly in Asia, but they failed to compensate for the shrinkage of sales in Japan. Consequently, net sales in this segment stood at 19,578 million yen, down 15.3% year on year, and segment profit was 1,805 million yen, down 42.4% year on year.

In the future, we will further accelerate our proposal-based business providing solutions to customers' problems to receive more high added-value projects. We will also focus efforts on the development of standard products in the new energy sector and other growing fields and on the cultivation of new applications for direct current rectifiers, an area in which we are strong.



#### Specific initiatives based on three priority measures

##### Quality improvement

Introduce standardized assembly designs to establish quality assurance systems on a unit-by-unit basis

##### Cost reduction

Replace and extend equipment to increase production efficiency and reduce outsourcing expenses

##### Shortening of delivery lead times

Eliminate the stagnation between processes to seek the theoretically shortest lead time. Focus in particular on shortening the delivery lead times of custom-made products

#### Current state of the power supply market and the Group's strategic response

Amid the ongoing depreciation of the yen, the materials industry and the industrial equipment sector are strong. Demand connected to increasing production and replacing equipment is rising. In these circumstances, we have received brisk orders for custom-made products tailored to customers' unique specifications. At the same time, power supplies for surface treatment are standardized products. Demand for them is sluggish due to a sharp fall in capital investments. However, new demand is anticipated related to their use in facilities producing next-generation circuit boards.

In the renewable energy sector, solar power generation systems are particularly increasingly used in both the business-use and home-use markets, aided by governmental subsidies. In the panel and power conditioner markets, however, overseas manufacturers are gaining strength based on their cost competitiveness. They are entering the industrial market as well. This is a threat to the Group.

In light of this, we are working with the Fukushima Renewable Energy Institute (FREA) of the National Institute of Advanced Industrial Science and Technology (AIST) to jointly develop a next-generation grid connection system. [\[P06\]](#) We aim to differentiate ourselves using power conditioners equipped with energy management functions and to expand sales by fulfilling the many different needs of customers in the medium-capacity-range market.

#### Power supply business strategy based on CF26 and priority measures

In the CF26 medium-term management plan, [\[P18\]](#) we set the priority target of expanding sales of custom-made products tailored to customers' unique specifications, power supplies for surface treatment, modular power supplies for evaluation and local models for overseas markets. To achieve this, we are introducing standardized assembly designs and labor-saving manufacturing processes to reinforce our integrated production system.

Specifically, we centrally control our entire production process using a core system. We utilize a system for the visualization and streamlining of operations. This has led to digitally transform (DX) our practical manufacturing operations. Through these efforts, we seek to construct a high-efficiency production system and to achieve the shortest production lead time in the industry. We will supply special custom-made power supplies in a timely manner to both contribute to society and achieve customer satisfaction.

In addition, we will carry out priority measures to maximize the production capacity of our existing production structure. We will standardize and automate personalized operations to facilitate the passing down of skills and personnel development. We are also working to reduce business continuity risks. We will also clarify the skills that are necessary for individual functions and encourage employees to acquire public qualifications to increase the percentage of employees that hold qualifications and push for the development of a group of skilled personnel.