

Nissin Electric Completes Construction of New Production Shop for GIS at the Maebashi Works

— Innovative Smart Factory —

Nissin Electric Co., Ltd. has constructed a new production shop for gas insulated switchgear (GIS), one of the main products that underpin the growth strategies in the Medium-to-Long-Term Business Plan “VISION2025,” on the premises of the Maebashi Works (Maebashi City, Gunma Prefecture). The company held an inauguration ceremony on April 5, 2022. The investment amount was about 3.5 billion yen. The production shop will start operation in stages from April 6, 2022. Nissin Electric’s GIS has been used in many projects. The main products include the ultra-compact GIS “XAE7”, which is one of the smallest in the world and is used for 66/77 kV high-voltage substations at plants and buildings, the GIS(GF7) for electric power companies, and grid connection equipment for wind farms and mega-solar power plants. Nissin Electric has one of the highest market shares for GIS in Japan.

This is a business activity that contributes to one of the strengthening the business foundation in the Nissin Electric Group Medium-to-Long-Term Business Plan VISION2025, “Enhancing manufacturing capabilities” and “Improving productivity.”

Nissin Electric opened the Maebashi Works in 1963 to meet the demand for electric power during Japan’s high economic growth period. The Maebashi Works has offered substation equipment for about 60 years. The Maebashi Works has been renewed as an “innovative Smart Factory” to meet the growing demand for GIS in line with the acceleration and expansion of the use of renewable energy and the required production increase of GIS to replace old products delivered during Japan’s high economic growth period.

The inauguration ceremony was attended by 21 persons concerned, including Nissin Electric Chairman Saito and President Matsushita. At the beginning of the ceremony, Chairman Saito stated: “The production shop for GIS has been renewed as a Smart Factory by introducing cutting-edge technologies, such as automation and IoT technologies, to achieve the Medium-to-Long-Term Business Plan ‘VISION2025.’ It will achieve production innovation and workstyle reforms, implement environmental measures, such as reduction in CO₂ emissions, and improve quality. It will serve as a model factory capable of maintaining our market competitiveness into the future. This model will be deployed across the Nissin Electric Group to promote NISSIN ISSIN.”



New Production Shop for GIS



Ribbon cutting at the inauguration ceremony

[Features of the new production shop]

- **Production capacity increased by up to 1.5 times**

The GIS production capacity has been increased by up to about 1.5 times (compared to FY2018) by constructing the new production shop, introducing new equipment, improving transport efficiency within the shop, and building an optimal, streamlined production line capable of seamless product production. From the viewpoint of the SDGs, the

electric power consumption per unit has been cut by about 30% by reducing the traffic line and transfer using cranes, automating inspections, and improving main and ancillary operations. The emissions of SF₆ gas have also been reduced by introducing the latest equipment.

• **Achieving high productivity and reducing the lead time by actively introducing IoT**

Network cameras have been installed on the production line, and large monitors have been installed in respective workplaces to visualize the production status of products and operation status of production facilities. Linkage with 3D-CAD is ensured, and state-of-the-art production technologies and automation equipment are actively introduced to achieve high productivity and reduce the lead time.

With the Maebashi Works as the beginning, Nissin Electric will introduce IoT technologies to achieve manpower saving and deploy the Smart Factory concept across the company. The company will strengthen its manufacturing capabilities and improve the production system to realize an optimal production system capable of flexibly meeting changes in demand due to changes in the market in the future and achieve the revenue of 160 billion yen and consolidated operating profit of 20 billion yen set forth in “VISION2025.”

[Profile of the new production shop]

Location:	On the premises of the Maebashi Works of Nissin Electric Co., Ltd., 2121 Soja, Soja-machi, Maebashi City, Gunma Prefecture
Completed:	April 5, 2022 (start of construction: February 2021)
Start of operation:	In stages from April 6, 2022
Overview of the building:	Steel-frame construction/Two stories above ground
Total floor area:	About 9,800 square meters
Building area:	About 7,660 square meters
Production item:	GIS
Investment amount:	About 3.5 billion yen

The Nissin Electric Group has been stepping up its efforts to promote the SDGs through its business operations. This accomplishment is related to the following goals among the 17 SDGs.

8. Decent Work and Economic Growth

9. Industry, Innovation and Infrastructure

13. Climate Action