

Sekisui Plastics Co., Ltd.

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Investor and Public Relations Department

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ST-LAYER_™ Used in Wind Power Generation Blade of NTN Green Power Station; Contributing to regional disaster prevention

ST-LAYER, a product from Sekisui Plastics Co., Ltd (Head Office: 2-4-4 Nishi-tenma, Kita-ku, Osaka, Japan; President: Masato Kashiwabara), has been adopted for use in the wind power generation blades of the NTN Green Power Station; a power station from NTN Corporation that makes use of energy from nature. With the installation of this power station in our Group Company located in Tenri City, Nara, Sekisui Plastics is contributing to the prevention of regional disasters.

1. Outline

ST-LAYER, a CFRP/GFRP composite foam former with a high-function foam as its core material, has been adopted for use in the wind power generation blades of the NTN Green Power Station, due to its light-weight and high strength. The power station has been installed at Sekisui Plastics Tenri Co., Ltd (670 Morimoto-cho, Tenri, Nara, Japan), and with the start of its operation in October 2019, it will now support the region in case of disasters.

2. As for ST-LAYER Used in wind power generation blades

ST-LAYER is a composite structure that uses as its core material ST-Eleveat, Sekisui Plastics's engineering plastic foam that has high heat resistance and high strength. Its light weight and high strength permit the blade size to be increased, contributing to high output and increased power generation efficiency. This is the first case of the application of ST-Eleveat as the core material in the ST-LAYER composite structure.

3. Regarding Installation facility

Power generated from wind and solar power is stored in batteries incorporated in the NTN Green Power Station, and is then used for automatic LED lighting at night. The stored power can be output externally as an emergency power source. It can also be used an emergency power source when power is unstable because of outages after a disaster, in streetlights to illuminate the darkness of a disaster-hit area or in case of a communications equipment shutdown. It also functions as a regional watch post, with its built-in monitoring camera for crime prevention.

ST-LAYER structure CFRP/GFRP Foam

NTN Green Power Station SLH700



- OHigh-efficiency generation and stable power storage
- -Wind power generation: Generator nominal output 500W (Increase from 200W of conventional types)
- Solar power generation:Max. output 220WLED lighting:
- Total luminous flux: 900lm
- Safe and low noise design even installed in urban areas.
- ©Ensures around 5 days worth of power, even when the sun does not shine and wind does not blow



NTN Green Power Station website

4. Future Outlook

Sekisui Plastics aims to contribute to society both through expansion of its environmental business, making use of the features of ST-LAYER (light weight and high strength), and through efforts jointly with regional society to prevent disasters and reduce their impact.

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