

August 25, 2023

NYK IDEMITSU Green Solutions Co., Ltd.

Release of the ULTY-V plus AT, a new model of the boiler control optimization system

NYK IDEMITSU Green Solutions Co., Ltd.\* (headquartered in Shinagawa-ku, Tokyo) has developed the ULTY-V plus AT, a model with a new function added to the ULTY-V plus.

In response to a growing need for carbon neutrality, we developed this function to upgrade the current model ULTY-V plus so that it can accurately grasp the behavior of each process (mostly fuel command and response speed) to handle a diverse range of mixed-fuel combustion. This function will be implemented soon in the ULTY-V plus, which is used by domestic power companies.

In recent years, a wide range of fuels have tended to be used in the effort toward carbon neutrality, such as white pellet fuel, black pellet fuel, wood, and ammonia. The ULTY-V plus AT is a fully autonomous control system that utilizes existing artificial intelligence (AI) to independently measure, analyze, and determine a whole range of boiler operations including fuel feed adjustment and steam pressure adjustment, by automatically and delicately analyzing the behavior in mixed-fuel combustion of fuels with different properties—solid fuel, liquid fuel, and gaseous fuel—and optimizing all kinds of fuel in use.

Having a linkage function with a new monitoring system for unburned carbon in fly ash, which allows real-time measurement using new technology currently under research and development, the ULTY-V plus AT is capable of analyzing or examining the loss trend due to unburned carbon in fly ash, which has been difficult to measure in real time.

Utilizing AI technology, and in particular our ULTY technology cultivated through experience in sales and implementation of about 150 units, we will develop fully autonomous integrated optimization systems that include technology to improve the efficiency of peripheral equipment.

We will continue to strive to understand and meet each customer's unique needs and create products that help reduce carbon footprints globally.

\* NYK IDEMITSU Green Solutions Co., Ltd. is a joint venture company that was established in March 2019 mainly to promote the sales of ULTY-V plus in Japan and overseas including China, Taiwan, and Vietnam.

Major shareholders: Idemitsu Kosan Co., Ltd., NYK Trading Corporation, and Nippon Yusen K.K.

Business: Sales, development, and improvement of boiler control optimization systems and provision of related consulting services, etc.

Contact

NYK IDEMITSU Green Solutions Co., Ltd.

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