Value Creation: Cases and Topics

Promoting the development of the product life cycle business and eco-products through collaboration with customers to support a sustainable future.

Contribute to SDGs through retrofitting to prolong the life of aging equipment (KOKUSAI ELECTRIC CORPORATION)

The batch processing system that the Company sold in the 1990s is still being actively used 30 years on. Production has already ceased for many components and maintenance has expired. However, customers also have strong needs for ongoing use, so we consider the possible technical responses and take action to the greatest extent possible. In 2021, we have been transplanting the control system installed in the latest equip-

ment (VERTRON® Revolution) into aging equipment through retrofit proposals aimed at prolonging the life of equipment, which have been well received by customers.

These initiatives also lead to saving resources and reducing waste, so they contribute to the realization of SDGs while also complying with the Company's statement for "sustained growth of the product life cycle business."

Note: VERTRON is a registered trademark of KOKUSAI ELECTRIC CORPORATION.



Providing total solutions and upgrade functions able to produce the latest devices (Kokusai Electric Korea Co., Ltd.)

The use of semiconductor devices is increasing in our entire society in association with technological developments. We anticipate that use will continue to increase in various fields such as AI, IoT, cloud services, automated driving, and EV. Furthermore, semiconductor devices are thriving products for alternating generations through high aggregation and the application of new processes. Therefore, it is an industry that requires ongoing investment into cutting-edge equipment able to install new technologies.

The Company conducts a business that provides total solutions to support new processes in both hardware and software and upgrade functions able to produce the latest devices with existing equipment. The life of equipment can be substantially extended through this business and customers are able to effectively utilize investment costs through the use of existing equipment. We will explore ways to expand the development region for this business through collaboration with each Group company.

New product: Development of resistivity measurement equipment VR300DH Series (Kokusai Electric Semiconductor Service Inc.)

Demand for electric vehicles is growing as we head towards a carbon-neutral future and there is also a rapid expansion of demand for semiconductors incorporated in electric vehicles such as power devices and MEMS sensors.

The Company has developed new products with the best cost performance for the production of these legacy semiconductors with the Resistivity Measurement equipment VR300DH Series. This equipment can measure below 200mm and 300mm wafers with high precision and at high speed, which can be used for open cassettes as well as SMIF (Standard Mechanical Interface for port transfer of 200mm wafer cassettes) Indexer and FOUP specifications. This equipment can measure ultrathin wafers required for the production of IGBT (motor driving power semiconductor), and its features include the ability to reduce the traditional footprint by 40% and reduce power consumption by 25%.



Appearance of development equipment