

FUJIKURA NEWS 8

2020 No.468

Fujikura Modern history -4

From Depression to Historic Business Expansion

Following the launch of Fujikura Plastics, Fujikura Transport, and Fujikura Warehouse, Fujikura's diversification entered a new phase with the establishment of DDK Ltd. (first Japanese-American joint company) through joint capital investment with Amphenol Corporation. In 1966, Fujikura started domestic manufacturing of copper-clad aluminum wires that replaced galvanized copper wires, which had been mainstream and also invested in, established, and operated Japan Alumoweld Co. with *two other companies. While Japan's economy went from bust to the Izanagi boom (rapid economic growth of the late 1960), Fujikura's business also experienced historic expansion. *Ataka & Co., and Copperweld



Japan Alumoweld Co. (Numazu)

Special feature

Fujikura Group's efforts in UN SDGs

The Fujikura Group has contributed to solving social challenges through our products and services under our management philosophy, "to create exceptional value for our customers around the world using "Tsunagu" (connecting in Japanese) technologies."

We will further strive to build a convenient, sustainable future society and contribute to the achievement of UN SDGs to solve various modern social challenges through "Tsunagu" technologies.



Involvement in Habitat for Humanity

AFL Telecommunications LLC (AFL) and Fujikura America, Inc. (FAI) join the activities by Habitat for Humanity, an international NGO that advocates affordable housing free of interest for those who live in degraded environments due to poverty.



AFL



FAI



Sale of TABLE FOR TWO (TFT) Lunch

Fujikura has expressed its approval of the activities of the TABLE FOR TWO (TFT) International, an NPO that tries to solve social challenges of suffering from starvation and malnutrition in developing countries and obesity and lifestyle diseases in developed countries. Consequently, the company has sold TABLE FOR TWO (TFT) lunch, the price of which includes 20 yen each for donation, at the cafeteria of the headquarters since 2014.



Contribution in Medical Field

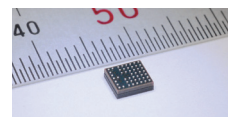
Fujikura has been expanding its business in the medical field based on its own IT and electronics technologies. As part of this move, the company set up a base in Minneapolis, US, one of the world's bases to develop medical equipment. As a result of the operations there, we will begin delivering ultra-thin camera modules for a major medical equipment company. In addition, the production of Chip-stack WABE® will be expanded to miniaturize medical equipment for treatment use and meet each customer needs. Furthermore, we are accelerating to manufacture an increased number of oxygen sensors to be used in respirators for COVID 19 treatment. We will be committed to improving the quality of peoples' lives.



Minneapolis office



Ultra-thin camera module, CMOS



Chip-stack WABE®

2020
8

4 QUALITY EDUCATION



Awarding Scholarship to Myanmar's Science and Engineering Colleges

Fujikura established Fujikura Scholarship Program aimed at supporting the education of next-generation human resources majoring in the science and engineering fields in the Union of Myanmar (hereafter Myanmar) in 2017. Since then, four universities with science and engineering faculties are granted scholarships. In addition, to provide the latest technological information, we conduct special lectures regarding Myanmar's electric power situation and also present Fujikura Technical Review, a journal that the company issues, to each college.



Ceremony for awarding scholarship

5 GENDER EQUALITY



Joining the IkuBoss Corporate Alliance

Fujikura has joined the IkuBoss Corporate Alliance organized by NPO Fathering Japan, to create a workplace where diverse employees can thrive.

6 CLEAN WATER AND SANITATION



Securing Clean Water and Managing Water Discharge

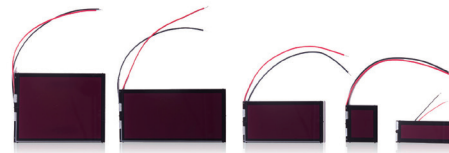
The Fujikura Group takes measurements (temperature, hazardous substance, pH) on clean water, industrial water, and groundwater (in well) at each site in compliance with laws and regulations to confirm the safety and sanitation of water. In addition, each of the manufacturing sites in Japan conducts automatic monitoring of pH, SS (suspended solid), and oil in industrial wastewater as much as possible, managing water quality by setting our own criteria stricter than those in each region.

7 AFFORDABLE AND CLEAN ENERGY



Supply of Environmentally-friendly Dye-sensitized Solar Cell (DSSC)

Fujikura provides DSSCs enabling photovoltaic power generation in any living environment from indoor to outdoor. A DSSC is a clean solar cell manufactured using materials and processes with less environmental burden. Small electronic devices employed DSSC is easy to be installed owing to no wiring work. Such devices require low or no maintenance frequency depending on supplied power from DSSC. Low or no maintenance reduces environmental burden caused by discarding batteries after used on a number of devices. We will contribute to achieve SDGs by offering DSSC well-harmonized with environment.



Dye-sensitized Solar Cell Module Panel

8 DECENT WORK AND ECONOMIC GROWTH



Introduction of Efficient Inspection Using AI

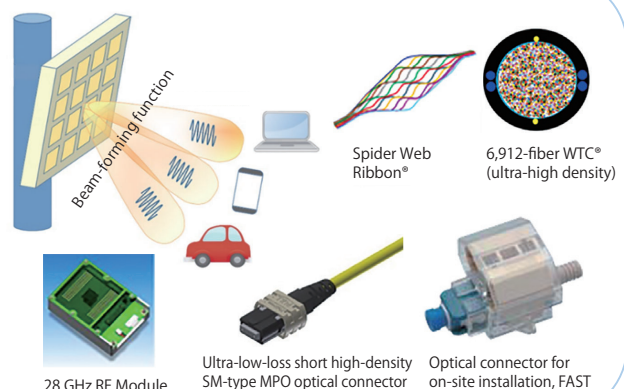
The Fujikura Group has been putting AI that uses deep learning into practical use. We push on with the introduction of efficient AI inspection at the manufacturing process of products by making efforts to increase the percentage of correct answer from AI and visualizing the decision making by AI.

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE



Contribution to 5G

In the future Society 5.0 social infrastructure, 5G solution will allow next-generation high-performance communication networks characterized by ultra-high speed, low latency, and multiple simultaneous connection. Fujikura provides ultra-high density optical cables (using Spider Web Ribbon, SWR[®]), WTC[®], super-low loss MPO optical connectors, and optical connectors that facilitate on-site installation work. In addition, we plan to deliver 28 GHz RF modules for 5G base stations. The Fujikura Group will support 5G with these products.



28 GHz RF Module

Ultra-low-loss short high-density SM-type MPO optical connector

Optical connector for on-site installation, FAST

10 REDUCED INEQUALITIES

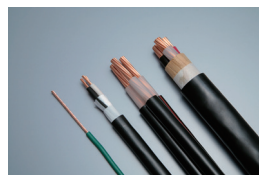
Promotion of Employment of Persons with Disability

Fujikura has joined the Physical Challenge 2020 project promoted by Activatelab Co., Ltd. to back up the social participation of persons with a disability as an accelerator partner. We aim to improve the work environment toward the realization of society where any person can work lively regardless of disability.

11 SUSTAINABLE CITIES AND COMMUNITIES

Support for Creation of Comfortable Town

Fujikura Dia Cable offers not only different electric wires and cables necessary for the advancement of the social infrastructure and industries but also different diagnostic equipment and high-voltage cable diagnostic services by IoT suited to the maintenance of these products. The company also has the product lineup for wireless communication (high-frequency coaxial cable, leaky coaxial cables) to help create a town where people can continuously live by offering one-stop services in the electric lines and cables field. We will continue to supply high-quality products and services that meet customer needs as a maker and seller of electric wires for industrial use.



Power cable



Highly-foamed-insulator-type leaky coaxial cable (NETIS registration No. : KK-180001-A)



Live wire sheath fault locator LILIA-150T

Appearance of the body

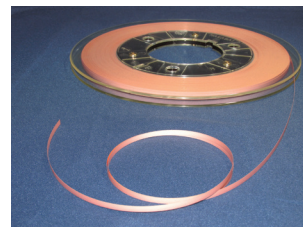


Appearance of input changeover switch

12 RESPONSIBLE CONSUMPTION AND PRODUCTION

Contribution to Practical Use of World's Highest-level NMR by Rare-earth High-temperature Superconducting Technology

The rare-earth high-temperature superconducting wire rod that Fujikura manufactures can be used in a wide temperature range and magnetic field compared to conventional ones, expected to find uses in various industrial machines in the medical and analysis fields. Rare-earth high-temperature superconducting wire rods demonstrate excellent superconducting characteristics in a very high magnetic field. Recently, our product has contributed to renewing the world's record of nuclear magnetic resonance (NMR), which is expected to help further progress of research such as in the pharmaceutical and medical fields where NMR is used.



Rare-earth high-temperature superconducting wire rod

13 CLIMATE ACTION

Contribution to Reduce Heatstroke Risk

In these years, preventing heatstroke is one of the important issues regarding safety in life. Heat indexes are measured and distributed to address this issue, and the Ministry of the Environment and the Meteorological Agency started testing a heatstroke alert system in June this year. However, heat indexes differ depending on each environment such as in schools, construction sites, and nursing homes. Thus the indexes monitored through actual painstaking measurements at each place is important from the viewpoint of heatstroke prevention.

Fujikura has started to offer a sensor system that visualizes heat indexes using IoT technology and notifies danger by an alarm. We offer a completely wireless, maintenance-free sensor network since our sensor node operates with autonomous power-supply by energy harvesting device – DSSC.

Fujikura will be continuously committed to solving social challenges using IoT technology to visualize the environment.



IoT solution to prevent heatstroke



Participation in Clean-up Campaign on Beach

Fujikura's Numazu Office participates in a clean-up campaign to clean up plastic products, wood, waste, bottles, and cans scattered on Senbonhama Beach, Numazu City with neighbor companies.



Employees participating in clean-up campaign



Compliance

The Fujikura Group, as a member of society, will thoroughly conduct honest corporate activities complying with laws and regulation of each country and local community, fair and transparent transaction, maintenance of healthy, normal relationship with the government and each organization, and management and protection of information. We will also strive to supply products and solutions thinking of our customers.



Solving Challenges by Innovation

Fujikura has opened BRIDGE Fujikura Innovation Hub at the headquarters in Koto-ward, Tokyo as the place to solve future social challenges as mentioned in the 2030 Vision. BRIDGE creates a community where networking and collaboration that goes beyond the framework of organizations by holding seminars on the topic of innovation, events to introduce advanced technologies, events to pitch enterprising venture firms, and symposiums and workshops aimed at solving social challenges.



Efforts to Secure Biodiversity

The Fujikura Group recognizes that its business operations are closely related to the global environment and thus set up the "Fujikura Group Biodiversity Long-term Vision and Road map 2030" to protect the global environment and take initiatives in conserving bio diversity. In 2010, the company built a bio garden, "the Fujikura-Kiba Millennium Woods" on the premises of the headquarters to reproduce the rich nature of Musashino Plateau with native species several hundred years ago.



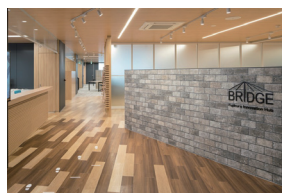
Entrance of Fujikura-Kiba Millennium Woods



Day lily



Couple of kingfishers looking place to lay eggs



Entrance of BRIDGE



Event space