The Maxell Group's CSV Business Management

The Maxell Group established the Corporate Sustainability Department to further reinforce CSV management, and will promote initiatives to strengthen the connection between business and social issues.

Anytime, Anywhere, in Safety

Energy Division
Galvanic cell-type lead-free oxygen sensor

Received the "Health and Welfare, Biotechnology, and Medical Parts and Components Award" at the 2020 "CHO" MONODZUKURI Innovative Parts and Components Award (organized by MONODZUKURI Nippon Conference and Nikkan Kogyo Shimbun, Ltd.).

Value Provided

Galvanic cell-type oxygen sensors are small and light, and they operate at room temperature. As they offer a low-cost method for measuring oxygen concentration, they are widely used in applications such as exhaust gas measurement, biotechnology equipment, food storage, and education. In addition, since conventional products used anodes made from lead—a hazardous substance—they presented a risk of soil or ocean pollution or harmful impacts on the human body. Recently, general household appliances are no longer made using lead, but in the absence of an alternative technology, products such as oxygen sensors continue to use lead.

At Maxell, we have achieved a lead-free galvanic cell-type oxygen sensor as the result of many years of research and development. In conjunction with this, we have also developed a proprietary weak acidic electrolyte liquid that is suitable for lead-free anodes. With this, in 2019 we succeeded in commercializing a lead-free galvanic cell-type oxygen sensor that is not affected by CO_2 or other acid gases and also offers long service life and high reliability.

Supporting a Better Quality of Life

Sliontec Division
Waterproofing materials (butyl tape, rubber sheets)

Value Provided

Butyl tape and rubber sheets for waterproofing help to not only reduce leaks in buildings but also prevent mold growth, rusting of metal parts, and deterioration of wall and ceiling materials. Their overall effect is a reduction in waste. As standards of living rise rapidly in Southeast Asia, where waterproofing technology is still underdeveloped, Maxell is working to promote the construction of houses using waterproof sheets. The region is largely unfamiliar with the concept of waterproofing, but we are working on the ground there to promote waterproof sheet construction methods with a view to improving the standard of dwellings in the region, developing the technical skills of local operators, and taking care of the environment.

Providing Safety and Peace of Mind in Daily Life

Life Solution Division
Ozone* anti-bacterial deodorizers

Value Provided

A rising public awareness of hygiene has driven increasing demand for products that can eliminate bacteria, viruses, and odor. The Maxell Group has been developing and selling anti-bacterial deodorizers that use low concentrations of ozone since 2015. Ozone breaks down bacteria, viruses, and the sources of odors as it reverts to oxygen. Using this characteristic of ozone, Maxell's *OZONEO* series of anti-bacterial deodorizers can eliminate bacteria and viruses from a space, and remove odors. They are used in hotel guestrooms, hospital examination rooms, and various other spaces. We are currently expanding the *OZONEO* series mainly in Japan and Asia, and we plan to expand sales routes globally, including in Europe.
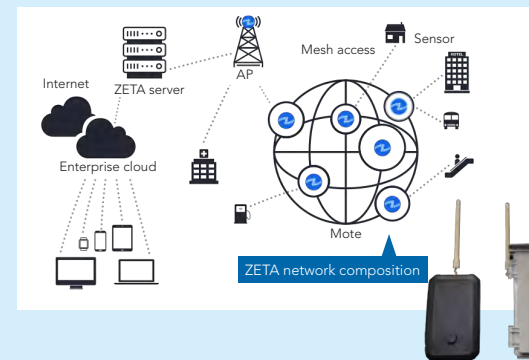
Looking ahead, we will promote product development aligned to customers' needs and expand our lineup to support comfortable living.

* Low concentration ozone adjusted to 0.05 ppm, below the environmental standard of 0.06 ppm specified in the Basic Environment Law.

Contributing to Disaster and Damage Prevention with IoT Monitoring Systems

Optronics Division
IoT monitoring system

Value Provided

ZETA Harmful Animal Capture and Monitoring System is an IoT monitoring system provided by the Maxell Group. The system sends notifications about monitoring data on harmful animals such as deer or boars to the user's mobile device, helping to reduce damage to crops and reducing the time between capture and processing of wild animals. It can also be expanded for use with wild game animals.

Looking ahead, we will provide low power consumption, low-cost IoT monitoring solutions to enable the development of safe, secure towns through infrastructure aging monitoring, disaster monitoring, crime prevention systems, and elderly person monitoring systems.