



## Establishing a Recycling-based Society

To make effective use of limited resources, the Tokai Rika Group is promoting the cyclical use of various resources such as resins, metals, and solvents used in the production of products.

### Promoting product designs and technological developments to make recycling easy

We are manufacturing products that will contribute to the formation of a recycling-based society by improving our products' ease of disassembly and using recycled materials.

### Use of recycled materials

To support the effective use of natural resources, we actively promote the use of recycled materials. In power window switches we are using resin materials which contain recycled materials that are made from crash-processing after resin molding.



Power window switch

### Reduction of waste in production activities and efficient use of natural resources

We are working on reducing the discharge of waste materials and using limited resources efficiently by improving production yield, reducing the rate of defects, and thoroughly implementing 3R.

### Effective use of edge loss in the casting processes

#### Development of regenerative technology

At the Otowa Plant we have developed a technology to turn the aluminum edge loss generated during the production of casting parts into high-quality recycled material, so that recycled materials can also be used for casting products that undergo heat treatment.



Aluminum edge loss



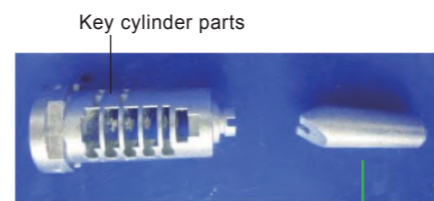
Melting furnace

#### Reuse by changing process

At TRI (Indonesia), the edge loss of key cylinder parts was cut and discarded at the same time as deburring, but by changing the process and cutting before deburring, edge loss can now be reused.



Cutting edge loss



Key cylinder parts

Edge loss ▶ Melted

### Recycling of plastic waste materials

The Head Plant crushes waste materials from resin molding for thermal recycling, and by introducing a crusher that can handle larger waste materials, now it is also possible to recycle defective molded products that were previously disposed of as industrial waste.



Resin molding product (defective product)



Waste material after crushing (combustion improver material)

### Reduction of the use of water in production activities

At the Tokai Rika Group we are conducting a water risk assessment using the amount of precipitation and water withdrawal at each production base, and working on reduction of the use of water by increasing the efficiency of use and adopting reuse.

### Reduction of the use of water

In the plating process, part of the waste water is treated in the ion exchange tower and then reused in the process.

We also reuse the concentrated waste water, produced in the pure water manufacturing process, needed for removing the smallest particles of dirt in the semiconductor manufacturing process and some pure water used in dirt removal, to reduce the water consumption and amount of waste water.



Ion exchange tower

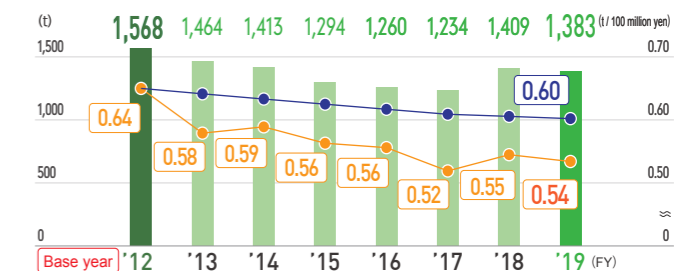
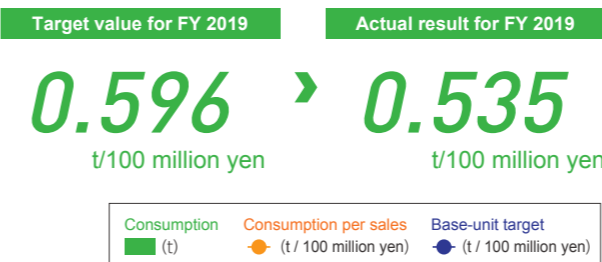


Water purification apparatus

### Effective use of resources and reduction of packaging and wrapping materials in logistics activities

In order to reduce the consumption of wrapping and packaging materials, we are working to improve the packaging and make packaging and wrapping materials returnable.

#### Trends in the amount of packaging and wrapping materials per sales

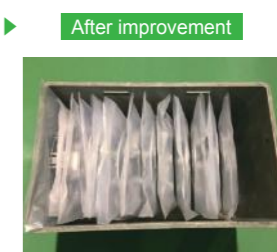


### Reduction of the use of cardboard by reviewing packaging

The spare parts for wheel covers had been delivered in cardboard boxes, which were then discarded by customers. By changing the packaging from cardboard to resin boxes and using them repeatedly, we were able to reduce the annual cardboard usage of 34,000 boxes.



Packed one by one in a cardboard box



Multiple individually packaged products in one box



This proposal will also lead to customers' reduction of waste materials. We will continue to work on improvements such as eliminating, thinning, and reducing packaging materials, and find the best way so that we can contribute to establishing a recycling-based society.

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Reduction of materials

13.7 t/year