

Special Feature 1

Initiatives to Reduce Water Use

The Shinko Group has made environmental protection a top management priority. Accordingly, we have made it our group policy, based on the philosophy of the Shinko Way, to contribute to the protection and improvement of the global environment by pursuing harmony between the global environment and corporate activities, through manufacturing. We carry out a range of activities in line with this policy.

Every three years, we establish an Environmental Protection Program and set out specific targets to achieve during the three-year period. We attempt to continuously address environmental issues through systematic actions taken by each site and department. In this special feature, we introduce initiatives to reduce water use as a representative example of the activities on which we are focusing in our current Environmental Protection Program.

Shinko has established the target of reducing its water use by 118,000 m³, an amount equivalent to 5% of the 2.36 million m³ used in FY2014, by the end of FY2018. The Wakaho, Takaoka, and Arai plants have been working toward this goal since FY2016.

Thus far, we have implemented a variety of reduction measures, including through recycling of water used in the manufacturing process, further reduction of pure water for rinsing, and reduction by changing the manufacturing process.

Through these efforts, we reduced our water use by 88,100 m³ (3.75% vs. a target of 3.3%) for the two years of FY2016 and FY2017.

Below is a description of the main reduction measures implemented.

◆ Reducing the supply of water to plating equipment (Figure 1)

The plating equipment rinses products with pure water after the plating process.

The Arai Plant tackled the issue of reducing the use of this pure water. It studied the cleanliness of product rinsing (in terms of quality) and switched from controlling the supply of pure water used for rinsing based on an upper control limit to a target value (the minimum quantity needed for rinsing). This measure reduced water use by 3,940 m³/year.

◆ Reducing water use in washers (Figure 2)

Besides implementing measures expected to achieve a large reduction, such as changing the supply of water to manufacturing equipment and recycling wastewater, we are working thoroughly to reduce water use, even if the quantity is small.

Although the magazine* washer was designed to continually supply water, whether or not there were any magazines to wash, we modified it so that water is supplied only when magazines are moving through the washer, reducing water use by 140 m³/year.



Magazine washer

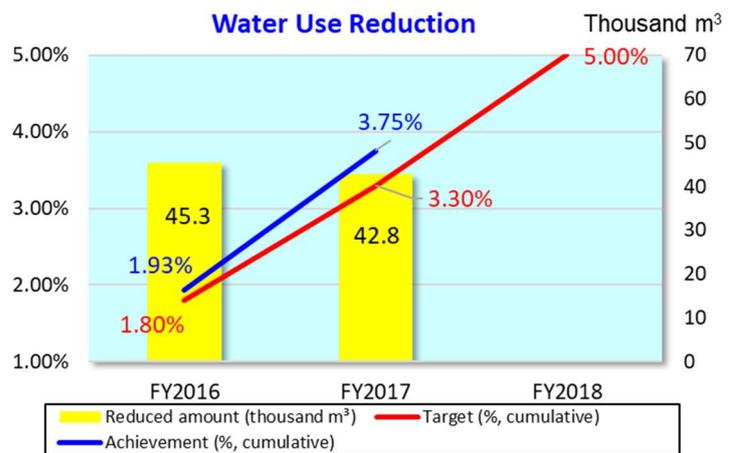


Figure 1

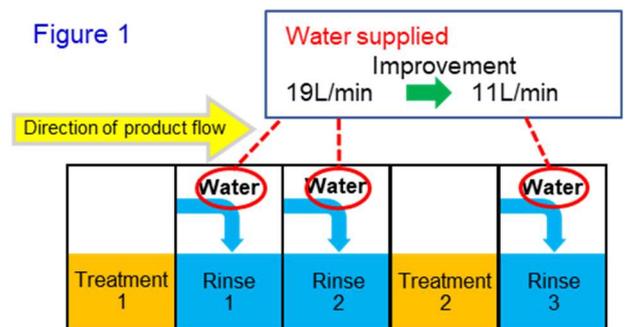
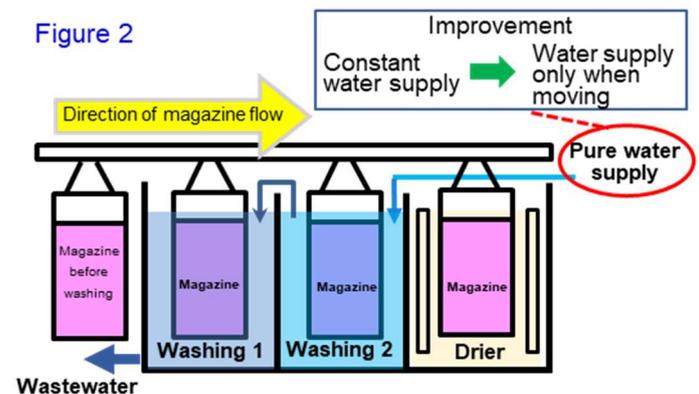


Figure 2



* Magazine: A container for holding and moving product through manufacturing equipment

◆ Reducing water use in etching equipment (Figure 3)

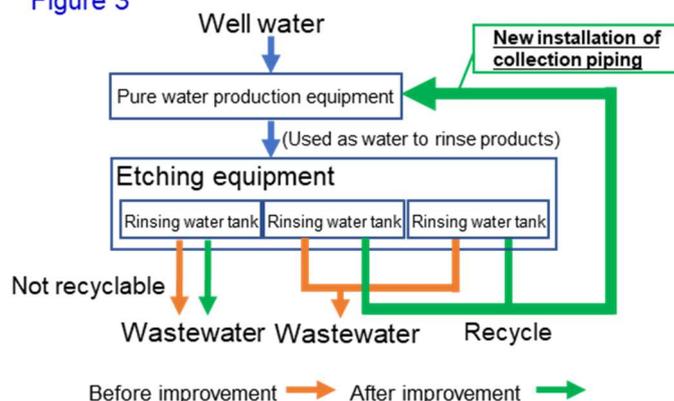
The treatment method for wastewater from rinsing tanks for etching equipment depends on how dirty the water is.

The Arai Plant checked the dirtiness of all the water for its etching equipment and reconsidered the treatment methods for the wastewater. The results showed that the wastewater from two rinsing tanks was recyclable. Accordingly, the plant connected piping to recover the wastewater and feed it to pure water production equipment for recycling. This reduced water use by an additional 7,387 m³/year.

◆ Recycling pure water for hand wash basins

The water that resulted after use of pure water at hand wash basins set up in the clean room was regarded previously as wastewater and not recycled due to the risk of contamination. An investigation of the water found a low level of contamination, and accordingly the flow was redirected from wastewater to recycling, reducing pure water use by 28 m³/year.

Figure 3



Pure water hand washbasins

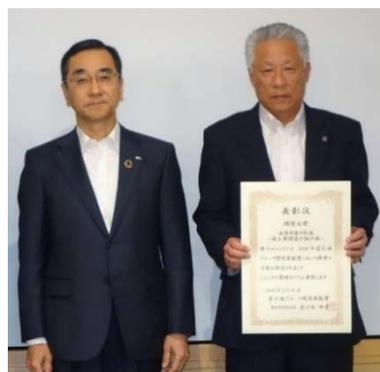
The mottos we use when considering the effective use of water resources in our plants are: "As much as possible, do not use water," "Clean efficiently with little water," and "Recycle water used." Going forward, we will continue taking these mottos as reminders in our efforts to further reduce the use of water resources by devising and implementing effective reduction measures. At the same time, we will focus on enhancing and strengthening our environmental protection efforts group-wide as part of the social responsibility of a manufacturer.

Topic

◆ Shinko Wins the Grand Prize in the Fujitsu Group Environmental Contribution Awards

The Fujitsu Group Environmental Contribution Awards are presented each year to encourage employees to take initiatives related to the environment within the Fujitsu Group.

The presentation ceremony for FY2017 activities was held in June 2018. Shinko's "Reduction of Water Use," an initiative carried out as a company-wide project to reduce natural resources and energy, won the Grand Prize from a pool of 65 entries.



Environmental Contribution Awards