

# Initiatives for Effective Use of Resources

## Basic Approach

The Minebea Group recognizes that there are limits to the availability of resources used in its products, which include metals, plastics, and other raw materials, along with oil, natural gas, and other energy sources. Additionally, with regard to rare earth elements indispensable to the manufacture of electronics, since the number of countries producing and exporting the materials is limited, they are more susceptible to export restrictions.

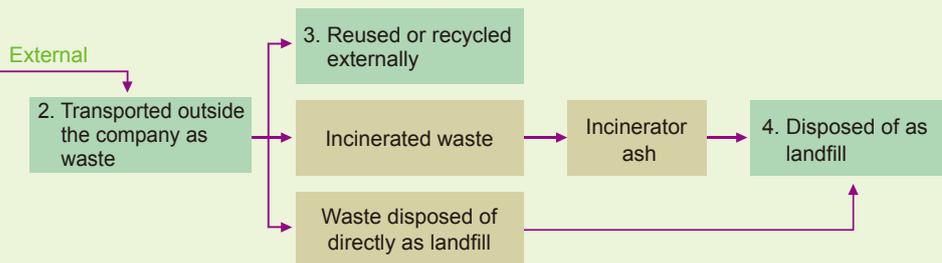
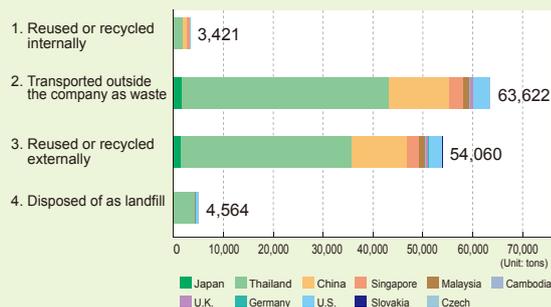
We believe that the effective use of resources is critical to the continuation of our business activities, and to that end we are taking various management measures.

## Results of FY2013 Initiatives

In FY2013, principal raw materials used by Minebea Group included approximately 87,800 tons of steel and 8,200 tons of resin, with the total amount of materials used increasing by approximately 23% compared to the previous fiscal year.

The amount of landfill waste generated by the Group's operations in FY2013 totaled 4,564 tons. As a result, the amount of landfill waste in FY2013 increased by 234 tons compared to FY2012.

### Waste Processed (FY2013 Actual)



At our mass production plants in Thailand and China, we are recycling water inside the plants to the greatest extent possible and prevent external emissions through our "Plant Wastewater Zero System." Water emissions from Group plants in FY2013 totaled 697,000 m<sup>3</sup>, a decline of 87,000 m<sup>3</sup> compared with FY2012.

## Initiatives at Business Sites

### Participation in thermal recycling (Yonago and other plants)

Up until seven or eight years ago, only certain types of waste plastics from the Yonago Plant were recycled into reusable materials. Since then, the waste plastics have been collected as RPF\* raw materials, and today nearly all the waste plastics are converted into RPF at a contractor's facilities and reused in an electric power boiler at a paper manufacturing company.

In FY2013, the Yonago Plant generated about 41 tons of waste plastic and was able to recycle 98.1% of the waste into RPF materials through the establishment of internal waste separation standards and progress in recycling activities. Waste plastics from the Karuizawa and Hamamatsu plants are also being converted into RPF raw materials.

\* RPF (Refuse Paper & Plastic Fuel): A solid fuel made primarily from waste plastics and difficult-to-recycle paper. RPF generates a high amount of heat, on par with coal and oil, propelling its demand as an alternative to fossil fuels.

## Future Issues and Goals

For FY2014, we have set a target of limiting the amount of landfill waste to 4,850 tons following a recalculation of previous results. Currently, we are researching the types of landfill waste we generate and conducting market analysis in an effort to further lower waste amounts in the future.