



For Environmental Protection



Performance — Workplace CSR Activities

Establishing System for Environmental Commendations

We have launched a system of environmental commendations for the NGK SPARK PLUG Group in Japan to commend outstanding environmental initiatives with the aim of encouraging environmental activities. The best examples from improvements implemented in each area are selected to receive commendations from the President at the Central Environment Committee.



Greening of area around Miyanojo Plant

In fiscal 2014, which was the first year of the system, the four examples below received commendations.

Area	Department	Details
Komaki Plant	Sensor Production Engineering Dept.	Increased batch size in combustion furnaces
Komaki Plant	Production Support Engineering Dept.	Response to Revised Water Pollution Control Act
Miyanojo Plant	Entire plant	Outstanding Green Factory (Minister of Economy, Trade and Industry Award)
NTK Ceramic Co., Ltd.	Management Dept.	Integrated management of firing production plans across entire plant

Voice of Our Maintenance and Management Department

We will continue to promote creation of an environment that coexists with the community

The Kagoshima Miyanojo Plant, where an integrated production system for spark plugs has been established, produces the largest number of plugs for a single plant in the world.

Up to now, we have been promoting the beautification and greening of the environment in addition to carrying out diverse initiatives over many years. These include measures to tackle noise using plantings, development of a ground with natural turf which is provided to local high school rugby teams for matches and training camps, and the establishment of cherry trees and a promenade on the south side of the plant, which promotes health for employees who are encouraged to walk.

The hopes involved in each of these individual activities have led to the receipt of this award, and we take pride in being the department involved in the maintenance and management.



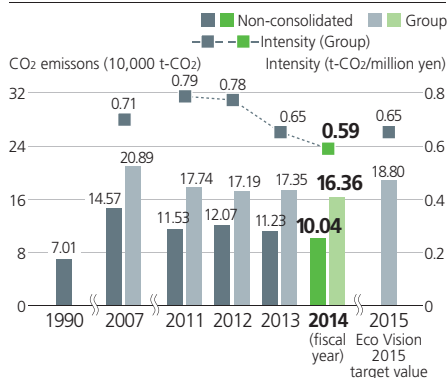
Environment Group

Miyanojo
Nittoku Alpha Service Co., Ltd.

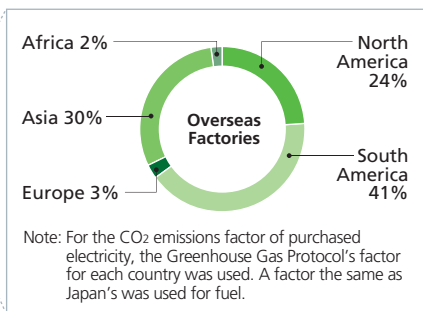
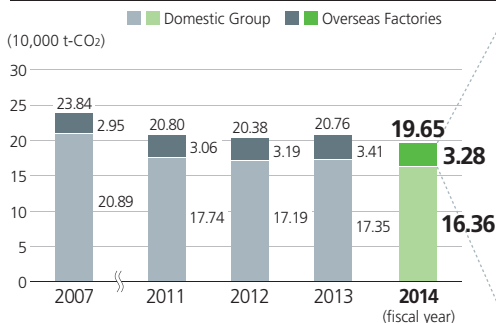
Meeting Our Target for Reducing CO₂ Emissions

In fiscal 2014, our CO₂ emissions was 163,600 tons, meeting our fiscal 2014 target of 175,000 tons and also lower than in fiscal 2013. In addition, intensity of emissions improved by 17% compared with fiscal 2007. The target was attained through energy transformation in the manufacturing process, updating of facilities (for energy efficiency), achieving an energy-savings effect by revising our manufacturing conditions, and transferring processes to affiliated companies.

Trend of Emission Volume of Energy-Origin CO₂ (Offices and Plants)



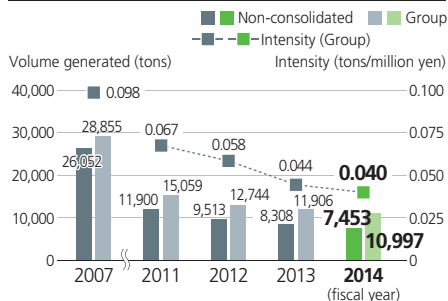
Trend in CO₂ Emissions (Group companies in Japan and overseas manufacturing and sales subsidiaries)



Trends in Waste Generated

In fiscal 2014, the waste intensity was 0.040 tons/million yen. By reducing the amount of ceramic sludge produced in our manufacturing process and increasing the manufacturing process yield, we have lowered the waste intensity 59% compared with the fiscal 2007 level.

Trends in Volume of Waste Generated



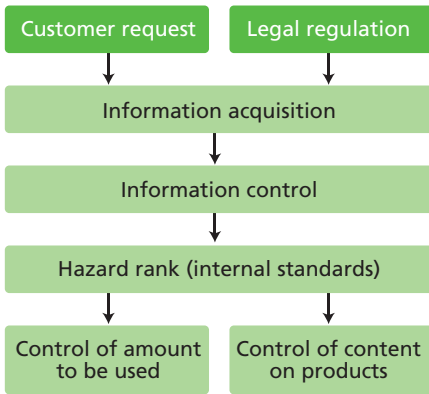


For Environmental Protection

■ Soundly managing chemicals to comply with the international regulations of different countries

To satisfy customer requests and regulations such as the ELV Directive, RoHS Directive and REACH Regulation of the EU, we assign hazard ranks to substances of environmental concern. With handling standards for each rank, we carefully manage non-containment and reduce their use.

Management System



Masanori Nishi
Electronic Component
Engineering Dept.

Voice of Our Controls Organizer

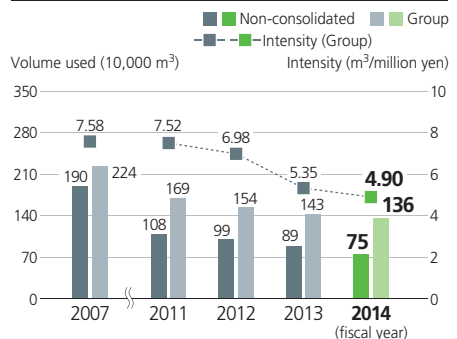
We strive for thorough management of chemical substances

Amidst progressing globalization, requests from customers relating to regulation of substances of environmental concern are increasing every year. In order to provide customers with even safer products, we strive for thorough management of the chemical substances in all the products we handle and compliance with laws and regulations in partnership with the Environment and Safety Management Dept.

■ Reducing the Amounts of Tap and Well Water Used

In fiscal 2014, the water use intensity was 4.90 m³/million yen. Water use intensity improved by 35% compared with fiscal 2007 due to conserving water by changing manufacturing conditions and upgrading and updating to equipment with a high water-savings effect.

Trends in Volume of Tap Water/Well Water Used



■ Developing Environmentally Friendly Products

Hexagon Socket Machining Tools that Last Longer and Conserve Resources Shaper Duo



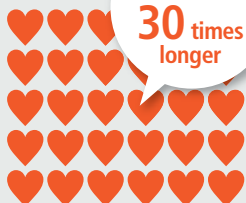
Shaper Duo has been accredited as an environmentally-friendly product by the Japan Cutting & Wear-resistant Tool Association for conserving resources and energy.

Conserving Resources

Comparative lifespan of tools



Carbide tool
(conventional product)



Shaper Duo

Cutting tools for hexagonal socket machining of male screw heads on a lathe need to be durable. Shaper Duo contributes to reducing the volume of tool waste as it can last approximately 30 times longer than the conventional carbide tools in which the cutting blade is integrated with the holder.

Conserving Energy

Shaper Duo does not only have the advantage of conserving resources. The hexagonal socket machining of male screw heads, which was previously carried out through separate processes, can now be performed continuously immediately after processing of the shaft with a small automatic lathe.

This makes it possible to integrate the processes, thus contributing to conservation of energy in production.