

Aiming to Create Eco-Factories

Lowering the environmental impact of manufacturing activities is a major objective at Sanden. Our factories have been taking actions to prevent pollution for many years. Following the receipt of ISO 14001 certification, we started building an environmental management system in 1997 to support an aggressive environmental protection program. Since then, this system has been expanded to include Group companies in Japan and other countries. Currently, 32 Sanden manufacturing sites have earned ISO 14001 certification, representing every Group factory except recently completed facilities.

There are three major environmental themes at Group factories: lowering energy consumption to prevent global warming; reducing the volume of waste materials to contribute to growth in the recycling of resources; and eliminating the use of hazardous substances.

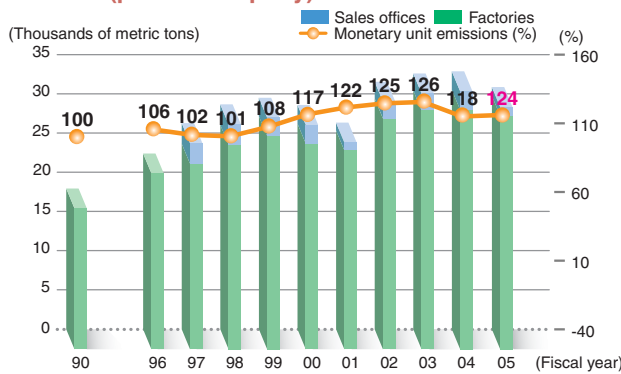
Activities to Conserve Energy Used for Manufacturing

Sanden uses its exclusive QFDE (quality function deployment for environment) system, which is part of the product development process, in its production activities as well. QFDE can identify every possible loss and contribute to improvements in TPM and other aspects of manufacturing.

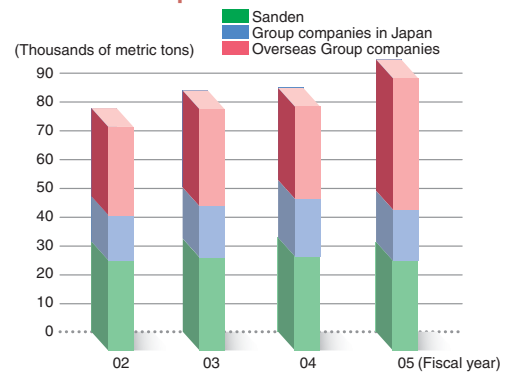
Sanden's energy consumption in unit terms is now lower than it was in

1998. However, energy consumption is higher in absolute terms due to the reduction of outsourced production, realignment of Group businesses and other actions to strengthen operations. We plan to use MFCA, which was adopted in fiscal 2005, and other new methods to step up efforts to conserve energy.

Sanden (parent company) CO₂ Emissions

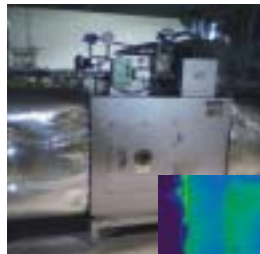


Sanden Group CO₂ Emissions

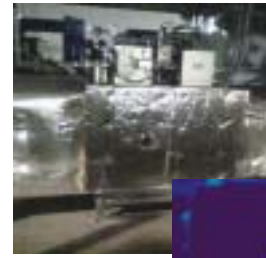
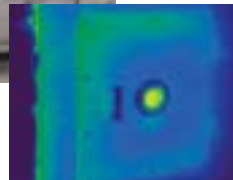


Accomplishments in Fiscal 2005

Sanden uses a large number of drying ovens and other equipment that generate heat. We evaluated the thermal insulation of this equipment and made improvements as required in each case. We then used thermometers to once again check for wasted heat. Using this information, we increased insulation along walls, pipes, and other locations that were allowing heat to escape. Furthermore, we checked and upgraded insulation at Group companies as part of improvement activities overseen by Sanden executives.



Before



After

35-60°C Reduced

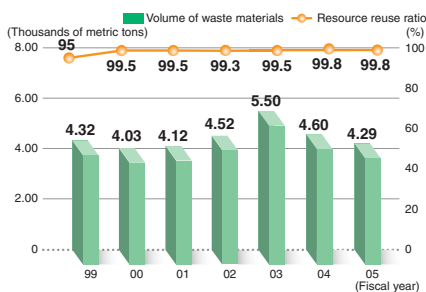


Initiatives to Reduce Manufacturing Waste Materials

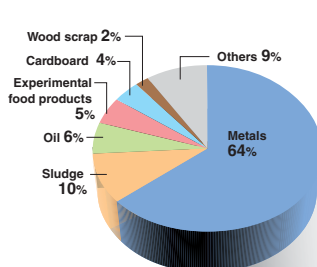
As part of our commitment to recycle resources, we conducted a campaign to eliminate waste materials sent to landfills. In 2000, all our business sites achieved zero-emission status (less than 1% of waste materials sent to landfills). Since then, we have been working on continuously lowering the remaining amount of materials sent to landfills. There have been a number of notable accomplishments: 1) Development of lighter products and research in new shapes for components in order to reduce waste materials generated by production processes; 2) Reduction in number of defective processed parts; 3) Reduction in packaging materials; and 4) Generating waste materials that can be recycled rather than merely incinerated to produce energy.

Group companies in Japan also conduct these activities. All major production bases have achieved zero-emission status and are constantly working on improvements. Reducing the volume of waste materials cuts our environmental impact and helps promote recycling. Another important benefit is cost savings. Consequently, the zero-emission drive is one of our most important corporate initiatives. The Yattajima Plant has been working continuously on this theme since making its zero-emission declaration in 2000, reduced to half for waste treatment expenses since then. Separating all waste materials into categories for recycling and reuse helped make this possible. The plant also works with waste treatment contractors to identify waste materials that have monetary value, a program that is steadily yielding benefits.

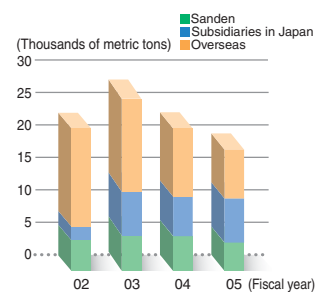
Resource Reuse Ratio and Total Waste Material Volume at Factories



Fiscal 2005 Composition of Factory Waste Materials



Fiscal 2005 Sanden Group Waste Material Volume



Management of Chemicals

Sanden uses a centralized management system to handle all data concerning chemicals used for business activities. This system allows us to monitor consumption and emissions of chemicals with greater accuracy. We can also strengthen our chemical management activities. Another

advantage is the ability to allow any employee to view data on the safety of specific chemicals and applicable regulations in Japan and overseas. Since employees are more aware of risks associated with chemicals, we can better protect the environment and prevent accidents.

Fiscal 2005 PRTR Data (List of chemicals with production or use amounts exceeding five tons per year)

(Metric tons)

Chemical	Amount Handled	Amount Released				Amount Transferred			Amount Eliminated Through Processing	Amount Recycled
		Air	Water	Soil	Total Amount Released	Off-site	Sewerage	Total Amount Transferred		
Dichloromethane	153.4	140.7	0.0	0.0	140.7	12.7	0.0	12.7	0.0	0.0
1,1-dichloro-1-fluoroethane (HCFC-141b)	18.8	6.8	0.0	0.0	6.8	12.0	0.0	12.0	0.0	0.0
Xylene	20.7	18.2	0.0	0.0	18.2	2.5	0.0	2.5	0.0	0.0
Chlorodifluoromethane (HCFC-22)	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.0
Toluene	6.4	4.0	0.0	0.0	4.0	2.4	0.0	2.4	0.0	0.0
Total	199.4	169.7	0.0	0.0	169.7	29.7	0.0	29.7	0.0	0.0

Countermeasures for PRTR Regulation

In 1999, Japan's Pollutant Release and Transfer Register (PRTR) was created through the Law Concerning Reporting, etc., of Release of Specific Chemical Substances to the Environment

and Promotion of Improvement of Their Management. Sanden submits PRTR data reports.

Reducing Environmental Risks

Sanden is committed to reducing environmental risks as part of efforts to prevent environmental accidents due to oil and other chemical substances. Initiatives include the identification of substances, equipment, and machinery with the potential to cause air, water, or soil pollution as a result of leakage during transport, storage, or use, the implementation of strict day-to-day control of

such items, and the introduction of monitoring instruments. To prevent environmental pollution should an accident occur, the Company has created an *Emergency Response Manual*, keeps sandbags and oil mats on hand, and conducts emergency drills.

In fiscal 2006, there were no environmental accidents or violations.

Reducing Environmental Impact via Logistics

Sanden is actively working to reduce environmental impact by making logistics operations more efficient. For instance, we are working to reduce transport distance by revising distribution routes, reduce the number of vehicles used by increasing load ratios, promoting a modal shift in transport, and developing a maintenance and co-delivery business. In addition, the Logistics Department is focusing on reducing, reusing, and recycling packaging materials by simplifying packaging specifications, using returnable containers for packaging materials, reusing pallets, and promoting the use of highly recyclable packaging materials.

With regard to chemical management for products in use, we collect CFC gas from our vending machines and showcases.

Modal Shift

Sanden is actively promoting a modal shift in transport to reduce environmental impact and enhance logistics efficiency.

We have increased logistics efficiency through such measures as using marine transport to ship products from Niigata to our distribution center in Otaru, Hokkaido, and rail transport to ship products from Niiza to Kumamoto for delivery to customers in Kyushu. In fiscal 2005, Sanden's CO₂ emissions from marine transport amounted to 363 metric tons and CO₂ emissions from rail transport totaled 242 metric tons.

In addition, Sanden Logistics has earned ISO 14001 certification and is working to conduct its activities in an environment-friendly manner. Going forward, we will continue to promote a modal shift to forms of transport with a relatively low impact on the environment.

Freon Gas Recovery

Sanden offers removal and disposal services for vending machines and showcases that are no longer needed when customers switch to new models and has proactively addressed environmental issues concerning Freon gas since 1997 when voluntary recovery guidelines were established via Freon gas regulations.

Sanden has freon recovery equipment at its distribution sites throughout Japan, actively trains recovery technicians, and encourages customers to use Freon recovery services. In addition, the Company has participated in the establishment of a Freon recovery organization in Kanagawa Prefecture as an industry representative and led the industry in promoting Freon recovery education.

In fiscal 1999, Sanden began offering chlorofluorocarbon (CFC, Freon-12) and hydrochlorofluorocarbon (HCFC, Freon-22) recovery service, expanding this service to include hydrofluorocarbon (HFC, Freon-134a) in 1999.

We recovered the following amounts of chemicals during fiscal 2005.

CFC gas

By refrigerant type	Amount recovered	Amount destroyed	Amount reused	Amount stored
CFC	111.99	59.07		52.92
HCFC	589.27	403.03	123.4	62.84
HFC	160.11	137.87		22.24
TOTAL	861.37	599.97	123.4	138