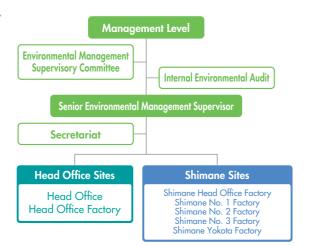
# Environmental Management System Promotion Organization Structure, Materials Flow, Environmental Goals and Achievements

# **Environmental Management** System Promotion **Organization Structure**

Hoshizaki has established a framework for all departments in all factories to participate in environmental improvement activities. Based on our overall goals, we have set improvement goals for the medium-term three-year period across all sites and at each department level, and are moving forward with improvement activities each year by formulating two-month implementation plans that clarify specific measures.



### **Materials Flow**

Procurement

Manufacturing

Shipping

Use

#### INPUT ·····>

Raw Material Inputs

Metal Materials Plastic Materials Polyurethane Raw Materials 1.531t

**Energy Consumption** 

Electric Power 16,054,000kWh Other (crude oil equivalent) 1,021kL

#### Water Consumption

Tap Water 50,000m<sup>3</sup> Industrial Water 20,000m<sup>3</sup> Groundwater 59,000m<sup>3</sup>

Chemical Substance Consumption Refrigerant Fluorocarbons HFC 57.0t

Foam CFCs 1.3t Cyclopentane 75.6t Dichloromethane 12.8t 12.7t Gas for Processing

Paper Consumption

Packing Material Consumption Wood Cardboard 1,274t Plastic 304t

#### OUTPUT

Emissions of Gas into Atmosphere CO<sub>2</sub> from Energy 10,492t NOx Okg Product Sox Okg Development

Drainage Volume

Sewer Drainage 23,000m<sup>3</sup> Public Water Zone Drainage 106,000m<sup>3</sup>

**Chemical Emissions** 

Refrigerant CFCs Foam CFCs Ot Dichloromethane 12.8t

Waste Emissions

Waste: Recycling 2,891t Waste: Landfill/Incineration 10t

Transportation Volume Transportation Volume 21,740,000 ton-km

## **Environmental Goals and Results**

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	FY2020 Goals	Results	Comments	FY2021 Goals
Energy Conservation	Energy Consumption Rate 7% Reduction Compared to FY2013	×	Due to the impact of the spread of COVID-19, we were unable to achieve our goals as a result of a significant decrease in figures for revenue and added value.	Energy Consumption Rate 2.8% Reduction Compared to FY2013
Suppressing Waste Generation	Metal Work Scrap Yield Rate 3.7~7.5 Point Improvement Compared to FY2008 4.5 Point Improvement Compared to FY2013 0.034 Point Improvement Compared to FY2016 (Goal Values Set by Each Department)	•	By product group, we were unable to achieve goals due to the large fall (in revenue) of mainstay products with high yield rates.	Metal Work Scrap Yield Rate Goal Values Set for Each Department and Process
	Plastic Material Work Scrap Yield Rate 6.0~18.0 Point Improvement Compared to FY2008 (Goal Values Set by Each Department)	X		Plastic Material Work Scrap Yield Rate Goal Values Set by Each Department
	Defective Product Incidence Control Goal Values Set According to Each Department, Incidence Process, and Incidence Cause	<b>^</b>	Despite the introduction of predictive maintenance and a buildup of small improvements, some departments were unable to achieve their goals due to defects caused by changes to materials, etc.	Defective Product Incidence Control Goal Values Set According to Each Department, Incidence Process, and Incidence Cause
Transport Load Reductions	Loading Size (Loading Rate) Improvement 0.1~0.3 Point Improvement Compared to FY2019 (Goal Values Set by Each Site)	×	Shipment volumes decreased, so the loading volume per vehicle for transportation also decreased, and we were not able to achieve our goals.	Loading Size (Loading Rate) Improvement Goal Values Set for Each Site
CFCs	For Foam : Switch to Low-GWP* Foaming Agents in Some Products For Refrigerants: Research Aimed at Changing to Low-GWP* Refrigerants	0	[For Foam] Implementation complete. [For Refrigerants] Implementation complete.	Research Aimed at Changing to Low-GWP* Refrigerants
Product Development	Further Energy Savings in Showcases and Rapid Chillers		We were able to achieve further energy savings by optimizing the cooling units to improve the heat insulation performance of the main units in our showcases, and also by adopting inverter compressors in our rapid chillers.	Set Goals Including Model Changes to Top-Runner-Compatible Products
Zero-Emissions (Recycling Rate of 99% or More)	Achievement of Zero Emissions (Recycling Rate of 99.0% or More at Each Site)	0	Both the Head Office site and the Shimane site were able to achieve a recycling rate of 99.0% or greater.	Achievement of Zero Emissions (Recycling Rate of 99.0% or More at Each Site)
Natural Environment Conservation	Cooperation and Participation in Hoshizaki Green Foundation Conservation Activities	0	We cooperated with Hoshizaki Green Foundation conservation activities.	Cooperation and Participation in Hoshizaki Green Foundation Conservation Activities

\*Low global warming potential (GWP). The GWP is a number that shows how much warming potential a greenhouse gas has relative to carbon dioxide.

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