



MURATA MACHINERY, LTD.

# MURATEC CSR Report 2014

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# **Editorial Goals**

In this Muratec CSR Report 2014, we describe our ways of thinking about and approaches to fulfilling our social responsibilities at Murata Machinery, as well as our efforts and the results related to them. The information shared covers all our corporate business divisions.

This Muratec CSR Report is published in order to inform our stakeholders, such as the global environment, our customers, our business partners, our employees and local communities of our social and environmental efforts and results.

In editing this report, our objectives have been to achieve "concrete explanations that are easy to understand" and "page layouts that are easy to read." In our explanations of each effort, we have also paid attention to presenting not only results but also the backgrounds and processes behind them. Furthermore, we have established key performance indicators (KPIs) for important items.

#### Scope of the report

Our company undertakes the development, manufacture and sales of textile machinery, logistics systems and factory automation systems, automated material handling systems (AMHS) for clean rooms, machine tools and communication equipment. This report covers our CSR efforts related to these business areas.

#### Organizations covered

In this report, we cover our main business places in Japan, as listed below. We have also included information about some of the activities of affiliated companies.

- Murata Machinery, Ltd.
   Head Office (Kyoto), Inuyama Factory, Ise Factory
- Period covered

As a rule, this report covers activities conducted in the 2013 fiscal year (April 1, 2013 to March 31, 2014). However, information about some activities that have continued from before this period, as well as activities that occurred closer to the date of publication have also been included.

Publication date

June 2014: Made public on our corporate website (June 2015: Next scheduled publication date)

Reference guidelines

GRI Sustainability Reporting Guidelines (G3.1)

#### Publishing division (contact for inquiries)

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# Company overview

Company name	Murata Machinery, Ltd.
Representative	President & CEO Daisuke Murata
Established	July 1935
Capital	¥900 million
Business activities	Manufacture and sales of textile machinery logistics systems and factory automation systems, AMHS for clean rooms, machine tools and communication equipment

### Business areas

Murata Machinery is a comprehensive manufacturer of factory and office automation products. We seek to satisfy our customers and promote the realization of a more affluent society by constantly creating new technologies and providing products and services that are ever better. We are focused on the five main areas of textile machinery, logistics systems and factory automation systems, AMHS for clean rooms, machine tools and communication equipment. In these, we exercise our technological expertise to develop a wide variety of products. Our efforts have even earned high evaluations internationally.

#### **Textile Machinery Division**

The roots of Murata Machinery are in textile equipment. From spinning machines to the construction and optimization of production systems, we provide comprehensive support for the fashion industry.

Main products Textile machinery including VORTEX spinning machines, automatic winders and two-for-one twisters for industrial yarn

Communication Equipment Division We make communication faster and broader. Advanced information transmission abilities strengthen business networks. Main products Digital multifunctional office equipment, facsimile machines, information server kit service

for multifunction products and GriDRIVE

# **M**uratec



Machine Tools Division Our high-performance mother machine (machine-making machinery) is changing the efficiency and quality of manufacturing. Main products Turning machines and sheet metal machinery





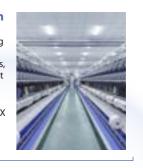
**—** 01

Number of employees

Net sales (non-consolidated) (consolidated group)

Head Office

3,000 (6,300 in group) (as of April 2014) ¥177.9 billion ¥218.9 billion (for March 2014 accounting period) 136 Takeda Mukaishiro-cho, Fushimi-ku, Kyoto 612-8686 Japan







We provide total solutions for logistics and factory automation using engineering technologies that combine unmanned conveyance systems and automatic storage.

Main products

Logistics centers, automated storage & retrieval systems (AS/RS), transportation systems, picking systems, sorting systems and data management systems

#### **Clean FA Division**

We support the production of semiconductors and flat-panel displays, including LCD televisions. Main products

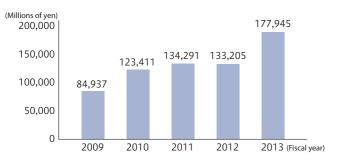
AMHS for semiconductor factories,

AMHS for flat-panel display factories and material control systems (conveyance control and management systems)

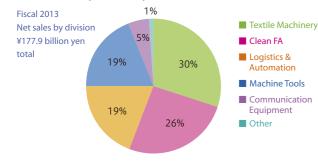


# Business results

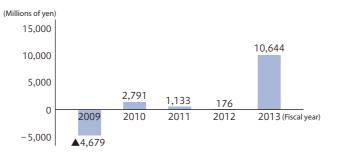
#### Net sales record (non-consolidated)



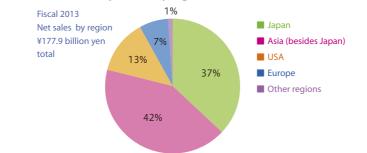
Net sales composition by division (non-consolidated)



#### Operating profit record (non-consolidated)



Net sales composition by region (non-consolidated)



# **Global network**

We want to improve the lives of people around the world through the creation of products. At Murata Machinery, we seek opportunities to do this and expand our business across the globe.





HEAD OFFICE (KYOTO)







MURATA DO BRASIL



Muratec is a machinery manufacturer which assists in customers' value creation with its wide-ranging machinery, from industrial machines to communication equipment. Based on the philosophy"Let machines do what machines can do and let humans do what only humans can do," Muratec has long provided its customers with "human-friendly technologies." Through our high expertise, solid technological capabilities, and innovation, we have translated this philosophy into products and services which respond to the needs of the times and society, thereby establishing ourselves in the area of industrial automation and labor saving. The activities that we have long engaged in show how we can contribute to society with products and services in our main business areas; namely how we can fulfill our corporate social responsibility (CSR).

In FY 2013, thanks to various economic measures taken by the new government, the protracted appreciation of the yen was corrected and business began to show signs of recovery from the persistent mood of economic slowdown. Although considerably affected by the severe business environment lasting until last year, Muratec has finally regained its usual pace. Now that our Five-Year Plan aimed at achieving three objectives—guality, innovation, and internationalization has come to the halfway point, we are seeking to drastically restructure our existing businesses and products, focuses and methods of our technological development, means of procurement and production, as well as ways of managing our organization and human resources, so that we will be better able to obtain and maintain our competitive edge. We are determined to continue accelerating our organizational evolution through change and creation in the years to come.

Any organization has its core values. Muratec's most important core value is creating new technologies (innovation), as indicated at the outset of our corporate philosophy. Our top priority is to seek customer satisfaction by providing "meaningful products that enrich the lives of our customers." Toward that goal, we make all possible efforts beyond industry practice, in all our workplaces that create, deliver, and maintain technologies and machines, as well as in all the processes that support these activities. Meanwhile, alignment with globally shared values and standards will be increasingly important when we operate in the international community. Based on these values and standards, we will materialize our organizational ideals by ensuring consistency between the former and latter parts of our corporate philosophy, that is, by constantly checking if we are taking appropriate means to accomplish our goals.

What does Muratec have to do if it is to "remain a company needed by society"? First, we must stay focused on the main business of helping our customers develop products in ways that create value. At the same time, we should listen to expectation from society, tackle them as challenges, and disclose the results of our endeavors. By recording the history of our activities in an objective and visible way and using it for further improvement, we hope to deepen a relationship of trust with our customers and other stakeholders, thereby contributing to the creation of an even more affluent society.

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# To Remain a Company Needed by Society

Muratec will promote CSR activities by conducting its businesses in line with its corporate philosophy.

> Murata Machinery, Ltd. President & C F O

Dawn Muna

# Protecting packages from quake Feature

The development of earthquake-resistant automatic storage and the challenge to stimulate the proliferation of the anti-earthquake technology



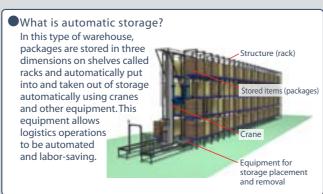
# Thinking about product creation with our customers

After the Great East Japan Earthquake Disaster, the falling of packages stored in automatic storage and the impact of this on its restoration became a focus of attention. In response to this, we launched a project to strengthen countermeasures against earthquakes for automatic storage. Our mission was to to develop automatic storage that could securely protect packages even during earthquakes and its widespread recognition throughout society. In this section, we will introduce the efforts of the engineers who took on these challenges along with comments from some of those involved.

In front of the seismically isolated automated warehouse at the Shin-Nagoya Plant of Rengo Co., Ltd. Mr. Koji Ibi of Rengo Co., Ltd. Packaging Engineering (left) and Norifumi Hamamoto of the Murata Machinery Logistics & Automation Division Engineering Department (right)

# Earthquake countermeasures to protect customer packages that are easy to install

The Great East Japan Earthquake Disaster occurred on March 11, 2011. Immediately afterwards, our Logistics & Automation Division received requests from customers using our automated storage systems. "Many items stored in our warehouse fell, so we want you to help us with recovery efforts." Even though almost all customer facilities were restored within a month of the disaster, we continued to receive numerous inquiries from customers. "Can you protect our existing warehouses from earthquakes?" "Is there any automatic storage that is earthquake-resistant?" Our company has been rapidly advancing earthquake countermeasures for automatic storage since the Great Hanshin Awaji Earthquake Disaster, which occurred in 1995. Fortunately, no major structural damage occurred to automatic storage in either disaster. However, the problem of stored packages falling from automatic storage has become apparent since the Great Hanshin Awaji Earthquake Disaster. Particularly after the "3.11" earthquake, which was characterized by swaying that continued for a long time, this issue has received even more attention. Mr. Yanai, Senior Manager of Logistics & Automation Division Engineering Department described the circumstances of that time. "At the time of the disaster, our systems caused great trouble to our customers because fallen packages obstructed restoration work. We became painfully aware of the need to develop earthquake countermeasures based on going back to the original functions of automatic storage, 'Secure Storage.' For this reason, we started a project to strengthen earthquake countermeasures for automatic storage so that packages would not be allowed to fall even if swaying occurred."



# Proposing optimal solutions according to customer needs

"We put our hearts most into being able to offer a range of solutions so that with a quick look our customers could easily select optimal choices according to their needs." Manager Fukuda, Head of the Architectural Section, who was responsible for development, reflected on it this way. "Our company has continued to advance technologies and gain practical experience for earthquake countermeasures for over a decade. However, issues existed with seismically isolated automatic storage, which is a primary measure. For example, since it is constructed with seismically isolated equipment installed between the floor of the building and its structure, it has higher construction costs than ordinary automatic storage and its application to existing automatic storage was also difficult.<sup>4</sup>



Since we needed to resolve these issues, we developed new equipment to prevent stored packages from falling in June 2011. These were a "vibration control stopper" and a "vibration control damper." Mr. Hamamoto, who was in charge of the development, describes the beginning of development as follows. "We undertook development with the idea

that we wanted to create products that could easily be added to existing automatic storage.

We struggled at the beginning of development because we were not able to achieve performance as we wanted, but in the end we were able to create products that met our expectations." With seismically isolated automatic storage as well, by increasing countermeasures for high-level automatic storage, which had not been in our product lineup before, we have become able to offer solutions to customers in an even wider range of industry segments.

# Vibration analysis with high-reliability and cooperative implementation of experiments

While we were developing these new products, we "established vibration analysis techniques" and "cooperatively implemented shaking experiments." Mr. Shigehara, who was in charge of development, says the following. "The expected earthquake intensities and the packages that customers would like to protect vary according to their needs. For this reason, we developed



# Customer voices

Rengo Co., Ltd. manufactures and sells cardboard and other packaging products and packaging-related equipment. At their Shin-Nagoya Plant, which was built in January 2014, they have incorporated seismically isolated automated warehouse that we designed and engineered. We spoke to Mr. Ibi, who was in charge of incorporating production equipment in the plant, from their Packaging Engineering.

Koji Ibi (left in the photo on the page to the left) General Manager Development Section 2 Engineering Development Packaging Engineering RENGO CO., LTD

In a cardboard factory, in which the period from production to supply is short, we need to realize manufacturing with greater production efficiency using automatic storage, so we advanced construction of our Shin-Nagoya Plant with "logistics innovation" as the theme. In the middle of this project, though, the 3.11 disaster occurred. We were face to face with the disruption of supply chains due to the disaster. At this point, we needed to make a factory that could securely protect products and allow them to be delivered to customers on time even if a large-scale disaster occurs, so we decided to adopt automatic storage equipped with seismically isolated technology.

In order to prevent packages from falling, Murata Machinery undertook detailed analyses and conducted severe shaking tests with real stored goods and packaging for us. As a result, we were able to confirm with our own eyes that packages would not fall even if the most intense earthquake anticipated should occur at the planned construction location. This gave us a great sense of security. The automation and mechanization of facilities are fulfilling important roles in manufacturing workplaces. We have engraved in our hearts the idea that we should never be late on delivery due to our own equipment issues. This does not change even during emergencies. We will continue to have high expectations for Murata Machinery as a partner for its capabilities in engineering and proposing solutions for ensuring secure logistics.

techniques to simulate the seismic waves that are actually anticipated based on the results of foundation investigation where each customer plans to build warehouses on and the locations of faults within the area. We propose analytical results that are as close as possible to actual shaking." Furthermore, we bring those analytical results to our company testing facility and simulate the action of an earthquake using the customer's packages. Customers can verify with their own eyes that the packages do not fall. According to Mr. Shigehara, "During joint testing, there is a sense of tension because we are expected to respond immediately to any requests or enquiry from customers at the site. However, more than anything else, a feeling of making something together is fostered, which is good."



# Protecting supply chains after earthquake disasters

We listened to their challenges to coming issues from the developer's perspective. "We were able to advance development smoothly thanks to the cooperation of numerous people both inside and outside the company. With the continued close cooperation of others inside and outside the company, I hope we can widespread automatic storage that is resistant to earthquakes as much as possible in the future by, for example, pursuing making installation even easier." (Hamamoto) "I was so fortunate that I could have so many opportunities to communicate directly with customers in this project, which was very inspiring. I want to listen to their opinions earnestly and apply them in future development." (Shigehara)



Rengo Co., Ltd. Seismically isolated automated warehouse at the Shin-Nagoya Plant

To continue functioning as an entity that serves the whole society

**Corporate Philosophy** 

We shall strive to expand the boudaries of technological advancement, provide meaningful products that enrich the lives of our customers, bring prosperity to each of our employees and lead society to a better tomorrow.

Our Social Responsibility

- Corporations are economic entities that pursue profits through fair competition. This definition, however, does not properly describe the significance of our existence. Our ultimate mission is not to pursue profits but to be of benefit to society at large.
- Our corporate philosophy expresses a strong belief and desire to achieve this mission. However, the causal link between corporate activity and social contribution presented in our corporate philosophy is not a law of nature or a self evident truth; it is just a hypothesis.
- Our social responsibility is to continually prove this hypothesis with all of the zeal and ability that we possess.

the latter our missions. Our two missions, namely "the happiness of our employees" and "affluent society," are inseparable. The happiness of each member enriches society. What makes people happy is a sense of contributing to the prosperity of society. The activities described in the earlier part of our Corporate Philosophy are a means of ensuring the prosperity of society. These are inseparable from our mission. We must note, therefore, that the end does not always justify the means. Neither is there any guarantee that the right means will invariably lead to the

We must continually monitor ourselves to ensure that our mission is achieved by the right means and our means serves its purpose. In other words, our social responsibility is constantly to make sure that the former part of our Corporate Philosophy is properly in line with its latter part.



# Muratec Code of Conduct

#### Products and services

We will develop and offer products and services useful to society, with sufficient care to safety and the protection of personal information.

### **Business transactions**

We will respect the rights of our Company as well as that of other companies including intellectual property rights, and engage in fair, transparent, and free competition and due transactions. Moreover, we will maintain sound and normal relations with political bodies and governmental organizations.

#### Information disclosure

3

We will engage in broad communication with society and disclose our corporate information in a timely and appropriate manner.

# Personnel, labor management and workplace environment

We will respect our employees' diversity, character, and individuality and secure a safe and employee-friendly workplace environment.

#### Environmental issues

We will actively engage in environmental issues in our corporate activities as well as through our products and services.

- The former part of our Corporate Philosophy describes our means and

  - accomplishment of our mission.

What makes MURATEC's corporate activities possible is the relationship of trust between its various stakeholders—customers, suppliers and vendors, employees and their families, global environment, and local communities—as well as

In order to continue functioning as an entity trusted and needed by all our stakeholders, we will endeavor to justify their confidence in us, expectations and requests from society through our corporate activities.

#### Social contribution activities

We will actively engage in social contribution activities as a "good corporate citizen."

No connections to anti-social elements

We will not engage in activities that benefit anti-social groups and organization that may threaten the order and safety of civil society.

# CSR management

# CSR activity objectives, themes and fiscal 2014 targets

"Be an entity that is trusted and needed by the society." This is our ideal about the way that we should be. Through efforts that are based on our corporate philosophy, we contribute to solving the problems of society by continuing to earn the confidence and fulfill the expectations and requests of our stakeholders.

Stakeholders	CSR activity objectives	CSR activity themes	CSR activity targets for fis
		Operation of environmental management systems	Based on ISO 14001, maintain environmental management systems and on the systems and on the systems are systems.
Global environment	In our business activities, we use many resources as parts and materials. Moreover, in product development and production processes we primarily use electricity as an energy source. Based in our awareness of these conditions, we are working actively to preserve the global environment through both our business activities and the products and services that we provide.	Reduce environmental impacts of business activities	<ul> <li>Reduce amount of CO<sub>2</sub> emitted per base unit by 15% compared to fiscal 2</li> <li>Reduce amount of water resource use per base unit by 5% compared to f</li> <li>Reduce total amount of waste emissions per base unit by 5% compared t</li> <li>Reduce amount of VOC emitted to the atmosphere per base unit by 10%</li> </ul>
		Develop and offer products that are better for the environment	Develop and offer products that are considerate of the environment
Customers	From industrial machinery to communication equipment, we create and deliver products and services that help our customers with value creation. Our customers are active primarily in the following business fields.	Maintain quality management systems	Based on ISO 9001, maintain quality management systems and endeavor
	<ul> <li>Industrial machinery (a variety of fields including textiles, distribution and logistics, medical products, food products, semiconductors and automobiles)</li> </ul>	Strengthen our quality culture	Continuously implement education related to strengthening our quality
Here .	<ul> <li>Communication equipment and network solutions (business office and SOHO, industrial equipment and medical equipment fields)</li> </ul>	Increase customer satisfaction	Develop and offer products that contribute to resolution of social issues
Suppliers and vendors	Based in the awareness that our business is achieved through the cooperation and support of our business partners, we are making thorough	Dedication to transparent and fair transactions	Continuously implement education related to transparent and fair transa
	efforts to ensure fair, transparent and free competition as well as reasonable transactions, and we are establishing relationships that enable coexistence and mutual prosperity.	CSR Promotion in the supply chain (consideration for human rights, labor practices and the environment)	Check status of efforts for CSR at our business partners
		Development and making use of the talents and abilities	<ul> <li>Through improvements to our company organization and culture, impler competitiveness</li> <li>Ensure corporatewide use of employee performance and evaluation feed (determine rate of feedback implementation)</li> <li>Continuously implement a variety of programs for the cultivation of glob</li> </ul>
Employees	Including our group businesses, our family of employees consists of about 6,300 people. Of these approximately 25% were employed outside of Japan	Support diverse ways of working	<ul> <li>Increased number of female managers</li> <li>Strengthen efforts to utilize seniors</li> </ul>
	in fiscal 2013. We believe that diversity in both personnel and ways of working is a positive characteristic, and we are promoting on a global scale the building of work environments that contribute to the creative and	Promote work-life balance	Maintain working hours suitably for work performance
	competitive capabilities of our businesses.	Ensure occupational safety and health	<ul> <li>Implement countermeasures to prevent the recurrence of occupational a (frequency of occupational accidents leading to absence)</li> <li>Main safety in manufacturing-related work areas (determine rate of compliance through environmental, occupational heat Maintain and promote employee health (utilize ratio of employees with heat Reduce number of traffic accidents</li> </ul>
Local communities	We have bases in 38 locations in 18 countries. As a good corporate citizen, we will contribute to the healthy and sustainable development of society by deepening communication with the members of local communities and supporting a variety of activities.	Support the development of the next generation through our business	Cooperate in activities conducted jointly by industry, government and ac product creation
		Efforts to promote culture, education and sports through communication	Continuously undertake support activities for the promotion of culture, e
Corporate governance		Maintain ethical standards	Continuously implement education related to compliance and information
	In order to continue to be a company that is trusted by society, we are striving to enhance our corporate governance systems and increase transparency and efficacy in our management.	Strengthen risk management systems	<ul> <li>Specify key business partners and evaluate quantitatively their business of</li> <li>Continuously implement education related to BCPs</li> <li>Specify important in-house data and backup that data in preparation for</li> </ul>

iscal 2014	Pages
d endeavor to improve environmental performance	
al 2010 level (by 2020)	
o fiscal 2010 level (by 2020)	P11-
d to fiscal 2010 level (by 2020)	P14
% compared to fiscal 2010 level (by 2020)	
or to improve quality	
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ealth and safety (EHS) daily audits)	
n health warning signs)	
academia and continuously implement classes about	P23-
education and sports	P24
tion security through e-learning, trainings by level, etc.	
s continuity plan (BCP) systems	P25— P26
or disasters and other risks	



# Reducing environmental impacts in Our business activities

At Murata Machinery, we are contributing to the realization of a sustainable society by innovating to provide products that are better for the environment and by reducing environmental impacts in our business activities.

# Our philosophy about efforts for the environment

Our business activities are expanding on a global scale, and we believe that contributing to the realization of a sustainable society from the perspective of preserving the global environment is a duty of our corporation. For this reason, as a manufacturer that supports product creation, we are fulfilling this duty in two ways-by providing products that have been made better for the environment through innovation and by reducing environmental impacts in our business activities.

Through these two areas of effort, we are working to promote harmony between our existence and the environment so that we can preserve this precious planet for the next generation. In these ways, we are carrying on the challenge to continue being a manufacturer that is needed by society.

- Create products that are good for the environment and energy conservation through innovation
  - Improve the environmental performance of products throughout their lifecycles
  - · Develop products that provide high performance in terms of both energy conservation and user-friendliness
  - Contribute to reducing the environmental impacts of society as a whole by providing and popularizing green products
- Reduce the environmental impacts of our business activities Make efforts continuously through the operation of environmental management systems



We have established an Environmental Philosophy and an Environmental Policy to codify our approaches to efforts for the environment. These statements are the foundations for all our environmental efforts.

# **Muratec Environmental Philosophy**

We recognize that issues related to resources and the environment are serious threats to the prosperity of society, and we are making dedicated efforts to resolve them through both the products that we make and the conduct of our business.

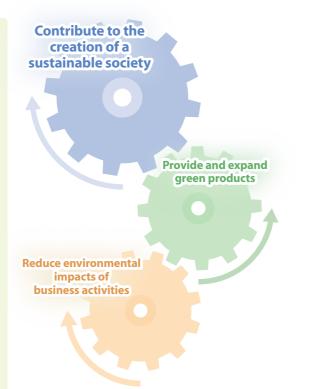
# **Environmental Policy**

We realize the principles and ideas of our Environmental Philosophy through action. To contribute to the realization of a sustainable society, we conduct environmental conservation on a global scale in accordance with the following environmental guidelines in all of our business fields from industrial machinery to communication equipment.

- 1. Reduce environmental impacts in business activities
- 2. Provide green products that are better for the environment

4. Set environmental goals and improve continuously 5. Disclose environmental information 6. Raise environmental awareness

3. Comply with laws and other requirements



Reducing environmental impacts in our business activities

# Efforts in our business activities

# Setting goals for environmental efforts

Goals to be pursued are necessary when undertaking efforts that are sustained over long periods of time. In addition, having ways to objectively look at the records of the efforts made to achieve them and showing the orientation of activities are important. Starting with fiscal 2010, which is when we established our current five-division structure, as our baseline, we have used

Objectives	Key performance indicators	Medium-Term Corporate Goal for 2020 (baseline year: fiscal 2010)	Base unit denominator (for normalized value)
Preventing global warming	CO <sub>2</sub> emissions (base unit)	15% reduction from 2010 baseline level by 2020	Head Office: Per unit of total person-day Inuyama/Ise Factory: Per unit of production value
Sustainable use of water resources Water use (base unit)		5% reduction from 2010 baseline level by 2020	Per unit of total person-day
Contributing to a recycling-oriented society	Waste generated (base unit)	5% reduction from 2010 baseline level by 2020	Head Office: Per unit of total person-day Inuyama/Ise Factory: Per unit of production value
Management of chemical risks at workplaces (Inuyama Factory)	Atmospheric emissions of volatile organic compounds (VOCs) (base unit)	10% reduction from 2010 baseline level by 2020	Inuyama Factory: per unit of production value

The "base unit" is an expression of the environmental impacts caused per unit of production value or employee activity.

# Material flow at Murata Machinery (Overall Picture of Environmental Impacts)

The following material flow chart is a graphic showing the environmental impacts resulting from our business activities as a flow of the inputs (the amounts of electric power and fuel energy) and the outputs (CO<sub>2</sub> emissions and the amount

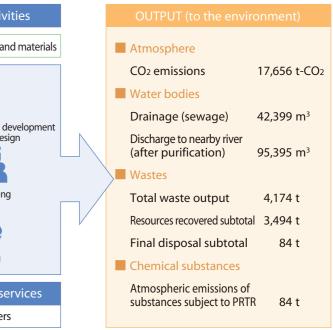
INPUT (of resources)	Business activ
INPUT (of resources)Energy2Electricity29,380,000 kWhFuel oil (type A)3749 klLPG809 tCity gas338,000 m3Kerosene69 klGasoline181 klLight oil27 klWater resourcesWater resourcesMunicipal water supply42,399 m3Groundwater495,395 m3	Procurement of parts a Procurement of parts a Planning, technological and product de Manufacturin Recycling Products and s
	To custome

The amount of input energy is a total of the energy used at our Head Office and Inuyama and Ise factories, exclusive of transport-related energy used in product shipping, sales, and maintenance. (However, the amount of fuel usage for the following purposes is included: work and conveyance vehicles within workplaces, company vehicles for uses other than those previously listed.)

<sup>3</sup> At our Inuyama Factory, we use fuel oil (type A) to generate our own power. We have our own electrical power facility that runs on fuel oil (type A) at our Inuyama factory. The amount of CO<sub>2</sub> emissions from the in-house power generation process is estimated based on the consumption of fuel oil (type A) during electricity generation <sup>4</sup> The water resources used at our Inuyama and Ise Factory includes both municipal water supply and groundwater. In aggregating the amount of water used, since it is difficult to directly determine the distribution and use conditions within each business place, the record of use has been estimated proportionally

numerical targets (using base units<sup>1</sup>) that are shared by the entire company to express how we want the company to become by the end of fiscal 2020. Within the implementation framework of our environmental management systems, we will execute efforts to achieve these goals, and promote the efficient use of energy and planetary resources from now on.

of waste) at every phase from product design to disposal. This allows us to grasp an overview of the relationships between our business activities and environmental impacts.

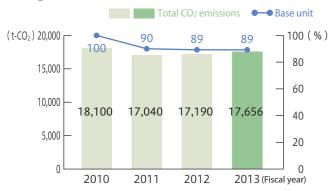


# Environmental impacts in business activities

#### Preventing global warming

Our total amount of CO<sub>2</sub> emissions from the use of electric power and fuel energy had been gradually trending down, but this has changed to a slight increase. In fiscal 2013, the amount of emissions increased slightly, by 3%, compared to the previous year. At our headquarters, the base unit improved. At our lse Factory, we recorded a 14% reduction in emissions compared to the previous fiscal year, and the base unit rate also improved significantly. The base unit rate for the entire company stayed at the same level as the previous fiscal year, but we kept the total emissions amount to a slight increase by improving the base unit with regards to the base unit denominator increase.

#### Change in amount of CO<sub>2</sub> emissions



#### Contributing to the realization of a recycling-oriented society

Our total amount of waste emissions, which had stayed at the same level until the previous fiscal year after an increase in fiscal 2011, recorded a significant increase in fiscal 2013. The total amount of waste emissions increased 16% compared to the previous fiscal year. An increase in total emissions (18% increase) at our Inuyama Factory, which accounts for about 90 percent of our total emissions, can be identified as a cause. At our Inuyama Factory, the amount of waste emissions increased temporarily compared to ordinary years due to the renewal of production equipment and new equipment. For the entire company, the base unit also increased 23 points compared to the previous year.

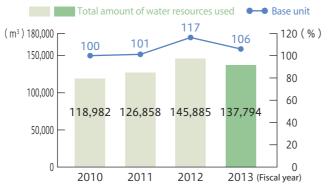
#### Change in total amount of waste generated



# Sustainable use of water resources

The total amount of water resources used had tended to increase in the previous fiscal year, but this became a decrease in fiscal 2013. For the entire company, we achieved a 10-point base unit improvement from the previous year. At our headquarters and our Inuyama Plant, we reduced our use of water resources. At our headquarters, in particular, we recorded a reduction of 25% compared to the previous fiscal year. In order to reach our target, we are advancing the inclusion of specific efforts for water conservation into the environmental management system activities of each business facilities.

#### Change in total amount of water resources used



#### Management of chemical risks at workplaces

At our Inuyama Factory, we use solvent coating processes, and we manage chemicals that are subject to the PRTR system<sup>1</sup> appropriately. We are working to reduce total emissions of volatile organic compounds (VOC) by switching to products that do not include PRTR-regulated substances and improving the efficiency of coating by adopting electrostatic spray coaters. We also installed a set of new coating supply pumps that require less amount of coating materials, and reduced the number of cleaning times for coating supply pumps due to changing colors.

#### Change in total amount of VOC emissions (Inuyama Factory)

Total amount of VOC emissions 

Base unit



<sup>1</sup> The Pollutant Release and Transfer Register (PRTR) system, which is based on the Japanese Law for PRTR and Promotion of Chemical Management, requires reporting the amounts of emission to the environment and transfer from business places of certain chemicals that might harm human health and ecosystems <sup>2</sup> The values of base unit for 2012 were corrected (before: 95, after: 102).

# **Efforts related to products**

In order to contribute to the realization of a sustainable society, we believe that popularizing products that consider the environment is important. For this reason, we are making efforts toward the realization of improved product environmental performance, primarily in the following fields.

- Promoting design that conserves energy
- Design that conserves energy (promoting the adoption of devices that conserve electric power)
- Conforming to standards for product energy conservation
- Promoting 3R design<sup>3</sup>
  - Recyclability of products at time of disposal
  - · Design that considers ease of disassembly
- Management of products that contain chemicals
- Appropriate management of products that contain chemicals
- Confirming compliance with the RoHS directive<sup>4</sup> and other chemical laws and regulations

<sup>3</sup> 3R design is an approach that considers reduction, reuse and recycling (of materials) in the design of products.

<sup>4</sup> The RoHS directive is a European Union (EU) directive that includes restrictions on the use of six specific harmful substances in electrical and electronic devices. It was put into effect in July 2006.

# Development of products that are better for the environment

#### QPRO automatic winder

The Textile Machinery Division's QPRO automatic winder is a textile machine that is responsible for the final process in spinning, which makes threads from raw cotton material. During development, the mechanical performance and

#### **TOPIC** The SKYRAV 3 automated overhead traveling vehicles receives a Good Design Award

The SKYRAV 3 automated overhead traveling vehicles, which began being sold by our Logistics & Automation Division in November 2013, received a fiscal 2013 Good Design Award from the Japan Institute of Design Promotion.

This product is an automated transportation vehicle that runs along rails attached to the ceiling, carrying necessary items to the places where they are needed. The prize was received due to high evaluations of the utilization of "wireless power transmission" and other green development concepts, as well as its novel design.

From the perspective of environmental consideration, we have realized an entire system that conserves energy.

Lithium ion batteries are installed in the vehicles themselves, and electricity is regenerated for reuse when the vehicle decelerates and descends. In addition, power loss is kept to a minimum by installing wireless power transmission equipment at only certain places along travel routes. Moreover, the wireless power transmission equipment makes a clean working environment possible by, for example, suppressing the amount of dust generated when power is supplied. Since the vehicles operate on batteries at all places along the travel routes except for the recharging areas, there is also more flexibility when installing the rails and installation has become easier. Compared to previous models, these vehicles themselves have transportation power that is up to 80% superior. This system contributes to conserving labor, energy and space for transportation between work processes in logistic centers, distribution centers and production factories.

environmental performance that were desired for the machinery as a whole were broken down into individual design elements. In addition, as we steadily achieved each target for individual development processes, we used a method for advancing design called "design review" (DR). As a result, we were able to achieve the elements considerate of the environment for the machinery as a whole. While achieving high productivity (high guality package), we were able to reduce the amount of electricity and compressed air consumed, as well as the amount of scrap thread waste generated during threading compared to the previous model. If the productivity of machinery can be increased, reducing the number of machines becomes possible, which also contributes to resource conservation.

# Developer comments

Textile Machinery Division AW **Engineering Section Manager** Takashi Nakagawa

We established high hurdles for each device, conducted design reviews and judged strictly whether or not functional criteria were met We believed that if these



could be cleared, we would also able to overcome issues with the machinery as a whole

Customer needs for energy-conserving products are increasing. From now on, we will continue to listen to the opinions of our customers, and develop machinery that "does what is expected as expected" and machinery with high added-value like the QPRO.





The SKYRAV 3 team that won the Good Design Award



# Together with our customers

At Murata Machinery, we seek to increase customer satisfaction by improving the quality of our products and services and by responding rapidly to quality issues.

# Our approach to quality

Through our business activities, we seek to contribute to the creation of a more affluent society by assisting in customers' value creation. In order to do this, we believe that considering the performance of products alone is not enough. Raising the level of "total quality that provides customer satisfaction," which includes "ease-of-use," "safety" and "serviceability," is very important. For this reason, we have established Muratec Quality Policy as our fundamental approach to quality, and we are striving to build a corporate culture that puts the highest priority on assuring safety and quality based on comprehensive quality control systems.

- Maintenance and improvement of quality control systems
- Efforts to strengthen our quality culture
- Strengthening recurrence prevention measures

# **Ouality Assurance Systems**

We have established a Quality Assurance Department that is independent from our business divisions and is led by the Operating Officer, General Manager of Quality Assurance Department. Moreover, in accordance with the ISO 9001, we are making efforts to build quality control systems for the manufacturing processes used in every business division and quality management systems (QMS).

In addition, we are striving to improve quality and respond quickly to quality issues by establishing a Quality Control Section in each business division and implementing the PDCA cycle for quality.

#### Risk assessments through design reviews

In each business division, we have established "design review implementation provisions," and we are conducting reviews (quality inspections) at every stage from product development and planning to design, prototyping, mass production and project inspection. During these reviews, risk assessments and environmental and safety assessments are required. We are undertaking such efforts to raise the levels of our products in terms of reliability, maintainability, safety and environmental consideration.

#### **Design review flow**



#### TOPIC **Product Creation Standards**

At our Manufacturing Department, we are seeking to establish Product Creation Standards throughout the company. The goal of this is to eliminate defects caused by things that cannot be depicted completely in drawings and that have unclear standards.

In the last fiscal year, we held presentations for our design managers as well as those who work for our partner companies, encouraging the clarification of standards in documents for determining acceptance and rejection and quality control requirement documents. As a result, the number of cases of defects caused by unclear standards has decreased greatly.



Presentation on Product Creation Standards

# **Muratec Quality Policy**

In adherence with our Corporate Philosophy, we improve the quality, quantity and speed of sharing, accumulating and retrieving information, thereby growing into a company that can learn both from successes and failures. Based on continuous improvement through learning, we will achieve excellence in terms of quality, cost, and delivery date of our products and services, thereby continuing to give satisfaction to and win support from our customers. In order to follow through with this policy, each department will set quality goals, and monitor their achievement status in the quality policy management process.

Together with our customers

# Efforts to strengthen our quality culture Opening of Quality Discipline Dojo at our Inuyama Factory

With the goal of raising awareness of quality, our company implements seminars and training with quality as the theme every year. Last year, at our Inuyama Factory, we set the goal of "improvement of customer satisfaction, and quality in our work," and conducted seminars on this jointly for the three divisions of Clean FA, Logistics & Automation and Machine Tools.

Furthermore, with the goal of further raising awareness of quality, we have started a Quality Discipline Dojo. At this hands-on educational facility, participants can reinforce their understanding of correct assembly work procedures through both classroom learning and skill practice. At the Quality Discipline Dojo, educational equipment for 16 fundamental assembly tasks has been installed and tests of actual skills are also conducted.

Technical skills have been passed on naturally from veterans to younger staff until now. At this dojo, hands-on practice is conducted under the guidance of instructors who are veterans that know their workplaces inside and out. While utilizing experience and intuition, they also teach "why work tasks are done the way they are" based on mechanical engineering. While gaining this understanding, the trainees can confirm and practice each process from its foundation.

For new employees, we provide disciplinary education in terms of "returning tools to their original locations after use" and "thinking about and implementing reforms when

#### 40th Corporate-wide Small Group Activity Presentation Conference held

As a small group activity, we started a QC (quality control) conference focused on workplace improvement efforts about 30 years ago and have been using it as an education opportunity to promote the understanding of QC at workplaces. Through small group activity, we seek to instill a strong quality mindset in every team member, which includes new employees and veterans with a variety of job types.

At the Corporate-wide Presentation Conference held every year, presentations are given by representative teams that have passed preliminary selection. They introduce successes and processes from improvement efforts that used QC methods on the themes of quality improvement and work efficiency.



Team that received the Grand Prize

they think work processes are difficult." In other words, the focus is on fundamental attitudes towards the conduct of work.

We are using this along with our Safety Discipline Dojo, which is operated next door, as facilities to support the improvement of safety and quality, and working to strengthen our quality culture.



Quality Discipline Dojo

# Responding to quality issues

#### Using a feedback system to prevent recurrence

In every business division, we are managing feedback data in order to "Growing into a company that can learn both from successes and failures." By sharing data from problems that occur at workplaces with the divisions where their causes occurred, our goal is to not only countermeasures for that site, but also to prevent the recurrence of such trouble and seek to improve quality.

For example, in the Logistics & Automation Division, causes are classified according feedback data about plan drawing flaws, and control is being applied with a system to prevent the recurrence of simple mistakes. For complex issues, we are seeking to improve defect rates by, for example, increasing the number of staff members.

# Our approach to customer satisfaction

In order to provide "total quality that satisfies our customers," we are trying to improve customer satisfaction through our customer service. For this reason, we always listen to our customers to ascertain the essence of their needs. We also seek to improve our services based on the latest technological trends and marketing information so that we are able to offer them solutions that are truly useful.

- Proposal of solutions
- Thorough customer support

# Proposal of solutions

The range of our businesses is both broad, with five completely different business domains, and deep, covering development to maintenance. Making the most of their features, we do not simply make and sell products. Rather, we provide more value to customers by proposing solutions according to customer needs.

# **Customer support**

We have established numerous service centers at home and abroad so that we can provide customer support rapidly after the delivery of our products.

Our service centers conduct inspections to ensure the safety and durability of our products. Should trouble occur, our service personnel rush to customers, even if they are abroad, and work to resolve the issue promptly.

#### TOPIC Our US sales group company won a **First in Class Award**

Muratec America, Inc. (MAI), which is our group company that is responsible for sales related to information systems in the United States, received a First in Class Award. This award was given because the comprehensive quality of its service and

Through the implementation of Smart Support, we are resolving the

problem that we had before of insufficient communication caused by

utilizing Visual Manager+, we have also become able to determine the

operation status of customer machinery on demand. This allows us to

realize the provision of service that is "proactive" by making proposals

As the manufacturer, starting with pursuing increased performance for

our machinery, we will make optimal proposals and provide service to

continue to strive to further improve the satisfaction of our customers

by undertaking service according to the conditions of each customer.

maximize the performance of our equipment. Moreover, we will

the physical distance from customers in China, India and other key

markets for textile machinery that are far away. Furthermore, by

to improve production efficiency based on this status.

support was highly evaluated by The Cannata Report, which is a survey of office equipment dealers in the North American region. This survey regarding manufacturer products, technologies and support systems is conducted every year by Marketing Research Consultants Inc., and awards are given to products, corporations and people that have been highly evaluated by dealers.



Award ceremony (2013)

#### Thorough communication achieved **Smart Support**—a "proactive" service system with effective utilization of IT solutions

In our Textile Machinery Division, we have proposed the concept 'Smart Support' to link 'after-sale service,' 'information systems' and 'people' to actively approach our customers. The concept behind this is to make communication with the customers that use our textile machinery stronger and more thorough. Smart Support is composed of three services. The e-PRO system allows orders to be placed for consumable parts over the Internet, and the Visual Manager+ system allows the operational status of equipment to be checked anywhere at anytime. Finally, through Muratec Global Service, our service staff members (people) are responsible for providing optimal proposals and maintenance that are suitable for each customer.

#### Visual Manager+ What is Smart Support? Integrated Management & Support System for Automatic Winder • The operation status of machinery (factories) can be Smar By being connected via the Internet, Muratec collects and analyzes customer's operation data and provides machine diagnostic reports for maintenance by customers. G - PPPC (e-Procurement) Part reservation and ordering system At an exhibition. w Estimates for parts can be created easily over even demons feature using Locations where the latest parts for your installed machines are in stock and how many are available can be checked. Parts that are in stock can be reserved. Muratec Global Service Technical support Around the world, the staff members who are closest to our customers quickly provide service appropriate to their region and country. Smart Support overview



# Working with our suppliers and vendors

With fair and impartial purchasing activities, we are striving together with our suppliers and vendors to provide products and services that are valuable to our customers and fulfill our corporate social responsibilities.

# Our approach to purchasing transactions

We need to acknowledge that we cannot do our business without the cooperation and support of multiple people operating in the individual business areas, such as the business partners. For this reason, we are fulfilling our responsibilities to society by building strong relationships of trust with our business partners based on fair and impartial purchasing activities and providing products and services that are valuable to our customers. In addition, as a foundation for global expansion, we are strengthening quality control and building supply chain structures that can respond flexibly to changes in the environment.

Dedication to transparent and fair transactions Strengthening supply chains

### Purchasing transactions policy

#### 1. Strict adherence to laws, regulations and social norms

We will conduct fair and transparent business activities by strictly adhering to laws and regulations, starting with the Subcontractor Act, as well as by adhering to social norms, including the elimination of discriminatory treatment, the prohibition of child labor and forced labor, respect for intellectual property rights and the prevention of corruption.

#### 2. Promotion of fair and impartial transactions

We will conduct transactions that are fair, transparent, subject to free competition and reasonable. We will not accept or provide entertainments, gifts, money or any form of bribes for the purpose of achieving unreasonable profits or other benefits. We will respect healthy business partnerships that strictly abide by laws and regulations.

#### 3. Business partner selection standards

In addition to items 1 and 2 above, we conduct comprehensive evaluations when selecting the suppliers and vendors that are the most important for the work of our company. Factors include the stability of their business foundations, the assurance of product specifications and quality that meet our needs, high levels of technological development capabilities, strict adherence to deadlines, stable supply and reasonable prices.

# The provision of safe products and services

In order to earn the trust of our customers, we strive to assure the safety and quality of the products and services that we provide. For this reason, we visit our suppliers and vendors because they have significant impacts on the quality of our products. By conducting inspections and providing guidance, we strive to maintain and increase the quality of supplied products.

- In addition, we are undertaking efforts to systematize the certification of factory auditors as one aspect of personal cultivation for our materials sections. This is not just a quality protocol based on an ISO 9001 quality management system. We are also seeking to cultivate personnel who are capable of selecting business partners appropriately and providing them guidance in product creation.
- Last fiscal year, 20 of our employees, mostly members of our Purchasing Department, were certified as auditors. In the future, by further expanding application, we will continue to seek to improve the quality of purchasing activities.



Auditing of a business partner

# Green procurement

"2510"11. "1522"

Our Green Procurement Guidelines, which we established in fiscal 2005 based on our Environmental Philosophy and Environmental Policy, clearly indicate that we will give preference in procurement to suppliers and vendors that are making efforts to reduce environmental impacts. These guidelines have a strong emphasis on efforts to comply with the European RoHS directive and other restrictions on the inclusion of chemicals in products. At the same time, however, they also explain our approaches to the

procurement of parts and components, raw materials, office

supplies and services. We revise the contents regularly. Last fiscal year, a chemical substances list was added in order to conform to Chinese product environmental standards. As we share our guidelines widely with our suppliers and vendors and gain their understanding and cooperation, we are also promoting green procurement by sharing information

about environmental impacts and making efforts to resolve issues related to them that we have in common.





We value our relationships with our employees at Murata Machinery. For this reason, we are undertaking a variety of efforts related to personnel education, the promotion of diverse ways of working and occupational safety and health.

# Our approach to human resources

We consider human resources to be the most valuable asset of our company. We believe that it is important to create work environments that allow our employees to realize a sense of purpose in both work and private life by providing opportunities to maximize their potentials.

In particular, at this time when markets are rapidly globalizing and ways of thinking and senses of values are diversifying, companies need to respond to change. This includes by making efforts even in personnel systems to strengthen international competitiveness.

- Creating satisfying and fair personnel management and human resources development systems
- Promoting diversity
- Abolition of discriminating treatment due to nationality, gender, age, disability or other personal trait
- Welcoming diversity in workplace
- Promoting a work-life balance
- Implement thorough occupational health and safety measures, including employee health management and overwork countermeasures

# Personnel system that considers development and making use of the talents and abilities

Our personnel system makes the roles that each employee is expected to fulfill clear and has fundamental guidelines for cultivating (development) and utilizing (application) the talents and abilities of each employee as well as for praising he or she when praise is due and disciplining when appropriate (evaluation).

#### Goal management system that encourages challenges

By strengthening the bonding between the ultimate aim of the organization and the success of each individual employee, our goal management system is increasing the possibility of realizing both. By having each individual set stretch goals, we are encouraging employees to take on challenges.

#### Feedback interviews that boost satisfaction and development

At our company, after employee performance evaluations, we hold compulsory feedback interviews between superiors and subordinates. Superiors convey both strong points and areas that need to be improved, while subordinates also communicate on concerns and desires. By sharing their expectations, these meetings provide motivation for further growth in their capabilities. In addition, we have been conducting surveys since fiscal 2010 with the aim of raising the performing rate of interview. Last fiscal year we achieved performing rate of 91%. We will continue to promote these efforts with the goal of achieving 100%.

# Human resources development and application

### Human resources development

#### Supporting career development with a basic policy of self-management

In order to maximize the value of our human resources, which is the most important asset of our business, our intention is to "improve employee professional abilities and provide opportunities for self-development" at our company. So, we support career development with a basic policy of

Career development support system

self-management centered around On the Job Training\* (OJT). In addition to performing group trainings according to expected roles by year and job position, we also provide a variety of other support for personnel cultivation. We offer opportunities for self-development that include, for example, correspondence courses and language training.

\* On the Job Training (OJT) seeks to improve the work execution capabilities of each individual through training while executing the real tasks of their jobs in their own workplaces under the guidance of their superiors and , senior employees

		Joining	Advancement and promotion	Retirement
	Growth as an	Training by year of	Training by level/Career design training	
	employee	employment	Selective training (management training and short-term overseas training programs)	
		Focused training (laws, contracts, compliance, etc.)		
	Skill raising	Language training, correspondence courses		
-	Strengthening specializations (by division)	Various trainings for spec	cialty techniques and skill acquisition	

#### Developing global human resources

With the goal of cultivating personnel who can be active on a global stage, we have continuously conducted a Short-term Overseas Training Program since fiscal 2012. In fiscal 2013, 20 young employees participated in the program at a group company in the US.



6th session participants at group company Murata Machinery USA

# Human resources

#### System for development and effective utilization of talents and abilities

In order to optimize the application of the abilities of each individual employee, we conduct centralized management of personal information using a web interface, and utilize it as a "personnel map."

On this personnel map, we enter information related to the responsibilities skills and capabilities of each individual. We have also established a job request system using this map. In addition, we have prepared an in-house free-agent system and other ways to bring forward the desires of both employees and company. By doing this, we seek to put the right people in the right places through employee rotation.

# **Promoting diversity**

# Achieve diversity that contributes to innovation

At our company, we believe that diversity, in other words the various differences among individual employees, including gender, age, nationality, culture and sense of value, contributes to innovation. For this reason, we are promoting the creation of environments that recognize different attributes and allow diverse personnel to play active roles.

#### Advancement of female employees

We are increasing opportunities for female employees to take active roles, including assignment to sales and engineering, which are work types that had few female employees in the past. Moreover, we support a smooth return to work for employees who use childcare leave. We have them hold discussions with their superiors before beginning the leave and before returning to work. In addition to reducing uncertainty during the leave, this also creates opportunities to discuss how they will work after returning from the leave, for example.

# TOPIC GTD Program

In June 2013, for the purpose of developing truly global personnel, our Clean FA Division started a Global Talent Development (GTD) Program for English fluency. In this program conducted over the period of one year, we seek to improve employee language skills. With a base of daily vocational English exercise with English tutors over the Internet, regular TOEIC and speaking tests are also given. A speech contest is held for the employees receiving these lessons half a year after the start of the program. They demonstrated the accomplishment gained from their daily practices in this contest with their division heads participating



**TOPIC** Implementation of employee awareness survey We conduct employee awareness survey once every two years. Our goals are to identify the current strengths and weaknesses of the company as well as the issues that it faces and to investigate effective measures based on the results of these surveys. Fiscal 2011 results Fiscal 2013 results 4% Satisfied 8% 28% Fairly satisfied 339 22% 23% Average satisfaction Not very satisfied 37% 350 Not satisfied Satisfaction with work

Through efforts like this, we have tripled the number of female managers from 8 in fiscal 2007 to 24 fiscal 2013.

#### Reemployment system

In April 2001, we instituted a system for rehiring of mandatory retirees. The goals of this system are to provide opportunities for employees who have reached the mandatory retirement age of 60 to continue being active and to effectively utilize their abundant experience and high levels of skills and techniques.

We expect that the number of elderly people who desire employment continues to increase in the future. For this reason, we are promoting the creation of environments that allow people with desire and ability to play active roles regardless of age.

# Work-life balance

Supporting working with child and nursing care

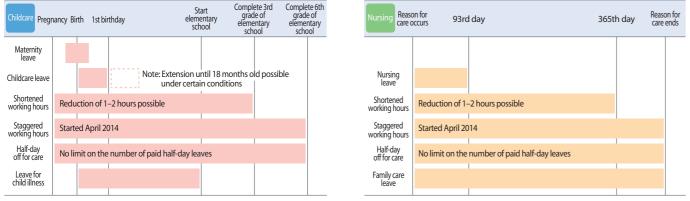
We have formulated a corporate action plan (3rd period: 2 years from April 2013) based on the Next Generation Education and Support Promotion Act, and we are creating programs that help employees to maintain the balance between work and personal life.

For further expanding our programs, we have established "shortened working hours" and a "half-day off for care" system that allows employees to take unlimited half-day paid leaves for child and nursing care. In addition, in April 2014, we adopted a "staggered working hours" system.

#### Utilization rates of systems that support balancing work and personal life

System		Number of users (individuals)			
		Fiscal 2011	Fiscal 2012	Fiscal 2013	
	Parental leave	38	45	42	
Childcare	Shortened working hours	46	60	71	
	Staggered working hours	Note: started April 2014			
	Nursing leave	0	0	0	
	Reduced working hours	0	0	1	
	Staggered working hours	Note: started April 2014			
	Half-day off for care (child and nursing care)	60	80	77	

#### Overview of systems that support balancing work and personal life



In addition to the above, we have also established an accumulated annual leave system (90 days maximum accumulation) that allows employees to use accumulated annual leave (annual leave that has exceeded its validity period) to take time off for "personal illness" or "care for a family member."

### Ensuring reasonable working hours

Seeking to preserve the health of our employees and realize workplaces where people can work with peace of mind, labor and management are working together to reduce excessively long working hours. In order to achieve appropriate understanding and management of working hours, we are utilizing a "daily work reporting management system." At the same time, in order to encourage employees to go home soon at the end of normal working hours, we have established days when employees are required to leave by a certain time and implement workplace patrols. In addition, we hold meetings for supervisors to explain work management every year, and we are advancing the learning of accurate knowledge regarding working hours. In order to promote the acquisition of annual paid leave days, we have set up a variety of paid leave, including "paid vacation days for birthdays" and "paid vacation days for health management," as well as arranging a that makes taking paid leave easy for employees.

### Special incentive leave

We have adopted a Special Incentive Leave\* with the goal of giving employees who have continued work for many years opportunities to take a long vacation for restoring both body and mind, as well as to consider family life and health with their families and to think about future life plans.

\* The Special Incentive Leave encourages employees that meet the requirements to take a vacation of at least 10 days.

#### TOPIC Exchange meeting for female employees was held at the Shiga plant of Muratec Mechatronics

At the Shiga plant of Muratec Mechatronics (MMC), which is a group company, an exchange a meeting for female employees was held.

This opinion exchange meeting was held with Panasonic Corporation Eco Solutions Company. In this meeting, female employees discussed "work and the workplace," "balancing work and family" and other themes. Participants said things such as, "I felt that other participants had maintained a strong passion for work even while they raised children and was encouraged by this." "There many things with which I could empathize since we were exchanging opinions with people in the same kinds of situations." This meeting contributed to resolving concerns and further increasing motivation to balance work and family.



Exchange meeting for female employees at the MMC Shiga location

# Our approach to occupational safety and health

We make assuring the safety and health of our employees one of our highest priorities. Through safety and health practices, as well as by continuous improvement of these practices, we seek to realize safe and healthy workplace environments and to maintain and promote employees health.

In order to realize these goals with certainty, led by our Occupational Health and Safety Committee, we are endeavoring to foster a culture where each individual employee independently makes efforts for safety and health.

- Safety: Eliminate work-related accidents
- Health: Increase health management awareness and reduce illness
- Traffic safety: Seek to have no accidents

# Efforts for safety and health

On the safety front, with the goal of reducing the number of occupational accidents that occurred to "zero," we are advancing efforts that use the frequency of occupational accidents leading to absence as an indicator. Last fiscal year, our main focus of implementation was advancing the execution and establishment of regular risk assessments that suit the work characteristics and conditions of each workplace. Based on the results of risk analyses in these assessments, we are continuously making efforts to make existing equipment and work tasks safer. In addition, we also focused efforts on safety and health education for employees. We endeavored to raise the safety awareness of each worker. In addition to conventional group trainings, through e-learning we also implemented training related to the hazardous and effects of chemical substances on people and the environment as well as methods for the appropriate use of personal protective equipment (PPE).

# Make safety our DNA! We implement EHS (environment, occupational health and safety) Daily Audits

In the manufacturing sections of our L&A Division and Clean FA Division, we started conducting EHS Daily Audit in workplaces in June 2013. We have continued to conduct these audits every day since then.

The idea for starting daily audit resulted from questions during customer audits, such as the following. "Are safety related activities are commonly practiced, as if they are worker's habit?" "Are workers well trained in terms of chemical handling?" "Are there any performance indicators of safety practices? Are they used to drive improvement?" We needed measures to respond to these questions immediately. "When our company is viewed from outside, we are still not doing enough." The measure to improve the situation that we decided upon was the method of implementing daily audits. Project teams were formed for the execution of the audits. The series of auditing processes, including auditing item selection, scheduling proposals and workplace feedback of auditing results and their immediate



On the health front, we are supporting the preservation and improvement of employee health by, for example, setting goals of preventing illnesses that cause leave from work and "zero" work-related illnesses and making efforts to reduce the rate of disease occurrence, and giving advice for the improvement of lifestyle habits.



reform, were incorporated into workflows.

A key of these activities is an arrangement to have regular reports about the audit results given weekly to the responsible managers. This way, the activities are authorized and the orientation of the activities is aligned for the achievement of goals. Since starting this, results have been tending to improve. We have expanded the number of workplaces covered from 4 originally to 19.

The drastic measure of implementing something "every day" was necessary to realize visible changes in the behaviors of workers. This was a good example of visible results that people could experience personally.



Auditing (confirming that things are tidy and in order)



# Murata Machinery is a good corporate citizen,

and we have actively sought to be involved in society outside the framework of our business by participating in a variety of activities over many years.

# Supporting the development of the next generation through our business

We are contributing to cultivation of youth in terms of creativity and socialization through the creation of products.

# Holding karakuri-making classes for local elementary school students

As one effort to support the development of the next generation, our company has been participating every year in the Kyoto Children's Product Creation and Workshop Study Project, which has been held by the Kyoto City Board of Education since February 2010. The class theme was making karakuri, which are traditional mechanical puppets. As the instructors, our company employees introduced moving karakuri puppets while allowing the students to actually handle mechanisms that were planned and manufactured with children in mind. Through these activities, the joy of creating products was conveyed to the children.



Karakuri class for elementary school students



Summer Factory Training participants

### Providing opportunities for internships and other work experiences to technical college students

In order to allow students to experience through work both the interesting and difficult aspects related to creating products, we have been implementing a Summer Factory Training internship program for technical college students every year.

In fiscal 2013, the training topic was the creation of manufactured goods that are moved by motors. The participating trainees, who came from all around Japan, were divided into groups. During the two-week training period, they had presentations on planning, conception, design, assembly and manufacture, and experienced the entire product development flow that occurs in our business. We hope that the trainees will utilize what they learned during the training when they are thinking about their future career paths.

Connections with local communities

# Cooperation with the "Learning the product creation knowledge of Kyoto" class held by the Kyoto Institute of Technology

As a part of their "Kyoto knowledge—advanced product creation in traditional industries" class, Kyoto Institute of Technology students toured our Head Office (Kyoto).

This class, which has the cooperation of the Kyoto Municipal Institute of Industrial Technology and Culture, has the goal of "cultivating abilities to create advanced industries with high senses of aesthetics for a new era." Our company assisted with it for the second year in a row. After the tour, a class was given by some young employees. They deepened their interaction with the students through presentations about their real experiences after joining the company and the contents of their work.



Tour of textile machinery (in the orientation room of our company)

### TOPIC Lecture about CSR given at Ryukoku University

Our company CSR staff participated as a lecturer in a Ryukoku University Faculty of Policy Science class called "Global citizenship (corporate social responsibility)" (led by Professor Takafumi Nakamori). This class with the theme of "rejuvenating regional power" has been realized through the coordination of Kyoto

Prefecture and company CSR efforts. Six companies, including ours have provided instructors. During the final class, presentations were given in which students offered proposals to make the CSR activities of the participating companies even more attractive. The companies were able to gain numerous insights from their creative proposals.







# Supporting overseas study by









nter-Prefectural Women's Ekiden

Cultural and educational

support and sports





# Management systems

At Murata Machinery, in order to continue functioning as an entity trusted and needed by society, we are building comprehensive corporate governance, internal controls and other systems and striving to improve the transparency and effectiveness of our management. Moreover, in accordance with our management policies that emphasize compliance, we will endeavor to justify their confidence in us, and fulfill expectations and requests from society.

# **Corporate governance**

# **Basic policy**

We have made realizing "the happiness of each employee" and "an affluent society" the goals of our Corporate Philosophy, and we strive to be a company that continues to be trusted by society. In order to achieve this, we are advancing business activities with high levels of fairness and transparency through the execution of policies for comprehensive management and auditing functions performed by the Board of Directors, auditors and others, and for the establishment of internal controls that emphasize compliance.

# **Internal controls**

# Basic policy

We believe that it is important that internal controls function effectively in order for a business to survive and continuously develop. At our company, we are advancing improvements to our internal controls based on the Companies Act by implementing thorough compliance measures and by emphasizing risk management. Rooted in our belief that "A company must control its own behavior ethically and socially," we are endeavoring to assure the effectiveness and efficiency of our work.

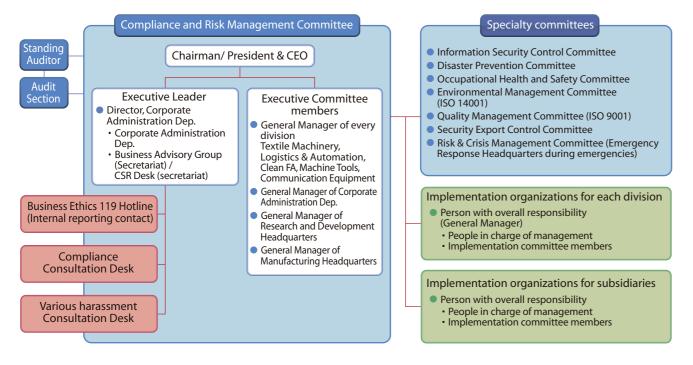
# Corporate governance systems

Our Board of Directors meets once every three months as a rule and at other times as necessary. The board is responsible for discussing and making decisions about fundamental management policies and other important issues as well as overseeing the status of business execution. In addition, we are also working to strengthen governance by having auditors conduct financial and business auditing, including for our overseas group companies. In June 2011, our company adopted an operating officer system, and we are building management systems that can adapt to changes in the business environment even more than before.

# Compliance and Risk Management System

Our Compliance and Risk Management Committee has been operating as an organization that promotes the implementation of internal controls for the entire Murata Machinery group since April 2007. People responsible for compliance from each division and group company are the members who advance the activities of this committee. They are working to raise awareness about compliance and to implement related practices.

### Compliance and risk management committee system organization



# Efforts to promote compliance and risk management activities

### Muratec Code of Conduct

The Muratec Code of Conduct is a shared code of conduct that every officer and employee of the Murata Machinery group must follow. For our company, this code of conduct takes priority over profit, and, for our employees, over the directives of superiors and any personal relationships inside and outside the company. Furthermore, as a foundation for the implementation of our code of conduct, we have issued a Muratec Code of Conduct Implementation Guidance. We are also providing internal education to promote the thorough implementation of compliance measures. In this code and guidance, we make clear that we respect fundamental human rights and prohibit discriminatory practices and corrupt behavior, as well as completely reject child labor and forced labor.

# Utilization of in-house consultation and reporting desks

As contact points for consultations related to compliance and harassment, as well as for reporting unlawful activity when discovered, we have established a variety of consultation desks they can be used by every group employee, including temporary staff. We strictly protect the secrecy of the employees who use these desks and prohibit acts of reprisal and detrimental treatment.

# Measures to respond to large-scale natural disasters

At our company, we are working to augment our business continuity plans (BCP) in order to protect human life, restore business activity rapidly, and minimize impacts on our customers and business partners when a risk occurs that could affect the continuity of our business. At our Inuyama and Ise factories, which are core production facilities, based on an established BCP, we are advancing concrete measures to minimize damage from natural disasters, infectious diseases, IT dangers and other risks through trainings and verifications by participants after training.

By doing this, our goal is a "living" BCP that is constantly being improved rather than simply a set policy.



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Bus tour

# Implementation of compliance education

In the Murata Machinery Group, we are continuously undertaking education related to compliance with the goal of every employee having a deep and well-established compliance mindset.

- Group compliance training for new employees and new managers
- Focused trainings on subjects such as "the Antitrust Act and Subcontract Act," "trademark systems," "Security Export Control" and "CSR"
- E-learning for all employees on "compliance fundamentals," "social media" and "information security"



Antitrust Act and Subcontract Act class



Trademark systems class

Bus tour given to see the secondary evacuation sites for our Ise Factory

In fiscal 2013, we gave a bus tour to see the secondary evacuation sites for our Ise Factory. The secondary evacuation sites are on high ground 5 km from the workplace. Employees went by bus to each evacuation site, confirming how to get there, its location and placement of the entrance, for example. Through this experience of actually visiting each evacuation site, their knowledge from previous trainings and disaster education was made even more effective, contributing to further improving disaster awareness.

Note: Since a large earthquake could result in a tsunami at the Ise Factory, in addition to a tsunami refuge building on the site, we have also prepared secondary evacuation sites where employees and their family members can seek refuge when returning home is difficult. Among evacuation sites designated by Ise City, are three secondary evacuation sites designated by our company that meet requirements such as, "outside the range of potential tsunami" and "at a high elevation."



Bus tour participants



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