

# Environmental Report 2008

JUKI CORPORATION



# **Outline of the Juki Group**

#### **Juki Corporation**

**Outline of the Juki Group** 

Net sales:

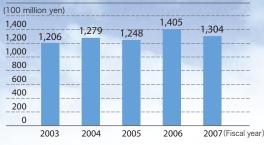
Number of employees:

Business segments:

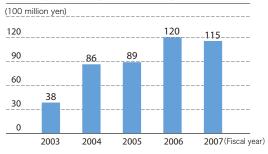
Number of consolidated subsidiaries: 37

Establishe	ed:	December 15, 1938
Paid-in ca	pital:	¥15.95 billion
Aggregate	e number of iss	sued shares:
		129,370,000 shares
Number o	f shareholders	:: 8,421
		Listed on Tokyo Stock Exchange
		First Section (loan transaction stock)
		Fiscal year ending March 31
Net sales:		¥76.3 billion
Major bus	iness sites:	Head Office:
		8-2-1, Kokuryo-cho, Chofu-shi, Tokyo 182-8655
		Central R&D Laboratory:
		3-17-14, Funabashi, Setagaya-ku, Tokyo 156-0055
		Ohtawara Plant:
		1863, Kita-kanemaru, Ohtawara-shi, Tochigi 324-0011
Number o	f employees:	1,202

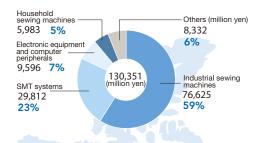
#### **Net Sales (Consolidated)**



#### **Ordinary Income (Consolidated)**



#### Net Sales by Business Segment (Fiscal 2007)



#### List of Manufacturing Companies in the Group

¥130.4 billion

Industrial sewing machines, SMT (Surface Mount

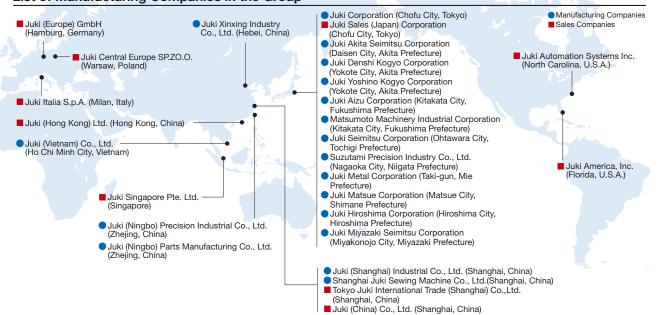
Technology) systems, household sewing machines,

electronic equipment and computer peripherals, and

As of the end of March 2008

7,264

others





#### **Editorial Policy**

This report summarizes the Juki Group's ideas on environmental preservation and the Group's environmental activities and achievements in fiscal 2007. The report includes organizational data up to the end of September 2008.

#### Period Covered

This report covers the period in fiscal 2007 (from April 1, 2007 to March 31, 2008 in Japan and from January 1, 2007 to December 31, 2007 in other countries), but sometimes includes data for other periods.

#### Scope of Reporting

The environmental activities of Juki Corporation and other Juki Group companies are introduced.

#### **Reference Guidelines**

Environmental Reporting Guidelines (Fiscal Year 2007 Version) issued by Japan's Ministry of the Environment

#### **Next Publication**

We plan to publish our next environmental report in October 2009.

Please send us your frank opinions and advice by completing the questionnaire attached to this report. Your comments are valued, and we will incorporate them in our next environmental report.

#### Conatct

CSR and Environment Group CSR and Environment Department Juki Corporation 8-2-1, Kokuryo-cho, Chofu-shi, Tokyo 182-8655 Tel.: +81-3-3480-1693 Fax: +81-3-3480-1125

\*Please visit our website if you would like to get more information on our company. http:// www.juki.co.jp/index\_e.html Juki Environmental Report 2008 Table of Contents

- 2 Outline of the Juki Group
- 4 Top Management Message
- 6 How We Developed a Sewing Machine that is Friendly Both to Users and the Earth

#### **Environmental Reporting**

- 8 Environmental Vision
- 9 Environmental Management
- 11 Environmental Load of the Juki Group's Business Activities
- 12 Environmental Targets and Results for Fiscal 2007
- 13 Environmental Performance
- 14 Environmentally Conscious Product Development
- 15 Research on Environmental Technologies
- 16 Global Warming Prevention Measures
- 18 Resource Conservation
- 19 Green Procurement and Management of Chemical Substances

#### **Social Reporting**

- 20 Governance
- 21 Responsibilities to Stakeholders
- 22 Relationship with Customers
- 23 Relationship with Employees
- 24 Relationship with Shareholders and Investors
- 25 Relationship with Business Partners
- 26 Relationship with Local Communities
- 27 Third-Party Opinion



# The Juki Group aims to grow as a manufacturing group to increase the trust that the public places in it, and to become one of the pillars of our social infrastructure.

We are pressing forward with reforms to transform ourselves into a stronger manufacturing group by building robust customer relationships while enhancing business segments such as the SMT systems business using our technologies for industrial sewing machines as the core. In this process, we rely on our corporate slogan "Mind & Technology" and "our customer-oriented policy" as the driving force to achieve transformation.

The Juki Group continues to provide products and services from a customer-based viewpoint, regarding our customers as "co-creation partners" from whom we learn and with whom we create value together.

The Juki Group issued its ECO-MIND Declaration to show its commitment to actively tackling environmental problems. All its employees have been steadily engaged in activities to reduce the Group's environmental load and develop products without using hazardous substances. In addition, the Juki Group is moving to acquire ISO 140001 certification at both its domestic and overseas manufacturing bases and is actively transforming these bases into "green factories." For its new building, which will be completed next fiscal year, a range of environmentally friendly measures have been taken, including rooftop greening, natural lighting, and the use of recycled materials.

In recent years, companies have been increasingly required to contribute to the creation of a sustainable society in conducting their corporate activities. In response, the Juki Group formulated the "Juki Company Code of Conduct" in 2004, and has since been implementing the code, including compliance with laws and regulations, across the Group. Unfortunately, however, one of the Juki Group companies experienced a problem with the quality of its management, and to prevent the occurrence of similar problems we appointed a new CCO (Chief Compliance Officer) in May 2008 and established the CSR and Environment Department in July 2008.

We will continue to make concerted efforts to maintain the group as a corporate entity that is trusted and that has an essential place in our society, and we would ask you to support us in these activities.

Kazuyuki NAKAMURA

President JUKI CORPORATION 中 村和之

# Corporate Philosophy of the Juki Group

All employees of the Juki Group worldwide are committed to researching, developing, and manufacturing even better products and providing even better services based on the Group's Corporate Philosophy, Basic Management Policies, and Policies Guiding Employee Activities.

#### **Corporate Philosophy**

- The men and women of Juki work hand in hand to spread happiness and enrich society
- Juki technologies are constantly evolving and creating new value

#### **Basic Management Policies**

- Promoting Total Quality Management
- Nurturing Strength and Flexibility in our Organization and in our People
- Running Our Company with the Best Management Practices of International Society

#### Policies Guiding Employee Activities

- Always think from the customer's point of view and respond swiftly
- Set one's own targets, accomplish the necessary roles, and expand them
- Act always as a trustworthy cosmopolitan

#### Juki Corporate Code of Conduct

The "Juki Corporate Code of Conduct" set forth below was established as a guideline for living by the principles of our corporate philosophy. Based on this Corporate Code of Conduct, the men and women of Juki follow all laws, all international rules and regulations, and the principles underlying them in the spirit of responsible corporate citizens with sound social sense.

Juki aligns the pursuit of its own interests through fair competition with the interests of its customers, stockholders, business partners, and society. Benefits for society are benefits for Juki.

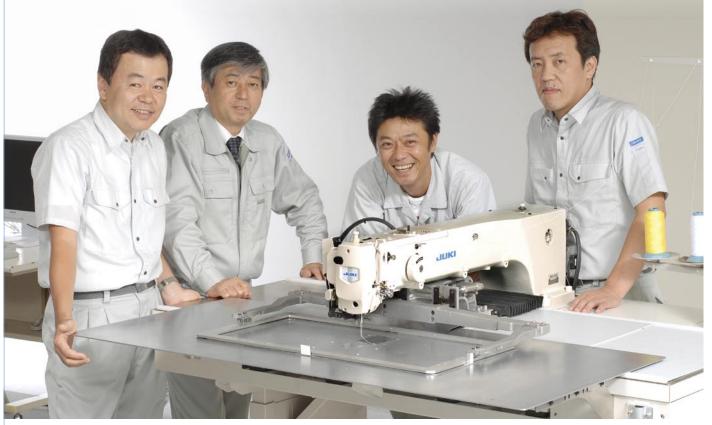
- Juki creates and supplies products and services useful for society based on thorough considerations of safety, the protection of personal and customers' information, and the satisfaction and trust of its customers.
- 2. Juki conducts its businesses fairly, transparently, and in keeping with the principle of free competition while maintaining a healthy relationship with national governments.
- **3.** Juki discloses its information fairly and consistently through open channels of communication with its shareholders and society as a whole.
- Juki works to ensure safety and ideal working conditions for every employee with full respect for his or her personality and individuality.

- 5. Juki takes good care of the earth environment by using resources effectively, recycling, and saving energy.
- 6. Juki maintains ideal community relations as a good corporate citizen and contributes to society through local activities.
- 7. Juki takes a firm stand against antisocial individuals and organizations that adversely affect social order and sound business activities.
- Juki observes the international rules and local laws as a matter of course, esteems cultures and customs, and endeavours to contribute to the development of countries.

If actions or events in contravention to the "Juki Corporate Code of Conduct" take place, top management at Juki takes immediate and thorough steps to remedy both the causes and outcomes.

# Developing a Product that Embodies the Concept of "Mind & Technology" How We Developed a Sewing Machine that is Friendly Both to Users and the Earth

We are committed to manufacturing products that are useful for society based on Technology with Heart and our customer first policy. We communicate this commitment through our corporate slogan "Mind & Technology," which forms the basis of the JUKI brand. We aim to develop new products that satisfy customer needs in terms of functionality, user-friendliness, productivity, and sewing quality, and these products should also be environmentally friendly. We have been making constant efforts to achieve this ambitious goal. One example of our success as a result of these efforts is the development of the model AMS-224E leading-edge computer-controlled cycle machine for industrial use. This sewing machine has a much higher environmental performance than conventional ones in terms of power conservation, heat generation, and noise. The successful development of this machine is attributable to the strenuous efforts made by the developers, who pioneered in developing and applying new technologies to reduce the environmental load of the machine.



The AMS-224E prototype machine and members engaged in its development: Tsuyoshi MATSUYAMA (R&D Headquarters, Industrial Sewing Machines Division), Toshinobu SHINOZUKA (General Manager, R&D Headquarters, Industrial Sewing Machines Division), Tadayoshi MINAGAWA (Development and Technical Department, Ohtawara Plant), and Masahiko OKAMURA (R&D Headquarters, Industrial Sewing Machines Division)



### Machine with Much Higher Power Conservation Performance

The AMS series of computer-controlled cycle machines (sewing machines for industrial use) are popular among a range of customers due to their high productivity and their high efficiency in performing complicated sewing tasks. Of these machines, the AMS-224 series, which have the widest sewing area, are used for sewing bags and automobile airbags. The AMS-224E, the newest model in this series, will be released onto the market at the end of 2008. Compared with conventional models in the series, we have achieved a wider sewing area, better sewing quality, greater productivity and operability, and much higher environmental performance with this newest model.

Toshinobu SHINOZUKA, General Manager of the R&D Headquarters of the Industrial Sewing Machines Division (second from the left in the photograph) says, "In our job, we naturally aim to develop a new product that provides higher performance than conventional ones, and in addition to functionality and user-friendliness, we also set a specific numerical target for environmental performance in developing a new product. Our environmental target is really ambitious: we developers should take on the challenge of improving power conservation performance of a new product by at least 30% above conventional models."

It took several years for members of the R&D Headquarters to develop the model AMS-224E, from the elemental research stage to the productization. The prototype machine showed a more than 40% improvement in power conservation in tests, and engineers engaged in the development point out that they were able to achieve this remarkable result because of the adoption of an "encoder-controlled pulse motor."

# Challenge to the Encoder Control System

Electronic cycle machines have a presser-frame that can be moved flexibly from front to back and from side to side, and the model AMS-224E has 6 motors, including the main motor used to move the needle. The model AMS-224E has a wide sewing area and incorporates large parts, and the motors therefore need to have higher output, which could result in higher power consumption. The developers had to find a solution to further widen the sewing area while improving the energy conservation performance of the machine. As a solution, they decided to adopt an encodercontrolled system, which reduces power consumption by improving the motor control precision.

"It might have been easier to use a variety of new materials to reduce the weight of the machine, but this is not cost-effective. Instead, we carried out a meticulous structural analysis of the machine to reduce its weight as much as possible. We were eventually able to improve the power conservation performance of the machine mostly due to the efforts of the electrical and software engineers," says Tadayoshi MINAGAWA (second from the right in the photograph), who was involved in the mechanical design.

"The mechanical design team greatly contributed to reducing vibration and noise, I think. Thanks to the adoption of the encoder control system, it is no longer necessary to continuously supply power to the motors. Instead, power is supplied only when necessary, which leads to greater power saving and lower heat generation. While conventional machines heat up to 90 degrees centigrade or higher, the AMS-224E only heats up to 45 degrees, which is half the temperature. To achieve this, however, we had to design the circuits from scratch, and the machine did not easily behave as we expected," says Tsuyoshi MATSUYAMA (first from the left in the photograph), who was involved in the electrical design.

# Improved Performance for All of Juki's Sewing Machines

The developers also had to design and develop technologies for the software to be used for the machine from scratch. It took time and labour for them to adjust the software to ensure that the machine would behave as expected under electronic control: it was difficult to utilize past experience in this "tuning" process.

"It took time and labour, but we have been developing products in such a way as to make it possible to use the developed parts and ideas not only on the particular product, but on other models too. We developed the encoder control software not only for the AME-224E but also for all of Juki's sewing machines. I am sure we can apply this technology smoothly to other models," says Masahiko OKAMURA (first from the right in the photograph), who was in charge of software development.

There are a variety of sewing machines for industrial use, including lockstitch, two-needle, zigzag stitch, buttonholing, and button sewing machines. Clothing factories put together their production lines using several hundred sewing machines of several different types. It is therefore difficult to truly contribute to the environment only by increasing the environmental performance of one single model. We believe it important to develop our products while always keeping in mind the necessity of introducing the environmental technologies we have developed to a wider range of products. Juki's development team develops new technologies, not only for the sewing machine in front of them but also for all future JUKI machines.

#### ....

The model AMS-224E was thus developed after overcoming many difficulties and has excellent environmental performance. Thanks to the new technologies developed, this model has greater product appeal, and the technologies will also be introduced to other JUKI sewing machines to further improve them to be "sewing machines that are friendly both to users and the Earth."

# **Environmental Vision**

The Juki Group conducts environmental activities on a daily basis according to its "Environmental Philosophy" and "Environmental Action Policy." We have made our ECO-MIND Declaration to promote our environmental conservation activities across the Group, including those to reduce our environmental load, conserve resources and energy, and foster recycling.

#### The Juki Group's Approach to Environmental Conservation Activities

The Juki Group set out its Environmental Philosophy and Environmental Action Policy to reduce the environmental load of its business operations and to contribute to creating a recycling-based society. Based on these, we have also formulated the Juki Group Guideline for Environmental Conservation and established an Environment Committee and Juki Group Environment Promotion Council. Through these bodies, we ensure that relevant information is exchanged and distributed across the Group, which will improve the level of environmental activities across the whole Group.

### **Environmental Philosophy**

JUKI group recognizes that activities of enterprises are closely related to the global environment, and is making efforts to:

- 1. Contribute to the local community and society by environment-conscious activities.
- 2. Provide people around the world with environmentally friendly products.
- 3. Play an active role to hand down a better global environment to future generations through continuous activities.

#### **Environmental Action Policy**

- 1. Develop technologies and products with environmental influences in mind.
- 2. Perform manufacturing, sales, distribution and service activities by minimizing the load on the environment.
- Promote resource and energy saving in all business activities.
- Promote recycling activities to make effective use of resources.
- 5. Observe environmental laws and regulations and establish voluntary control standards to enhance environmental conservation.
- Raise "awareness of ecological problems" among employees through educational campaigns.

#### Environmental Targets Set in Medium-Term Management Plans

The Juki Group sets out its environmental targets in its medium-term management plan, believing it essential for a company to reduce its environmental load and carry out environmental conservation activities if it wants to gain recognition from society for its efforts. In fiscal 2007, which was the last year of the Medium-Term Management Plan for the period from fiscal 2005 to 2007, we made efforts to achieve all the targets set out in the plan. As a result, we were able to achieve all the CO<sub>2</sub> emission reduction targets. In line with the new three-year Medium-Term Management Plan that starts in fiscal 2008, we will further strengthen our environmental management system to gain more recognition from society for being an environmentally advanced corporate group.

### Environmental Targets Set in the Medium-Term Management Plan (Fiscal 2005 to Fiscal 2007) and the Actual Results

Environmental Target	Fiscal Year	Numerical Target	Results	Evaluation
Reduction in CO <sub>2</sub> emissions	2005	1.5% reduction	Increased by 3.2%	×
Compared with fiscal 2004 levels; in overall volume (fiscal 2005)	2006	3.0% reduction	Reduced by 10.4%	0
and in ratio to sales (fiscal 2006 and fiscal 2007)	2007	6.0% reduction	Reduced by 8.6%	0
EMS Improvement by	2005	100% (5 companies)	100% (5 companies)	0
both domestic and overseas Group			39% (7 out of 18)	Ŭ
companies Upper: EMS	2006	100% (5 companies)	80% (4 companies)	×
certification acquisition rate for the fiscal year	2000		61% (11 out of 18)	
Lower: Percentage of EMS-certified	2007	100% (7 companies)	86% (6 companies)	
companies (accumulated)	2007		94% (17 out of 18)	

Evaluation:  $\bigcirc$  Achieved,  $\bigcirc$  Almost achieved,  $\bigtriangleup$  Nearly achieved,  $\,\times\,$  Not achieved

#### Priority Environmental Policies Set in the New Medium-Term Management Plan (Fiscal 2008 to Fiscal 2010)

Basic policy	•Transformation into an environmentally advanced company by improving the environmental management system
Priority issues	<ul> <li>Establishment and implementation of a Group-wide environmental management system.</li> <li>Formulation and implementation of voluntary environmental criteria (ISO 14021).</li> <li>Establishment of a system to comply with environmental laws and regulations.</li> </ul>
Specific measures to be implemented	<ul> <li>To support activities for the establishment of a new environmental management system</li> <li>To conduct ISO 14021-related research and implement relevant measures, and to make preparations for the announcement of a voluntary declaration</li> <li>To understand and evaluate the trends in environmental regulations (RoHS, WEEE, EuP, REACH, and others) and to establish a system to comply with them</li> </ul>

#### JUKI ENVIRONMENTAL REPORT 2008

# **Environmental Management**

The Juki Group is committed to contributing to the creation of a recycling-based society by reducing the environmental load of its business operations. To this end, we have managers in charge of the environment at each of our Group companies under the Group's environment promotion system and are implementing environmental measures for continuous improvement.

### Environmental Conservation Activities and Guidelines

On July 1, 2008, the Juki Group strengthened its system for conducting environmental conservation activities more widely across the Group.

We established a new CSR and Environment Department to supervise the Internal Environmental Audit Committee, which monitors our environmental management system. The Department also conducts environmental conservation activities, makes proposals for the Group to continue to exist as a socially valuable and attractive corporate entity, and encourages the entire Group to be more environmentally conscious. We reorganized the related councils, groups, and teams for each business segment to have clearer systems for environmental conservation. First, we established the Environment and Safety Council, under which the Laws and Regulations Research Group, Product Group, Energy Conservation Group, and Environmental Education Promotion Group are placed.

Moreover, to strengthen each business segment's ability to implement environmental conservation, including both domestic and overseas manufacturing and sales companies in the Juki Group, we founded the Environmental Conservation Promotion Teams for Industrial Sewing Machines, SMT (Surface Mount Technology) Systems, and Household Sewing Machines, respectively, as well as the Environmental Conservation Promotion Team for Head Office and Group Companies supervised by Head Office.

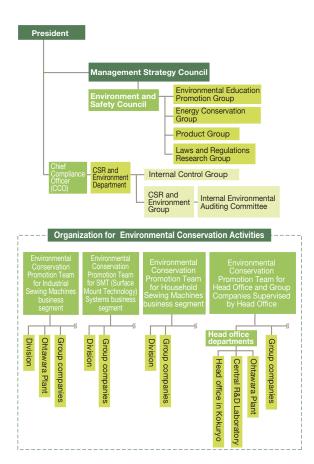
We will work hard to get the new organizations operating on track and further improve the actions for environmental conservation taken by the Group in line with its Juki Group Guideline for Environmental Conservation.

# **Conducting Internal and External Audits**

The Juki Group companies that obtained the ISO 14001-certified environmental management systems are audited both internally and externally to check whether the systems function in an effective manner.

The companies conduct internal audits on the systems at least once a year, focusing on compliance with laws and regulations and the degree of progress toward the achievement of the predefined targets. In addition, they have the systems objectively audited by external organizations once a year. The companies make appropriate responses to comments from the auditing organizations as well as to non-compliance and matters needing improvement that are identified through internal audits.

#### The Juki Group's Environmental Promotion System



#### Column

### Making Bags for "My Chopsticks"

In June 2007, as part of its efforts to raise employees' environmental awareness, Juki Corporation held an event to encourage employees to carry their own chopsticks with them. A total of 40 employees,

including those from Juki Group companies located in foreign countries such as China and Vietnam, participated in the event and made bags in which to carry their own chopsticks.



Trainees from Vietnam visiting the Central R&D Laboratory

### **ISO 14001 Certification**

We have encouraged all the manufacturing companies in the Juki Group to acquire ISO 14001 certification by the end of fiscal 2007, and all of them, excluding one, actually acquired certification by the deadline. The remaining one, Shanghai Juki Sewing Machine Co., Ltd. will acquire ISO 9001 certification by October 2008 and ISO 14001 certification by the end of fiscal 2009.

# Group companies acquiring ISO 14001 certification in fiscal 2007



这百片

Juki Hiroshima Corporation

Juki Metal Corporation



Juki Aizu Corporation



Juki (Shanghai) Industrial Co., Ltd.



Juki (Vietnam) Co., Ltd.



Juki (Ninbgo) Parts Manufacturing Co., Ltd.

### **Environmental Education**

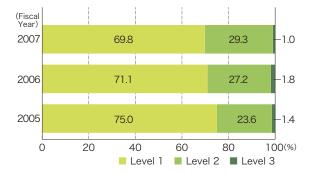
ISO 14001-certified Juki Group companies give environmental training to all their employees. The companies distribute to their employees ECO-MIND cards on which their environmental policies are written, and employees carry the card with them so that they will be constantly aware of environmental issues.

# **ECO-MIND Survey**

Juki Corporation has been conducting ECO-MIND surveys since fiscal 2005 to check if its employees are conducting themselves in an environmentally friendly manner, not only inside the company, but also in their daily lives and to determine their present level of environmental knowledge and improve their environmental awareness.

We aim to continue the ECO-MIND surveys and study the mechanism through which employees can acquire more knowledge about environmental problems and actually take action to protect the environment. At the same time, we will expand the target of this survey to include other Juki Group employees.

# Percentage of Employees at Each ECO-MIND Level



Employees are classified into three levels (Level 1 [low] to Level 3 [high]) according to their level of environmental knowledge and their conduct. Over the three years, the percentage of employees at Level 2 increased.

# Encouraging Applications for the Senryu Contest

The Juki Group encourages employees to apply for its *senryu* (satirical Japanese *haiku*) content. This contest is held every June, which is designated as "environment month." In fiscal 2007, we received 1,783 *senryu* from 963 employees. The number of *senryu* entered for the contest has been increasing year by year.

# **Environmental Load of the Juki Group's Business Activities**

The Juki Group uses a lot of energy and resources in manufacturing its products, including precious minerals used for parts and materials. In light of this fact, we are endeavouring to make effective use of resources and energy, and to identify the environmental load of our business activities.

### Input and Output Associated with Business Activities

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Electricity 7	7,090,436kWh	(in oil equivalent	19,830kl)
Fuel oil A	3,010kl	(in oil equivalent	3,036kl)
Light oil	409kl	(in oil equivalent	403kl)
Gasoline	262kl	(in oil equivalent	234kl)
Kerosene	308kl	(in oil equivalent	292kl)
Gas	102,000 m <sup>3</sup>	(in oil equivalent	121kl)
Liquid petroleum gas	1,277,077kg	(in oil equivalent	1,654kl)
Acetylene	1,027kg	(in oil equivalent	1 kl)
Coke	934,960kg	(in oil equivalent	726kl)
Methanol	5,760kg	(in oil equivalent	3kl)

💧 Water	813,000m <sup>3</sup>			
Materials				
Metal	15,044 t			
Plastics	304 t			
Rubber 14t				
Paper (excluding paper for office use) 107t				
Others (parts and raw materials, etc.) 3,180t				



# OUTPUT



**Recirculation of resources** 

\* Sum of data for fiscal 2007 collected from Juki Corporation and other Juki Group domestic and overseas manufacturing companies. Data on raw was not available for some Group companies.

# **Environmental Targets and Results for Fiscal 2007**

Since fiscal 2006, we have been setting common environmental targets for the head office of Juki Corporation and Group manufacturing companies. We are promoting our environmental conservation activities while monitoring our progress in achieving the targets. We have set specific environmental targets to reduce our CO<sub>2</sub> emissions and decrease the amount of incinerated and landfill waste.

### JUKI GROUP

Environmental Target	Numerical Target	Results	Evaluation	Future Activities
Reduction in CO <sub>2</sub> emissions	6.0% reduction over fiscal 2004 levels (in ratio to sales)	Reduced by 8.6%	O	Expand the scope of data collection to include sales companies and set the target to include a wider range of Group companies
Reduction in incinerated and landfill waste	2.0% reduction over fiscal 2004 levels (in ratio to sales)	Reduced by 10.7%	O	Continue with present efforts
Reduction in the amount of paper purchased for office use	5.0% reduction over fiscal 2004 level (in ratio to sales)	Reduced by 3.1%	×	Continue with present efforts
Compliance with environmental laws	Non-compliance cases: zero	Three cases	×	Improve the management of green procurement across the supply chain to prevent the unintentional use of RoHS- regulated substances in Juki products

Evaluation:  ${} \odot$  Achieved,  ${} \bigcirc$  Almost achieved,  ${} \bigtriangleup$  Nearly achieved,  ${} \times$  Not achieved

# JUKI CORPORATION

Theme	Intended Division/Dept.	Target, Policy, and Measures	Numerical Target	Results	Evaluation	Activities for Fiscal 2008
Sales and planning	SMT (Surface Mount Technology) Systems	Improved management of gasoline use regarding vehicles used for sales activities	10% improvement in fuel economy by the use of vehicles with higher fuel economy	95%	0	Promote"eco drive"as well
	Industrial Sewing Machines	Promotion of green procurement at the development stage	Green procurement rate: 100%	100%	O	Continue the established practice as a daily management item (following the solution to the problems with halogen-free circuit boards)
Green procurem	Each Business Segment	Maintenance and promotion of green procurement	Non-compliance with regulations on hazardous substances in products: zero	Three cases	×	Continue with present efforts
	Ohtawara Plant	Removal of hazardous substances	Survey on 2,400 items	Survey on 2,608 items	O	Continue with surveys to remove hazardous substances
Green trans- portation	SMT (Surface Mount Technology) Systems	Reuse of packaging materials	15% increase over previous fiscal year	Reduced by 18%	O	Continue to implement similar measures
	Head Office	Reduction in CO <sub>2</sub> emissions	5% reduction over previous fiscal year	Reduced by 6%	O	Continue to implement similar measures
Office	Head Office	Reduction of incinerated and landfill waste	10% reduction over previous fiscal year	Reduced by 12%	O	Continue to implement similar measures
	Head Office	Reduction in the purchase of paper for office use	10% reduction over previous fiscal year	Reduced by 21%	O	Continue to implement similar measures
	Ohtawara plant	Reduction in CO <sub>2</sub> emissions	2% reduction over previous fiscal year	Reduced by 4.8%	O	Continue to implement similar measures
Plant	Ohtawara plant	Reduction of incinerated and landfill waste	2% reduction over previous fiscal year	Reduced by12.6%	O	Continue to implement similar measures
	Ohtawara plant	Reduction in the purchase of paper for office use	5% reduction over previous fiscal year	Reduced by 8.2%	O	Continue to implement similar measures
Other	Comprehensive Quality Management Dept.	Support for both domestic and overseas Group companies in the acquisition of EMS certification	100% achievement of EMS improvement plans	100%	O	The CSR and Environment Department will help more manufacturing companies acquire EMS certification.

Evaluation:  $\bigcirc$  Achieved,  $\bigcirc$  Almost achieved,  $\triangle$  Nearly achieved,  $\times$  Not achieved

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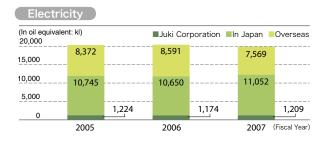
# **Environmental Performance**

The following table shows our environmental performance data for the past three years. We will further expand the scope of our environmental performance data to include more items and will strive to improve our environmental performance.

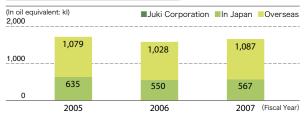
	Item	Fiscal 2005	Fiscal 2006	Fiscal 2007
CO <sub>2</sub>		3,014 t-CO2	2,821 t-CO2	2,938 t-CO2
Juki Corporation	Electricity	4,756,663 kWh	4,565,168 kWh	4,698,963 kWh
	Fuel oil A	81 kl	53 kl	62 kl
l S	Gas	9,000 m <sup>3</sup>	16,000 m <sup>3</sup>	12,000 m <sup>3</sup>
ਰੱ	Gasoline	59 kl	48 kl	59 kl
9	Water	19,000 m <sup>3</sup>	17,000 m <sup>3</sup>	17,000 m <sup>3</sup>
ati	Drainage	16,000 m <sup>3</sup>	15,000 m <sup>3</sup>	14,000 m <sup>3</sup>
9	Final waste disposal	0.5 t	0.2 t	0.04 t
	Total waste generation	74 t	96 t	106 t
	CO <sub>2</sub>	39,973 t-CO2	38,254 t-CO2	37,461 t-CO2
2.30	Electricity	41,771,353 kWh	41,401,695 kWh	42,965,697 kWh
t an th	Kerosene	349 kl	301 kl	306 kl
le uf	Fuel oil A	3,852 kl	3,270 kl	2,947 kl
Grad	Liquid petroleum gas (LPG)	490,241 kg	424,524 kg	437,676 kg
	Gasoline	112 kl	102 kl	92 kl
ping	Light oil	138 kl	128 kl	113 kl
Other domestic manufacturing c in the Group	Acetylene	594 kg	205 kg	127 kg
ğ	Coke	1,042,340 kg	1,174,720 kg	934,960 kg
companies	Methanol	6,240 kg	5,760 kg	5,760 kg
an	Water	342,000 m <sup>3</sup>	382,000 m <sup>3</sup>	387,000 m <sup>3</sup>
<u> </u>	Drainage	304,000 m <sup>3</sup>	328,000 m <sup>3</sup>	339,000 m <sup>3</sup>
0)	Final waste disposal	383 t	876 t	612t
	Total waste generation	5,612t	7,216 t	6,547 t
	CO <sub>2</sub>	24,273 t-CO2	24,436 t-CO2	20,074 t-CO <sub>2</sub>
80	Electricity	32,545,713 kWh	33,397,123 kWh	29,425,776 kWh
ĕ	Kerosene	0.2 kl	0.4 kl	1.4 kl
Overseas m companies	Gas	40,000 m <sup>3</sup>	72,000 m <sup>3</sup>	90,000 m <sup>3</sup>
<u>n</u> .ă	Liquid natural gas (LNG)	960,671 kg	890,985 kg	0 kg
β n	Liquid petroleum gas (LPG)	832,627 kg	794,029 kg	839,401 kg
ा व	Gasoline	128 kl	118 kl	111 kl
±₹	Light oil	281 kl	262 kl	296 kl
e fa	Acetylene	600 kg	975 kg	900 kg
nanufacturing in the Group	Water	215,000 m <sup>3</sup>	324,000 m <sup>3</sup>	408,000 m <sup>3</sup>
<u> </u>	Drainage	259,000 m <sup>3</sup>	283,000 m <sup>3</sup>	366,000 m <sup>3</sup>
ചെല്	Final waste disposal	2,349 t	2,114 t	1,780 t
	Total waste generation	4,135 t	4,406 t	4,074 t

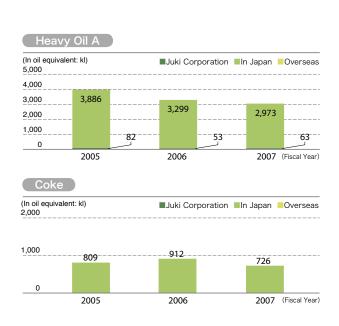
\* This table shows environmental performance data for Juki Corporation and other manufacturing companies in the Group shown on page 2.

 In fiscal 2007, we changed the CO<sub>2</sub> conversion factors, and so the data are recalculated retrospectively.
 In fiscal 2007, Union Special Corporation, which had been an overseas manufacturing company of the Juki Group, withdrew from the Group. As a result, the volume of liquid natural gas used by the Group was reduced to zero.



Liquefied Petroleum Gas (LPG)





# **Environmentally Conscious Product Development**

The Juki Group is committed to procuring materials and parts that have met both domestic and overseas regulatory requirements. We are implementing measures to conserve energy, reduce our environmental load, mitigate noise and vibration from our products, and reduce the generation of waste so that we can manufacture products in an environmentally conscious manner right from the product design stage.

### **Basic Policies for Product Development**

The Juki Group believes that products should be environmentally friendly as a prerequisite for satisfying customers. Based on this idea, we are developing more energy- and resource-saving products with lower environmental load.

In the procurement of parts and materials, we formulated the "Juki Group Green Procurement Activity Guideline" and are implementing measures to reduce our environmental load based on the "Guidelines."

In order to improve the recycling rate for products and parts, we use a "checklist to confirm that the design is environmentally conscious" at the product design stage. Specifically, we use the list to check for the use of single plastic material, use of generalpurpose plastics, reduced use of coating and plating materials, and other items to improve the recyclability of our products at the disposal stage.

Furthermore, for even greater saving on energy, we set numerical targets for energy saving designs at the product planning stage and implement measures to achieve those targets.

#### My action

# "I want to satisfy our customers in every way I can."

In light of the rapid spread of surface mount technologies, we are designing and developing new products giving special consideration to the use of these products by customers who will use pick and placers for the first time. In the design and development process, we are of course committed to complying with environmental laws and regulations and meeting inhouse standards as an important requirement, but we give first priority to actively providing customers with products that show high environmental performance. In fiscal 2008, we launched a group to reduce power consumption jointly with the R&D Department, and I am a member of this group. We set long-term targets for our activities and I look forward to

incorporating our R&D results into new products.

#### **Rikiya TAKAHASHI**

Manager, Third Development Department, R&D Headquarters, SMT Systems Division (Electronic Assembly and Test Systems Division), JUKI CORPORATION

# Environmentally Conscious Design of SMT Systems

We promote environmentally conscious designs for our SMT systems in line with the "Juki Group Green Procurement Activity Guideline."

To meet the needs for higher product performance and functions, we adopted a linear motor to improve the speed and reliability of the cutting-edge highspeed modular mounter FX-3 and realized reduction levels of vibration and noise from the product.

For this model, we have also achieved substantial saving in wiring and space by adopting new electrical components.

Our pick and placers feature a high degree of compatibility with various software applications and peripheral devices. This means that customers are able to continue to use their existing assets after introducing our new pick and placer models, and this in turn contributes to protecting the environment.



General-purpose chip placement machine that can be used for a range of parts

15

Environmental Reporting

# **Research on Environmental Technologies**

Juki Corporation is proactively implementing measures to reduce the environmental load of its products at the development stage, while keeping an eye on technological developments in a range of fields to find and apply technologies that help reduce the environmental load of its products. By these means, we are providing customers with more environmentally advanced products ahead of others.

### **Research for the Reduction of Environmental Load**

Most of the manufacturers that deliver highly technological products have advanced R&D departments and entire departments engaged in technological support to improve their comprehensive technological capabilities. Juki also has its Central R&D Laboratory, which supervises and manages the technological capabilities of the entire Juki Group and supports employees in developing specific products. We have incorporated the technologies initiated by the Laboratory in many products to reduce their environmental load.

The Central R&D Laboratory constantly monitors the trends of advanced technologies, chooses the ones that could be incorporated into JUKI products, conducts feasibility studies through joint research with universities and through other means, and actually applies the selected technologies after refining them for practical use. In conducting its activities, the Laboratory looks forward to 3 or 5 years from now, adding reduction of environmental load to its important R&D themes.

# **Research on Energy**

Industrial sewing machines and SMT systems are facing severe price competition all over the world. Juki has already been selling products with higher energy conservation performance, and its Central R&D Laboratory is conducting research into new technologies that help achieve the maximum energy efficiency at minimum cost. In recent years, we have been implementing measures also for old models already delivered to customers, including R&D to improve the energy conservation performance of these existing models by replacing some of their parts.

# Research on Developing Lighter and Lubrication-Free Sewing Machines

We are conducting R&D for materials that will greatly contribute to reducing product weights, focusing on the application of new materials and materials with high strength. In our R&D activities, we are monitoring changes in the processing technology, supply amount, and cost of each material. To develop lubrication-free sewing machines, it is essential to implement successful measures to prevent friction and abrasion. To make all Juki products lubricationfree, we are researching substitute lubricating agents and low-friction surface processing technologies.

#### My action

#### "I would like to contribute to solving environmental problems by downsizing parts."

By downsizing the parts of sewing machines and minimizing the electricity required for the machines with the use of computer-based analysis technology, which is becoming more advanced day by day, we will be able to further downsize the motors for sewing machines. This will in turn lead to power savings and also

reduced levels of vibration and noise. As a member of an R&D team, I would like to approach environmental problems from a slightly different viewpoint from the conventional one taken in product development.

#### Akira MAEDA

Deputy General Manager, R&D Department Central R&D Laboratory, JUKI CORPORATION

#### My action

#### "Taking a big step towards developing lubrication-free sewing machines."

We are committed to conducting R&D activities in order to prevent friction, which is inevitable wherever materials come into contact, to ensure the long-term, maintenance-free use of our products. Motors in sewing machines, however, repeat from stopping to 8,000 revolutions and we have to overcome a lot of difficulties

to reduce friction without using oil. Recently, great progress has been made in surface processing technologies, and we were able to put diamond-like carbon, which is highly abrasion-resistant, into practical use.

Kazuo TAKAKU Manager, Materials Technology Office, Central R&D Laboratory, JUKI CORPORATION

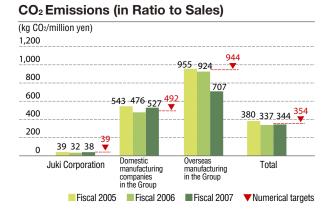


# **Global Warming Prevention Measures**

Carbon dioxide (CO<sub>2</sub>) is the largest contributor to global warming. The Juki Group is acting to reduce its CO<sub>2</sub> emissions by reducing the use of electricity and fossil fuels at its manufacturing bases while developing more energy-saving products.

# **Reducing CO<sub>2</sub> Emissions**

The Juki Group is committed to reducing its use of electricity, which produces about 70% of the Group's CO2 emissions, by decreasing the percentage of defective products, increasing material yields, improving production efficiency, using power-saving fluorescent lamps, and turning off the lights during the lunch break. In fiscal 2007, we were able to reduce our CO2 emissions by 7.2% overall and by 8.6% as a ratio to sales compared with fiscal 2004. In the future, we will implement further reductions, including replacing equipment with low-emission types.



# **Measures Implemented at Factories**

Juki's Ohtawara Plant, which emits the largest volume of CO<sub>2</sub> among the Juki Group factories, reduced its in-house power generation using heavy oil, which accounted for 70% or more of its CO2 emissions and increased the ratio of purchased electric power which emits less volume of CO<sub>2</sub>. As a result, the factory succeeded in reducing its CO2 emissions by about 2% in fiscal 2007.

Also, Juki Miyazaki Seimitsu Corporation installed blackout nets for the outside of its windows, thereby



Blackout nets set in Juki Mivazaki Seimitsu Corporation

increasing the cooling effect of air conditioners.

### Planting Trees and Flowers within the Factory Premises

The Juki Group encourages its factories to plant trees and flowers within their premises to reduce their CO2 emissions and protect the environment.

Juki Corporation's Ohtawara Plant has 300 plum trees within its premises and Juki Denshi Kogyo Corporation in Akita Prefecture has planted apple trees across its premises. Juki Aizu Corporation has measures to retain green space despite the expansion of its manufacturing facilities. Juki (Vietnam) Co., Ltd. also has a lot of flowers and trees and Juki Xinxing Industry Co., Ltd. has peach trees within their premises.

### **Construction of a New Building for Juki Corporation**

A new building is now under construction for Juki Corporation, which will be completed at the end of 2009.

The new building will of course meet the strict environmental standards set by the Tokyo Metropolitan Government and will also feature rooftop greening and energy-saving equipment including an air-conditioning system. We anticipate that the building will be evaluated by the local community as an environmentally conscious building.

#### My action

#### "Making each and every employee aware of the need for improvements."

As the manufacturing base of the Juki Group, we are committed to becoming a manufacturing company with low environmental load. Accordingly, all employees are made aware of the serious load that defective products will exert on the environment as well as the invisible load on the environment from the power consumed in making and processing materials. As a result, a greater number of in-house improvement proposal were made and the number of man-hours has been further reduced. Also, employees are saving more electricity



and reducing the use of office paper, because they are now more aware of the importance of protecting the environment.

#### **Motoo MINAGAWA**

Production Management Section, Administration Department, SUZUTAMI PRECISION INDUSTRY CO., LTD.

17

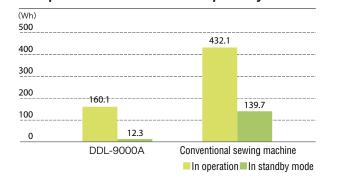
### Measures Implemented at the Product Development Stage

The Juki Group is committed to manufacturing products, giving due consideration to reducing its environmental load and is implementing energy- and resource-saving measures as early as at the design stage. We procure safe materials and parts in line with the "Juki Group Green Procurement Activity Guideline" and use a "checklist to confirm that the design is environmentally conscious", thereby improving the recycling rate for products and parts. Also, we have set energy saving design criteria for each of our major products as one of our new measures for environmental protection.

In industrial sewing machines, which are our core products, we released the model DDL-9000A, an environmentally conscious, energy-saving and lubrication-free sewing machine with low vibration and noise. This product was approved as an environmentally friendly and energy-saving product by the Chinese government in September 2007.

# Measures Implemented at the Transportation Stage

The Juki Group has been implementing measures to reduce CO<sub>2</sub> emissions during the transportation of its products for some time now. For example in April 2001, we improved the container transportation method used for our industrial sewing machines. We had been transporting empty freight containers from Tokyo and Yokohama Ports to our plant in Ohtawara City in Tochigi Prefecture by truck, but decided to shorten the transportation distance for these empty freight containers by transporting them to the Plant from a local international freight terminal in Utsunomiya City. In addition, in November 2004 we introduced a new system for the two-way transportation of loaded freight containers by rail in cooperation with Hitachi Transport System, Ltd. and Japan Freight Railway Company. In April 2006, we expanded the use of rail to include transportation from Akita to Tokyo and Yokohama, and thereby succeeded in reducing the CO2 emissions from the transportation of our products by 1,687 tons annually.



**Comparison of Power Consumption by Motor** 

# Reductions in CO<sub>2</sub> Emissions by Improving Transportation Methods



Reduction from transporting containers from a freight terminal in Utsunomiya
 Reduction from transporting industrial sewing machines by rail
 Reduction from transporting SMT systems by rail — Total reduction in CO<sub>2</sub> emissions

### Column

### Actively Participating in the Government's Environmental Initiatives

The Japanese government is implementing measures to reduce  $CO_2$  emissions. As one of these measures, the government is encouraging carriers to shift from truck transportation to rail transportation (modal shift), because rail transportation has less load on the environment and is not affected by traffic congestion. In February to March 2008, trials were carried out under the leadership of the Ministry of

Land, Infrastructure, Transport and Tourism in transporting international marine containers by rail between Tokyo and Utsunomiya, and Juki Corporation participated in the trials as a shipper. The Juki Group will continue to participate in the government's environmental measures as part of the Group's efforts to actively support and promote environmentally friendly transportation.

# **Resource Conservation**

We are continuing with our 3Rs (Reduce, Reuse, and Recycle) to conserve resources, including reduction of the volume of paper used for copying and printing, more effective use of resources, and reductions in the waste generated by our offices and factories.

### **Effective Use of Paper Resources**

The Juki Group has been encouraging the digitization of conference materials, use of both sides of copied and printed sheets, and paperless business operations using email.

The Industrial Sewing Machines Division of Juki Corporation has reduced its use of paper under the leadership of the General Manager of the Division. Specifically, the Division further digitized conference materials and introduces central filing to save space as part of the preparations for the move to a new building. As a result, the use of paper by the Division was reduced by 37.4% compared with the previous fiscal year.

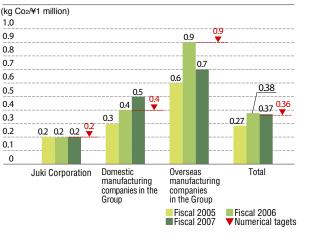
Overall, as a Group we have been able to reduce our  $CO_2$  emissions by 3.1% as a ratio to sales compared with fiscal 2006, but we were unable to attain our target reduction of 5.0%. We will implement further reductions in our  $CO_2$  emissions for achieving this target.

# Reducing Waste

The Juki Group is recycling waste plastics, cleaning liquids, edged tools, and pallets (wood chips), using cutting oil more efficiently. Our factories are implementing their own individual measures to reduce the amount of waste.

Juki Xinxing Industry Co., Ltd. began separating oil from oily waste rags by the use of a high-speed centrifuge, which resulted in the company reducing the volume of incinerated and landfill waste by about 53% over the previous fiscal year.

Overall, as a Group we reduced the generation of waste by 10.7% as a ratio to sales compared with fiscal 2006, far exceeding our set target of 2.0%.



#### Purchase of Paper (in Ratio to Sales)

Amount of Incinerated and Landfill Waste (In Ratio to Sales) (kg Co<sub>2</sub>/¥1 million) 100 94 90 83 80 70 67 60 50 40 30 20 21 19 20 18 14 10 0 Juki Corporation Domestic Total Overseas manufacturing companies in the manufacturing companies in the Group Group Fiscal 2005 Fiscal 2006 0.3 0.09 Fiscal 2007 Numerical tagets 0.2 0.09

#### My action

#### "Achieving Steady Results for In-House Beautification in Vietnam."

In our resource conservation activities in Vietnam, we first of all tried to change our employees' way of thinking. As a first step, we went around picking up litter and throwing it into a dustbin, which was filmed and shown to employees. The president of the company then began cleaning the trash area about two years ago, to set an example for employees. In addition, we have posted explanations on how to sort waste using photos displayed at the trash area and in the workplace. During the morning patrol, we film the trash area and show the film to employees at the morning meeting. In this way, local employees have increased their awareness of the importance of beautification in the company, and now the company is far cleaner than before.

0.10

0.1 0.0 0.07

Juki Corporation

#### Toshiki TAKEBUCHI

Manager, Vietnam Development Office, JUKI (VIETNAM) CO., LTD.



19

# **Green Procurement and Management** of Chemical Substances

In order to provide customers with environmentally conscious products, the Juki Group formulated the "Juki Group Green Procurement Activity Guideline" in August 2004 and has since been conducting green procurement activities. We update the "Guideline" from time to time to respond to new environmental regulations in a proactive manner.

# **Commitment to Green Procurement**

Based on its ECO-MIND Declaration, the Juki Group formulated the "Juki Group Green Procurement Activity Guideline" in August 2004 and has since been implementing green procurement. Utilizing the study data and technical materials accumulated in the course of these efforts, we have been designing, developing, and manufacturing products in compliance with the Guideline.

We responded to the EU's RoHS\*1 Directive in 2006 and to China's RoHS Directive in 2007. In 2008, we are implementing measures to comply with the new regulations in the European Union. We will continue to build even stronger green supply chains in cooperation with our suppliers.

# Maintenance and Management of the Green Procurement Systems

The Juki Group has hazardous substance analysis systems at all its procurement bases both within and outside Japan. We also check for hazardous substances contained in materials delivered to our major assembly bases and input the results to the database by product item. Moreover, we are improving our analysis technology for the entire Group through measures that include follow-up training seminars.

# **Management of Chemical Substances**

The Juki Group uses chemical substances in the manufacture of industrial sewing machines, pick and placers, and other products and we are strengthening measures to minimize the environmental load of all the chemical substances used in our products. Each of our factories has their own rules for the management of these substances and ensures safety right through the purchase, use, storage, and disposal stages of these chemicals as set out in their MSDSs.\*2

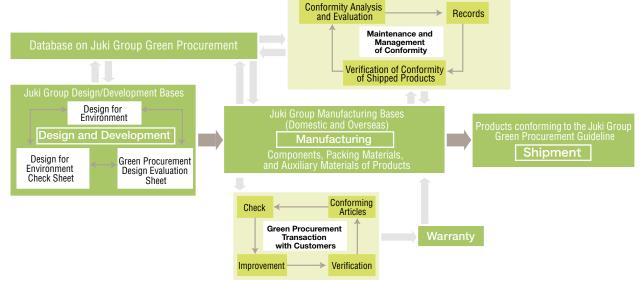
We are also committed to reducing the use of hazardous organic solvents in the parts cleaning and degreasing processes.

In 2001, we discontinued the use of trichloroethylene and dichloromethane at the Ohtawara Plant. In fiscal 2007, Matsumoto Machinery Industrial Corporation introduced vacuum cleaning facilities for cleaning parts and discontinued the use of trichloroethylene.

\*1 RoHS is an abbreviation for "Restriction of Hazardous Substances" and the RoHS Directive prohibits the use of 6 hazardous chemical substances (lead, hexavalent chromium, mercury, cadmium, PBB, and PBDE) in computers, home electrical appliances, and others.

\*2 MSDS is an abbreviation for "Material Safety Data Sheet," which shows the information required for the safe treatment of chemical substances (information on ingredients, disposal method, emergency treatment method, etc.) Manufacturers publish MSDSs for each of their products.





# Governance

The Juki Group is committed to enhancing its governance system, improving the speed, efficiency and quality of its management, and strengthening its compliance system to gain the complete trust of society. We also conduct risk management activities across the Group and prepare ourselves to manage any risks.

### **Corporate Governance**

We have a Management Strategy Council under the Board of Directors to improve the speed and flexibility of our management. We also have an Operating Officer System and Chief Officer System (Chief Officers are in charge of various group functions) in place to ensure smooth execution of business and to clarify the channels of responsibility. In addition, we appointed a CCO (Chief Compliance Officer) in May 2008 in response to a CSR problem that occurred at one of the Juki Group companies.

We have auditors, an Auditors Office, and an Internal Auditing Department who strictly monitor the entire Group and the execution of business by its directors.

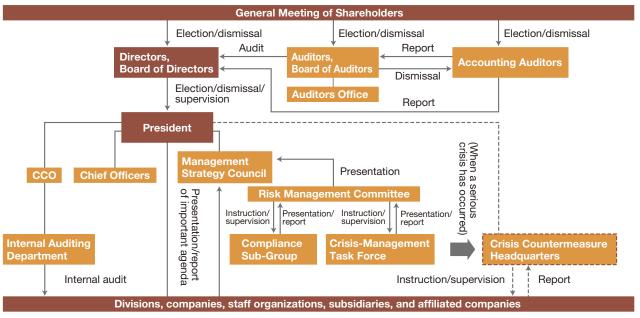
### Compliance

The Juki Group aims to continue to retain the trust of society by strengthening its compliance system while maintaining and improving its corporate ethics and actively communicating with society.

Employees of the Group are required to act in compliance with the "Juki Corporate Code of Conduct (see page 5)." In fiscal 2007, we held compliance-related training seminars for the directors and employees of the Juki Group. We also have an "Employee Code of Conduct Consultation System," which provides a contact point for employees, and through which they can make inquiries and ask for advice regarding compliance-related problems.

### **Risk Management**

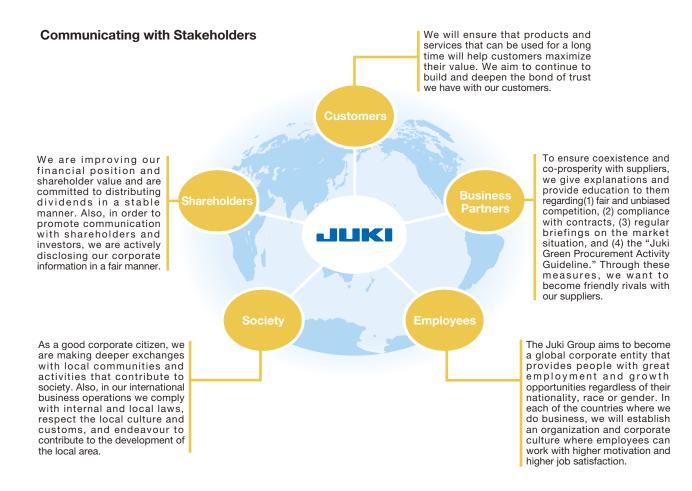
In the Juki Group, the Risk Management Committee leads the risk management activities for the entire Group. In preparation for emergencies, including natural disasters, fires and explosions, PL (product liability) problems and environmental problems caused by drainage from factories, we have established a system to implement preventive measures and respond to actual risks. In the event of a serious crisis, we will establish a Crisis Countermeasures Headquarters to actually manage the situation.



#### **Corporate Governance System**

# **Responsibilities to Stakeholders**

The Juki Group believes that conducting business activities fully oriented towards its stakeholders will increase its corporate value and generate mutual profits. We are implementing this to make ourselves into a corporate group that fulfils the needs of all of our stakeholders.



#### Column

#### **Local Contributions in Foreign Countries**

Over about 50 years, as a part of its business activities, Juki Corporation has been implementing education and training programs to develop production managers and engineers for its sewing factories. Since about 20 years ago, we have been engaged in human resources development as part of our social contribution to help developing countries grow their industries. Specifically, we send lecturers from Juki Corporation overseas 5 to 6 times a year to give lectures at the free-ofcharge seminars held there by the Association for Overseas Technical Scholarship (AOTS) to develop production managers. In 2007, these seminars were held a total of 6 times in India, Vietnam, Indonesia, and Sri Lanka. In addition, we cooperate with surveys carried out for ODA (Official Development Aid). During the period from 2006 to 2007, we sent lecturers to 3 seminars held concurrently with surveys in Ghana, to help develop trainers for production managers.



Training held for trainers for production managers in Ghana

# Always Impressed with the Sincere Attitude of Seminar Participants.

I have been involved in overseas human resources development for nearly 10 years. I was also sent to the survey carried out in Ghana in 2006. At the overseas location to which I am dispatched, I usually give talks to 30 to 40 local people, including governmental representatives, trade organizations, private companies, and teachers at dressmaking schools. Participants at these human resources development seminars are given certificates of completion, which will be an advantage for their future careers, and so they are very eager to learn from the seminars. I feel a great responsibility and motivation as a lecturer at these seminars. I am always impressed with the sincere attitude of seminar participants, who enthusiastically welcome me as a lecturer from Japan, a country far from their own.

#### Hiroyasu ASAI

Senior Manager, Sales Promotion Department, Marketing and Sales Headquarters, Industrial Sewing Machines Division, JUKI CORPORATION



# **Relationship with Customers**

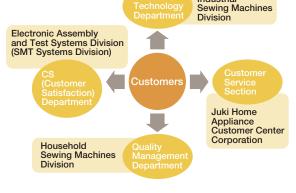
Industrial

We are working to provide safe products and increase Customer Satisfaction (CS), in addition to responding to inquiries and requests from customers. We are committed to building and maintaining a deep bond of trust with our customers.

# Increasing Customer Satisfaction (CS)

To ensure customer satisfaction, each of our divisions has its own system to respond to inquiries from customers. We also accept inquiries through our website.

#### System to Respond to Inquiries from Customers



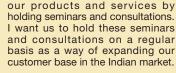
# **Product Safety**

As a premise to providing customers with safe products, we must comply with laws and regulations on product safety and continually review and improve our product safety measures. The Juki Group puts importance on the following three points when implementing product safety measures: (1) explicitly stating our intention to give priority to product safety;

#### My action

#### "I would like to improve Customer Satisfaction as a way of expanding our customer base in the Indian market."

We held a top management seminar in India to highlight Juki's Customer Satisfaction activities to a range of customers. We aim to help customer improve their productivity and increase their satisfaction levels with



**Mayur Doddabela** 

Manager, Plant Engineering Department JUKI MACHINERY (INDIA) PVT. LTD. (2) actively disclosing information on accidents with our products both internally and externally; and (3) implement a system for risk assessment and taking action to make our products safe. When a safetyrelated problem arises or could arise, we use all means to respond promptly and appropriately to ensure customer safety. In addition, we are acting constantly to prevent the occurrence or recurrence of accidents with our products, thereby reducing the risks.

# **Quality Assurance**

In line with the basic policies in our new Mediumterm Management Plan for fiscal 2008 to 2010 -"promotion of good qualitative management" and a "stronger *Monodzukuri* (the art of product making) power" - we are endeavouring "to improve our quality assurance system based on our strategies for quality and focusing on safety." We are also striving "to increase the quality and quantity of human resources who support the quality assurance system and to improve the level of our quality management skills." In fiscal 2007, we held seminars during the month of quality promotion, TQM instruction meetings for the development and manufacturing departments, and quality management education seminars for the executive managers of each business segment and Group manufacturing companies, and we encouraged more employees to sit for the QC (Quality Control) examination.

#### Column

#### Customer Satisfaction in the SMT Systems (Electronic Assembly and Test Systems) Division

In fiscal 2007, we improved the specifications for special orders and particularly strengthened measures for customers in Southeast Asia. In addition, we revised

the operating manuals for our products to make them easier to understand. The diagram on the right shows the results of our annual customer satisfaction survey conducted in fiscal 2007.

Satisfaction Survey Total score Education and training Delivery date management After-sale service Sales activities Sales Control Survey Quality and functions Estimation, and operational Costs - FY 2005 - FY 2007

**Results of the Customer** 

# **Relationship with Employees**

The Juki Group is building a business rotation system to make better use of human resources and is improving its workplaces and systems to help employees make their work and home lives more compatible. We also believe it important to give psychological support to employees for their overall health.

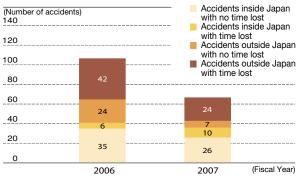
# Human Resources Development

The Juki Group is actively implementing measures to develop its human assets. These include educational support for employees at all levels, improved education on manufacturing through cooperation between different departments, and improving the management capabilities of our managers through seminars for motivation management and business coaching. We believe that this will eventually help the Group attain more growth and contribute to society by providing its employees with educational opportunities so that they can develop themselves and increase their motivation to work.

# **Occupational Health and Safety**

In order to provide employees with safe and comfortable workplaces, the Juki Group is making a concerted effort to eliminate labour accidents. To foresee and prevent labour accidents, we believe it important to share information about the details of any labour accidents that have taken place within the Group. The Juki Group manufacturing companies are therefore starting to share the relevant information, improve their risk assessment systems, and collect accurate data on accidents at work to prevent the recurrence of similar accidents.

# Number of Labour Accidents that Took Place within the Group



# **Mental Health**

The Juki Group implemented a system to help employees keep mentally fit some time ago. At present, we have the Health Consultation Section within Juki Corporation where a medical team comprising health specialists, nurses, and employment medical advisors are working on both a full-time and part-time basis to support employees in maintaining their health. Three-party meetings are often held between managers, employees and medical team members, and the percentage of employees who have taken in-house mental health checkups has already reached 100%. Also, some of the employment medical advisors on the medical team visit the workplace as mental health advisors. In this way, we are actively providing employees with mental health education.

### Providing Female Employees with More Opportunities

Companies are now providing female employees with more opportunities to display their abilities, and Juki Corporation is no exception: we have been offering various educational activities and improving systems for female employees. For example, a midwife works in the Health Consultation Section as a fulltime staff member to help pregnant employees and those who have just had children continue to work free from anxieties. In November 2007, we held a lecture for female employees focusing on their future as businesspersons 3 years from now. A total of 108 female employees participated and listened carefully to the lecture. In the future, we plan to increase the number of female employees in the development department and implement other measures to improve the work environment to provide female employees with more opportunities to display their abilities.

# Human resources development outside Japan

The Juki Group is committed to global human resources development and is actively promoting local staff members in foreign countries to managing positions. To this end, we provided 16 Chinese staff members with upskilling training to become managers and supervisors and provided a total of 20 Chinese and Vietnamese local staff members with technical training. In developing industrial sewing machines, we train employees using leading-edge tools so that they can acquire a range of advanced development skills.

# **Relationship with Shareholders and Investors**

The Juki Group actively discloses information and distributes appropriate dividends to shareholders and investors. We are also committed to winning their trust and appreciation by communicating the details of our corporate activities to help them understand clearly what we are doing. We have received many opinions and comments from shareholders and investors, and we are striving to meet their expectations.

### **Investor Relations (IR)**

Juki Corporation believes that it is important to improve the satisfaction of its stakeholders by strengthening communication with them.

We post short-term financial reports, financial statements, and annual reports on our website in good time as the best way of disclosing information on our business trends and financial position.

In July 2005, we began holding biannual briefing sessions for institutional investors, at which the president of the company gives a presentation and answers questions raised by participants so that they can deepen their understanding of Juki Corporation's management situation and distribution of dividends. At the sessions, we try to fully satisfy participants' requests for information.



Briefing session held in May 2008

# **General Meeting of Shareholders**

Juki Corporation holds a general meeting of shareholders every June, where deliberations are made on the financial reports, payment of dividends, and on the selection of directors. After the end of the general meeting, we introduce our major products to participating shareholders and hold a social gathering to deepen our communication with them.

In fiscal 2007, we demonstrated how to use sewing machines for industrial and household use

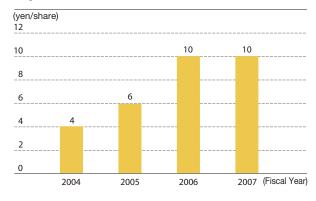
and SMT (Surface Mount Technology) systems (pick and placers) to shareholders at the annual general meeting, and it proved to be a good opportunity for us to introduce our products to shareholders. At the social gathering, we received a lot of valuable comments from participants. We will incorporate their opinions in our future actions so that we can meet shareholders' expectations.

### **Dividends Paid in Fiscal 2007**

The Juki Group has the largest share of the world market for industrial sewing machines. As a global corporate group, we have been taking action ahead of other companies on resource conservation, energy saving, developing lubrication-free machines, and recycling to reduce our load on the environment.

In fiscal 2007, we were able to achieve favourable business results while acting to protect the environment in line with our environmental philosophy, and we paid a dividend of 10 yen per share to our shareholders and investors.

We will continue to disclose appropriate corporate information and deepen communication with shareholders and investors at a variety of occasions, including briefings on financial settlements, visits to individual shareholders and investors, and interviews with media companies.



#### **Payment of Dividends**

# **Relationship with Business Partners**

As a global corporate entity, the Juki Group is promoting green procurement in cooperation with its business partners. We are committed to fair and unbiased trading with suppliers and improving our technological capabilities for coexistence and co-prosperity with our business partners. We are also enhancing communication with them through briefings and training sessions.

### **Procurement Policy**

The Juki Group aims to choose the best places for production and procurement on a global scale, in order to produce and deliver satisfactory products more speedily and more efficiently to customers at more reasonable prices.

We choose business partners in a fair manner using our "business partners examination table." Both within and outside Japan, partners to the Juki Group need to meet the Group's quality, cost, and due date requirements as a basic premise. In addition, when we choose partners, we evaluate them on their compliance with laws, regulations, and social norms, respect for basic human rights, compliance with the "Juki Group Green Procurement Activity Guideline," measures to ensure occupational health and safety, and protection of intellectual property rights.

Juki Corporation annually commends business partners who have fully met the company's evaluation criteria for quality, due date, and cost. We also issue a "certificate of guaranteed delivery" to partners who have met our examination criteria for quality management.

### **Exchange with Business Partners**

For the Juki Group to provide customers with satisfactory products in a stable manner, it is important for the Group to cooperate with its suppliers. To this end, Juki Corporation holds meetings to promote exchange and communication with suppliers, who are its partner companies.

In January 2008, we invited many of our business partners to a New Year's meeting at the Industrial Club of Japan. The meeting was a success and we were able to communicate with business partners in a comfortable atmosphere. We will continue to hold similar events in the future to communicate our gratitude to business partners for their cooperation and support.

### **Seminars for Business Partners**

Every year in our "Month of Quality Promotion," Juki Corporation holds a seminar for its business partners to help them improve their quality and to improve communication with them. In fiscal 2007, we held a seminar on the superiority of Japanesestyle factories with the participation of many of our business partners, where improvements made by the Ohtawara Plant were introduced to participants. Past improvements as well as improvements being made for further growth at the factory were presented with specific examples. In addition, business partners who had fully met Juki Corporation's evaluation criteria for quality, due date, and cost were commended and "certificates of guaranteed delivery" were given to business partners who met the company's examination criteria for quality management.



Seminar for Juki business partners

### Cooperation with Overseas Business Partners

Overseas too, we are strengthening our partnership with business partners. In China, we hold annual meetings with local business partners at Juki (Ningbo) Precision Industrial Co., Ltd.

In January 2008, we invited many of our local Chinese partners to a congress, at which we explained our procurement policies and commended partners for the excellent performances over the past year.

# **Relationship with Local Communities**

The Juki Group has customers in approximately 170 countries and deals with them via its worldwide sales network. In countries all over the world, the Juki Group companies are striving to build even better relationships with communities in the localities where they are doing business.

# Juki's Voluntary Firefighting Groups

Juki Corporation has voluntary firefighting groups made up of employees. These groups patrol local summer festivals and other events. In fiscal 2007, incredibly, the company's firefighting groups won all of the first, second, and third prizes at a contest of voluntary firefighting groups held in the entire *Chofu* district. This demonstrated the Juki Group's high awareness of the importance of fire prevention both inside and outside the company. We will continue to conduct activities that raise individual awareness of the importance of fire prevention.

### Making "Eco-friendly shopping bag"

To provide children with an opportunity to enjoy making things using a sewing machine and to learn the importance of protecting the global environment, we held an event for children at which they could make "eco-friendly shopping bags" with a sewing machine in August 2007. We held this event to help elementary school pupils with their homework in the summer holidays at the Ito-Yokado Kokuryo Store, which is located next to Juki Corporation's head office. A total of 25 children who were in the higher grades at elementary school participated in the event. Before actually making their "eco-friendly shopping bags," the children learned why using "eco-friendly shopping bags" is good for the environment. The children then made their own "eco-friendly shopping bag," struggling with the sewing machine, which was an unfamiliar device for them.

# **Bags for Kindergarten Children**

In February 2008, we held a workshop in *Kodaira* City, Tokyo Metropolis,to make bags for children entering kindergarten, in support of the activities of a community circle named "Poche." This circle organizes workshops and lessons for mothers with young children. We employed nursery staff for the workshop because it was for mothers with young children, and participating mothers (15 participants) enjoyed making bags for their children who would soon enter kindergarten. The children were pleased to get an embroidered bag with their name on it.

# Workshop for Making Things for Babies

Women only have a limited number of years in which they can become pregnant. To provide women with the opportunity to enjoy making things for the arrival of their baby, Juki has been holding a workshop for pregnant local women since 2006. In recent years, an increasing number of couples have been cooperating in bringing up their children, and in response to this trend, we invited both husbands and wives to the second workshop held in 2007. At the workshop, wives made a baby sling and husbands made a bib. Juki Corporation holds this workshop to give people the pleasure of making something by hand and to support mothers and fathers in bringing up their children.



A man participating in the workshop is looking forward to meeting his new baby and says,"I can't wait to show our baby the bib I made with my own hands."

#### My action

"The smiles of participants are a great reward for my efforts."

Many of the participants at our workshops do not use a sewing machine in their daily lives, but they can easily make a sling using the embroidery function on a modern sewing machine. At our workshops, I am sure participants enjoy making things by hand and have a unique experience that they can never get if they buy



ey can never get if they buy everything. We put a lot of effort into the workshops, including preparing the venue and materials, but the smiles of the participants always reward me for all the efforts we have made during the day.

Yumiko HACHIYA Household Sewing Machines Dept., JUKI CORPORATION

# **Third-Party Opinon**

In my role as a third party, here is my opinion on the Juki Group's current environmental report.



Journalist, Environmental Counselor **Yuko SAKITA** 

Ms. Sakita is an Environmental Counselor registered with Japan's Ministry of the Environment and is widely engaged in environmental education. She looks at society from the consumer's viewpoint and lectures and writes on environmental problems, especially on creating an environmentally-conscious society.

### Comprehensive opinion

In his message, the President of Juki Corporation refers to the Juki Group's tagline "Mind & Technology" and its "customer-oriented policy," demonstrating the Group's commitment to fulfilling its Corporate Social Responsibility (CSR).

In March 2008, one of the Juki Group companies had a problem concerning its quality of management, which I think is quite regrettable. In response, however, the Juki Group immediately appointed its first CCO (Chief Compliance Officer) and established the CSR and Environment Department to promptly implement measures to prevent a recurrence of similar problems. I highly appreciate the fact that the Group voluntarily disclosed relevant information to the public, and expect that it will make further efforts to achieve more growth and increase public trust in the Group.

The Group has clear policies to become a more robust manufacturing group using its technologies for industrial sewing machines, for which the Group has the largest market share, as its core technologies. Based on these policies, the Group has already succeeded in developing a sewing machine that consumes 40% less energy than conventional machines. The Group has thus steadily achieved results in terms of environmental measures, and I hope that it will make further contributions to the world by developing more environmentally friendly products and promoting more environment-oriented corporate management.

### Environmental Reporting

The year 2008 is the first year of the commitment period of the Kyoto Protocol, and at the G-8 *Hokkaido Toyako* Summit the leaders discussed the medium- to long-term targets for their global warming prevention measures. This year is deemed an important year for the enhancement of global warming prevention measures.

In 2007, the Juki Group impressively reduced its  $CO_2$  emissions by 7.2% in total and by 8.6% in ratio to sales against the target of a 6.0% reduction over fiscal 2004 levels. The year 2007 was the final year for the Group's Medium-Term Management Plan. In strengthening its environmental management system under the new Medium-Term Management Plan for 2008 onwards, I expect that the Group will transform itself into a more environmentally advanced company by formulating a comprehensive plan for the environment. Such a plan will include energy conservation measures, measures for "green factories" and "green distribution", and the use of

renewable energy toward the attainment of the super-long-term target of reducing the world's  $CO_2$  emissions by half (by 60% to 80% in Japan) by 2050.

Regarding the creation of a recycling-based society, the Group has been reducing its purchase of paper for office use through daily efforts, including the digitization of reference materials for meetings and use of both sides of paper, which is highly commendable. Moreover, if the Group shows year-on-year data showing its resource productivity, recycling rate, and other 3R promotion-related items in addition to data on the amount of incinerated and landfill waste, readers of the report will be able to understand how relevant measures are implemented by the Group in a more specific manner.

The Group is also making strenuous efforts to implement green procurement and manage chemical substances appropriately, and it will increase the credibility of the report to include quantitative data, such as the number of registrations made to comply with the PRTRrelated law. If the amount of information exceeds the space limit for the report, the Group could consider disclosing relevant data on its website.

### Social Reporting

As a basic policy, the Group is making it clear that it will make decisions in consideration of society, strictly comply with laws and regulations, and attribute importance to communicating with stakeholders under the supervision of the newly-appointed CCO (Chief Compliance Officer), which will increase public trust in the Group. In particular, the president of Juki Corporation refers to the "provision of products and services from the viewpoint of customers," who are "co-creation partners" in the Juki Group, and I hope that the Group will continuously disclose information about how the customers' opinions received by its customer centers and divisions are utilized for the better management of the Group. Regarding this, I would like to propose that the Group proactively introduce the viewpoint of female employees into the product development departments, which will in turn lead to better use of human resources.

### Future Expectations

Against the backdrop of climate change and the restricted use of resources, the international community is undergoing various changes. To create a virtuous cycle for the environment and economy, I expect that the Group will constantly take on the challenge of improving the energy conservation performance of its products, promoting designs for more energy saving and recyclability, and of developing reuse- and recycling-oriented businesses. At both its domestic and overseas sites, the Group is engaged in a range of activities, including the employment of local people, local human resource development, and the promotion of local traditions and cultures. I expect that the Group will clearly show its comprehensive policies to ensure symbiosis with local communities, including nature conservation and regeneration measures to maintain biodiversity, and as a global corporate entity, will bring smiles to a greater number of its employees, local communities, and stakeholders all over the world.





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