



# CSR Report 2009

# Message from the President



Morio Ono President & CEO Tamron Co., Ltd.

morio Ono

### Contributing to Society through Our Primary Business

For Tamron, 2008 was the year we started full-fledged corporate social responsibility (CSR) management. We started working on establishing full-fledged risk management and environmental protection systems as well as activities for contributing to society, progressing in our work. Considering contributing to society, we launched two important events linked to our primary business. One is the Railroad Scenery Photo Contest that we launched in collaboration with Saitama City and The Chamber of Commerce and Industry of Saitama Prefecture. We received a multitude of photographic work from photographers all over the nation, freshly reminding us that many people are deeply interested in the world of photography. We also contributed to our community with The Railroad Scenery Photographic Contest in Omiya known as a city having strong ties with railroad transportation and where our head office is located.

As another important event, we launched a program called "Educational Course Delivery Services" to elementary schools in Saitama City, using soap bubbles. We often hear that interest in natural science has been waning among children. Fortunately, we have our own analysis room capable of measuring materials at the substance level to prevent harmful substances from entering our products. On one day, contemplating how to teach the wonder of science and chemistry by linking the image of lens elements, the idea of using soap bubbles large enough to enwrap a child sparkled in my mind. Based on this idea, we started our Educational Course Delivery Services, designed to provide opportunities to children at local elementary schools to learn chemistry and science. The faces of children being greatly affected when they were wrapped by soap bubbles are imprinted in my mind.

For us, 2008 was the year marking the beginning of our substantial efforts to contribute to the economy, environment and society by creating new eyes for industry, as our corporate slogan advocates. At Tamron, we are committed to continuing this kind of work to further contribute to our local community.

### **Promoting Consolidated Management**

In 2008, as part of our work to increase our CSR management efficiency, we consolidated quality (ISO9001) and environment (ISO14001) management at our head office. We are confident that we will be able to pursue environmentally-friendly designs more efficiently if we focus more on quality and environment protection in conducting our primary business operations. As the next step, we plan to consolidate management at all domestic factories in 2009, and all group factories including Tamron Optical (Foshan) in China by 2010. We will be able to discuss  $CO_2$  and waste emission reductions, which are global action assignments, as our own action assignment when our management is globally integrated in that way.

As part of our efforts to pursue risk management, we also established our company-wide Business Continuation Plan (BCP) in 2008. We aim at establishing a credible structure capable of restoring normal business operations, even in emergency circumstances such as earthquakes, in order to continue to supply our customers with high-quality and environmentally-friendly products.

### For Ideal CSR Management in Pursuing Primary Business Operations

Our company started as a manufacturer of interchangeable lenses for single lens reflex (SLR) cameras, but we are now making a wide variety of optical devices including surveillance camera lenses and vehicle built-in lenses. These products contribute to realizing a safe society where people live with a sense of security. We believe that, by supplying our customers with high quality products that respond to these needs at affordable prices, we will be able to pursue CSR management through our primary business operations. We wish to continue to working on the further growth of our company and sustainable development of society by pursuing CSR management while striking a balance between the economy, social needs and environmental protection.

In compiling this CSR Report, we focused on communicating with our stakeholders. We would greatly appreciate your comments and suggestions for how we can further improve our CSR management.

# Tamron's CSR Management

#### Tamron's CSR Management

Tamron's CSR management is conducted under our basic corporate philosophy of contributing to the economy, society and environment by supplying customers with quality products that serve as eyes for industry. Our basic corporate philosophy advocates performing all operations of our primary business based on The Action Declaration, defining the stance the company should take toward stakeholders divided into five categories, and The Action Codes, showing how all Tamron employees should act while dialoguing with our stakeholders. In addition, we are committed to pursuing environmentally-friendly business operations since Earth is an important stakeholder. (For additional information on Tamron's CSR management, please refer to pages 2 and 5 of our CSR Report 2008.)



For reviewing our CSR Report, please visit our website at HYPERLINK WEB http://www.tamron.co.jp/envi/top/index.html

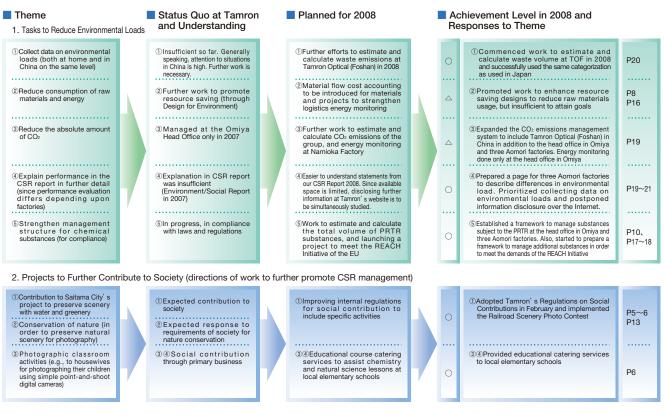
#### Response to Themes from Stakeholder Dialogue in 2007

Tamron held the first meeting to dialogue with stakeholders in 2007, learning from stakeholders concerning our work for reducing environmental loads and enhancing social contribution. In 2008, we reviewed our activities based on what we learned from stakeholders, working for improvement. As a result, for reducing the environmental load, we started estimating and calculating the quantity of waste generated at Tamron Optical (Foshan) where product output capacity was sharply increasing, based on the same

#### categorization as used in Japan.

However, the progress of our projects to accurately quantify all the raw materials used and reduce  $CO_2$  emissions at our three domestic factories in Aomori was behind schedule in 2008. We will continue to work on the projects in 2009. As for contributing to society, we established our Regulations for Social Contribution Activities as planned for 2008, commencing work based on the regulations. For additional information, please refer to the report below:

#### Stakeholder Thoughts and Responses



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#### About the front cover design

In compiling the CSR Report for 2009, we tried to focus on relationships with our stakeholders, by using a illustration of lens elements used in our products, as symbols of "New Eyes for Industry" that contribute to society.

#### **Editorial Policy**

- This report is issued for informing our customers, employees, shareholders, investors, business partners, communities and other bodies (local communities, public bodies, NGOs and NPOs being our stakeholders) about Tamron's work and progress on environmental conservation and social responsibility.
- 2. This report covers Tamron Co., Ltd and Tamron Optical (Foshan) Co., Ltd.
- The guidelines referred to are Environmental Report Guidelines (2007 Version), Greenhouse Effect Gas Assessment & Reporting Manual (Ver. 2.3 2008) and Environmental Accounting Guidelines (2005), issued by the Ministry for the Environment.
- 4. The needs for disclosing information to stakeholders were determined in accordance with GRI Sustainability Reporting Guidelines.
- 5. We strive to disclose information from the perspective of stakeholders by referring to the warranty processes in AA1000 Warranty Standards.

For additional information, please contact:

CSR Promotion Office, Tamron Co., Ltd., 1385 Hasunuma, Minuma Ward, Saitama City, Saitama 337-8556 Japan

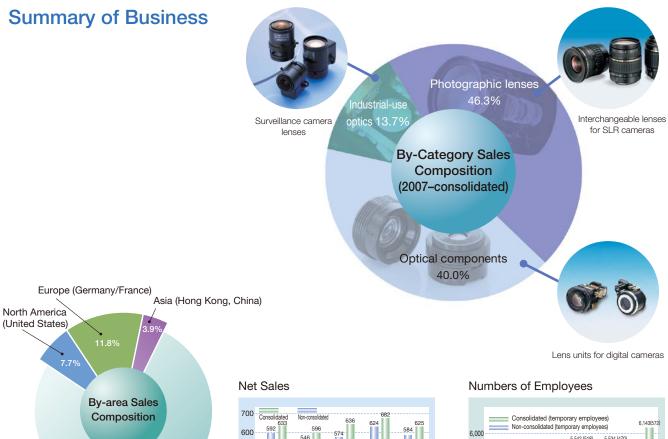
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# **Company Outline**



Head Office

| Trade Name              | Tamron Co., Ltd.  |
|-------------------------|---|
| Head Office             | 1385 Hasunuma, Minuma-ku, Saitama City, Saitama Prefecture      |
|                         | 337-8556 Japan  |
| Tel.                    | +81-48-694-9111   |
| Founded                 | November 1, 1950  |
| Established             | October 27, 1952  |
| Capital Amount          | 6.923 billion yen   |
| Representative Director | Morio Ono   |
| Employees               | Consolidated: 6,143 (including 572 temporary employees)         |
|                         | Non-consolidated: 1,569 (including 568 temporary employees)     |
| Total Sales             | Consolidated: 62,537 billion yen (2008)                         |
|                         | Non-consolidated: 58,414 billion yen (2008)                     |
| Stock Exchange          | 1st Section, Tokyo Stock Exchange                               |
| Domestic Factories      | Hirosaki, Namioka, Owani  |
| Affiliated Companies    | The United States, Germany, France, Hong Kong, China (Shanghai, |
|                         | Foshan)   |
|                         |   |



2004.12 2005.12 2006.12 2007.12 2008.12

500

400

300

200

100

0

Domestic

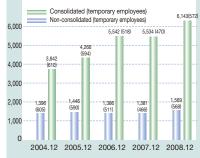
76.6%

By-area Sales Composition is based on sales to customers in Japan and areas where Tamron's

for SLR cameras.

subsidiary companies exist. Sales figures in overseas

markets are primarily sales of interchangeable lenses



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### Feature 1: Railroad Scenery Photo Contest

We ran the Tamron Railroad Scenery Photo Contest in 2008. Our head office is located in Saitama City where a large museum on railroad equipment opened in 2008. We held the photo contest to acquaint many more people with the joy of photography through railroad photography, contribute to photographic culture through railroad photography, and contribute to the area of Omiya known as The Railroad Town. We received a multitude of applications far beyond our expectations, including many interesting works depicting the lives of people connected with stations, equipment and other railroad facilities. The photo contest was held in collaboration with Saitama City, The Chamber of Commerce and Industry of Saitama City, and Takashimaya Department Store. We received 3,741 works altogether.

As a result of impartial evaluation by a judging committee, Grand Prizes were bestowed on two photographic works: one for photographers in general and one for primary and secondary school students. The two works were introduced at an exhibition held at Takashimaya Department Store, together with other prizewinning works. A number of people visited the exhibition. We were delighted to provide an opportunity to introduce photographic works to many photo enthusiasts. In planning the photo contest, we decided to open it to people using all lenses and in all age brackets to increase participation. We will continue to hold similar contests so that we may provide opportunities to let many more photographers and visitors feel the joy of photography. The excellent images received from many photo enthusiasts will become heartening works for our employees. We hope that similar events will help our engineers to develop many more quality products that measure up to the expectations of photographers.



Grand Prize Winning Work (For adults: Saitama City Mayor Prize) "Goers and Comers" by Masao Ito





Grand Prize Winner (General Segment: Saitama City Mayor Prize) Masao Ito (Kyoto)

Photography has been my hobby for decades. Since I often take railroad scenery pictures, I wanted to enter the contest, attracted by the contest theme. I took the picture as I was impressed by the twilight images when I was making a connection to another train at Kyoto Station. I was surprised, unable to believe it, when I heard the news of the prize. I am delighted to be awarded this prize.



Grand Prize Winner Work (For primary and secondary school students: Chamber of Commerce and Industry Chairman Award)

Haruna Miyamoto (High school junior in Chiba)

I started photography two months ago. I took many pictures at once in a photo session held by our Photo Club, using a digital camera. I took the picture along Isumi Railway' s track, paying attention to the background, the car and the boy. I wish to learn more about photography, taking many more pictures.

#### **Brief Summary**

Entry period: From March 19 through August 15, 2008 Winners announced: September 29, 2008 Photo Exhibition: From October 15 through 21, 2008 at Takashimaya Department Store in Omiya Total number of visitors: About 2,500 Total number of entries: 3,741 Sponsored by: Saitama City, Chamber of Commerce and Industry of Saitama City



The exhibition



students: Chamber of Commerce and Industry Chairman Award) "See You Again Next Summer" by Haruna Miyamoto

WEB http://www.tamron.co.jp/special/train/result.html

### Feature 2: Educational Course Delivery Services

Accepting suggestions from the stakeholder dialogue held in 2007 as part of our CSR management and given the recent problem of waning interest in science among school children, we started work to provide educational course catering services to local elementary schools. In 2008, our engineers engaged in analyzing chemical substances began by delivering chemistry courses. They studied the flow of coursework, focusing on themes based on chemistry and science. As a result of our proposal to elementary schools within our area, which is Minuma ward where our head office is located, two schools asked us to teach. We also received requests later from another elementary school and a nursery school in Saitama City. In total, over 400 children participated in the four educational courses we gave four times. Since the content differed from normal coursework, children, teachers and parents were interested. Employees in charge of the services were also delighted, saying that they were motivated due to finding job satisfaction when they saw many children were delighted. We will continue to work on our courses, and we wish to offer similar services on a broader range of themes befitting Tamron as a lens manufacturer.



Air Popper Coursework

< Coursework Content > Educational courses designed to allow child

Educational courses designed to allow children experience the wonder of science and chemistry were delivered.

- Huge soap bubbles, bubbles that don't pop Coursework to have children experience how the nature of soap bubbles changes depending upon differences in chemical substances and that bubbles can be made large and strong.
- Air popper

An air bullet dashes out each time when a cardboard box with a hole is hit by both hands. Coursework is designed to help children understand the strength of air bullets differing depending upon the box dimensions.

• Vitamin C checker

Coursework to have children examine if cookies and juice contain Vitamin-C with test fluid made by attenuating commercially available mouth wash with water. The program enables children to graphically see the effect of the chemical reaction observed when iodine reacts to Vitamin-C, changing color.

#### < Impressions of children >

More than 90% of children participated found the courses interesting. Comments

- · It was fun to be wrapped up in a bubble.
- Next time, I want to be wrapped up in a larger bubble together with my friend.
- · I want to try it again at home.
- $\cdot$  It was interesting to do various experiments.
- 2 Question What kind of experiment do you want to do next time?
- Experiment to make colored soap bubbles
- · Experiment to ride on a soap bubble
- · Boomerang!
- Musical performance using familiar devices at hand



Soap Bubbles Coursework

#### Interview with an employee engaged in the educational course delivery services



Mari Arai, CSR Promotion Office

From preparation to actual implementation, I tried to emphasize enjoyable lessons. In the classrooms, the vivid facial expressions of children were impressive. Also, each time, I was surprised to see children get new ideas from our presentation. They found new methods to play with what we prepared, in ways beyond our imagination. Teachers gave us helpful techniques for teaching children, while children found ways to enjoy our programs on their own terms. I could feel a sense of togetherness. Many children said they enjoyed our programs very much, so we accomplished our aims.

Since I started to work delivering educational services, my attitude toward my regular work has changed because I am more aware of the people in our local community. I will be happy if many more people in our community feel kinship toward our company from these kinds of activities.

# **Relationships with Customers**

Tamron works promptly on problem solving when problems are found anywhere from development to manufacturing. We work hard to supply our customers with safe high-quality products that will please them.

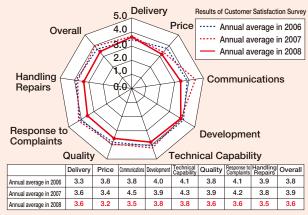
### **Continuous Improvement through Effective** Use of Customers Feedback

Tamron's company-wide quality management develops quality products pleasing customers, always working to continuously improve. Tamron asks users of photographic interchangeable lenses for feedback through questionnaires included in display boxes as well as listening to customers at events such as photo sessions. For OEM products, guestionnaires entitled Questionnaire for Surveying Degree of Customer Satisfaction are sent twice a year to all OEM customers to ask them for feedback on the eight aspects of delivery, price, communications, development, technical capability, guality, response to complaints and handling repairs.

Unfortunately, the overall evaluation results for 2008 dropped 0.3 percentage points while evaluation results for seven aspects except for delivery dropped slightly. Evaluation results for communications and response to complaints showed the largest decline in points because of delays in informing customers of findings and responding to complaints. For instance, the head office in Omiya handled product complaints as well as factories on a case-by-case basis. Investigation was prompt, but there were delays in reporting findings to customers because systems integrating information on investigation progress and reporting were not sufficient. We therefore reviewed those systems, and decided to integrate the systems pertaining to investigation, reporting and logistics. Now, all related information is understood at the head office and direct communications conducted with customers on a timely basis.

As for products received for repair from private users, we aimed at improving our repair services, working to complete repairs within three days after receipt at our customer service points. This was an improvement of one day from our previous policy. We met our target by 100% in and after October 2008. We wish to maintain and further improve our customer service structure in and after 2009, as we continue to work to increase customer satisfaction.

### Results of Customer Satisfaction Survey (annual average points in three years from 2006 through 2008)



### **Opportunities for Interacting with Customers**

Tamron provides free maintenance services for Tamron lenses at PIE (Photo Imaging Expo) held annually at Tokyo Big Site, one opportunity for interacting with our customers. Our free maintenance services are highly regarded, and the number of customers bringing Tamron lenses to our workshop increases every year. The total number of lenses brought to our booth during the four-day period was 144 in 2005, but the number increased to 381 in 2008. We are pleased that the number of customers who regularly use our products is increasing. We would like to take advantage of these services as an opportunity to listen to feedback from our customers.



Free Maintenance Services at PIE

#### For Developing Original High-quality Products

As a pioneer in high-performance interchangeable photographic lenses, Tamron consistently works on developing new products based on our advanced technology in order to satisfy our customers. For example, in September 2008, Tamron launched the AF18-270mm F/3.5-6.3 Di-II VC LD Aspherical (IF) MACRO (Model B003), an interchangeable lens with built-in vibration compensation (VC)<sup>(1)</sup> mechanism based on Tamron's proprietary technology. The zoom lens realizes 15X zoom power for the first time in the world as a high-performance interchangeable lens for single lens reflex (SLR) cameras, covering an equivalent focal length range from 28mm wide-angle to 419mm telephoto when converted to the 35mm format. The lead time we needed for the one-does-it all zoom lens was six months from design to mass-production.<sup>(2)</sup> We will continue to work on the speedy development of new products that meet customer satisfaction.

- (1) Vibration Compensation. A mechanism compensating for camera-movement to prevent blurring.
- (2) Normally, it takes almost eleven months from design to prototype (twice or three times) including prototype evaluation periods.



### Tamron's DfE (Designs for Environment)

In order to continue to develop products with designs friendly to our environment, Tamron enacted Product Assessment Regulations, working on DfE (Designs for Environment) approaches. The regulations require each new product be evaluated for parameters such as product life from design to disposal, resource saving, energy saving, recycling and chemical substance management. Products satisfying standards set for the respective evaluation parameters will carry Tamron Eco Labels. In 2008, we reviewed evaluations of all existing products.



lamron Eco

% Tamron Eco Labels

The label symbolizes an eye gently looking at our economy, society and environment. The eyebrow symbolizes a flowing stream of wind, air and water, the pupil the green earth, and the tree our three Rs of reduce, reuse and recycle.

### Example of Accomplishments with DfE



#### Example of Accomplishments with DfE

In the Model A001N 70-200mm tele-zoom lens, we reduced the number of parts by 31% while saving weight by changing materials from metal to plastic. This was achieved mainly by reducing the number of stainless steel balls used as bearings for smoothly rotating lens barrels in focusing and zooming. The design change also contributed to improving operability.

#### **Comparison Table**

|                 | 67DN                 | A001N                | Vs 67DN    |
|-----------------|----------------------|----------------------|------------|
| Focal length    | 70-210mm             | 70-200mm             | _          |
| Aperture        | F/2.8 LD             | F/2.8 Di             | _          |
| Weight          | 1,273g               | 1,140g               | Down 10.4% |
| Number of parts | 453                  | 313                  | Down 31%   |
| Cubage          | 969.7cm <sup>3</sup> | 996.0cm <sup>3</sup> | Up 2.7%    |

# Product Development Paying Attention to Resource Saving

Investments in new metal molds can be saved if existing molds are commonly used, which also contributes to resource saving and  $CO_2$  reduction. In designing the M12VG412 Vari-Focal Lens<sup>(1)</sup> for surveillance cameras, our designers dared to use the same designs for its lens barrels<sup>(2)</sup> as in its predecessor (12VG412SIR) while pursuing high-performance characteristics and precision. As a result, we could use eight existing models, contributing to resource saving and  $CO_2$  reduction.

(1) Lenses with variable focal lengths allowing adjustments of angles of view after installation. Vari-focal lenses combine the compactness of prime (fixed focal length) lenses with the advantages of zoom lenses, which allow adjusting focal lengths steplessly.

(2) Cylindrical part of a lens



# Efforts at Points of Production for Enhancing Quality

One quality problem common to optical devices is dust and dirt. Required levels differ depending upon product categories. For camera phone lenses, for example, even dust invisible to human eyes impinges on the performance. To meet standards on dust and dirt on optical devices for camera phones and to solve the problem common to all optical devices, Tamron completed the 3rd stage factory construction plan in November 2007, building a new factory with a clean room with a floor space of 2,583 square meters (equivalent to six tennis courts) at Tamron Optical (Foshan) (TOF). Assembling lines for existing products were moved to TOF in the autumn of 2008, and assembling lines for new products have been built one after another since then. As a result of these measures, the total number of defective products due to dust and dirt is on the decline.

In addition, manufacturing engineering divisions of three domestic factories have worked on reducing defects due to dust and dirt, introducing utilities they originally developed. As a result, enhancing cleanliness is now regarded as one of the most important key phrases at our production points. In addition, Tamron regularly holds Regular Meetings for Quality Assurance (RMQA) monthly at TOF, a joint meeting of the three Aomori factories once a month, and In-process Quality Audits3 every two months, working to share information on common problems and find solutions by all related divisions. Each factory continues to work on quality improvement, based on corrective actions adopted as results of RMQAs and findings resulting from In-process Quality Audits.

(3) Audit to objectively check if products are assembled in accordance with stipulated processes, and if the working environment is adequate to maintain product quality, in order to instruct further study or propose improvements as necessary.

# **Relationships with Employees**

Tamron works on fostering self-disciplined employees with the spirit of rising to the challenge of creating new ideas in a climate emphasizing ethics. Tamron also strives to create a safe work environment that encourages work, based on fair evaluations, respect for human rights and mutual understanding.

#### **Employee Satisfaction Survey**

As we can deliver high quality products that meet customer satisfaction if every employee feels a sense of fulfillment in working at Tamron, we implemented the first round of Employee Satisfaction Survey in 2008 by sending questionnaires to our employees. Questionnaires, each containing a total of 100 questions on the following ten themes, were sent to all employees working at the Omiya Head Office and three Aomori factories, except for directors, executive officers and new recruits. We found that about 70% of employees are satisfied overall. Analyzing the survey results sorted by categories of managerial level employees, factory, and gender has clarified some problems we need to solve for further improvement. We plan to implement the same survey in 2010, and wish to address the problems, based on the results of the survey, maintaining communications with employees through human resource departments.

#### Ten Themes:

- Overall satisfaction 1
- 2 Management policy 3. Corporate climate, atmosphere
- 4 Human relations
- 5. Sense of satisfaction in job responsibility
- 9. Welfare program

8. Wage system

10. Personnel evaluation system

6. System of personnel management system

7. Human resource development

#### Mental Health Diagnoses

The necessity of helping people with mental health problems has been recognized more than ever as the number of people injured by stress and suffering from emotional disorders increases. We worked on strengthening our mental health care, providing mental health maintenance seminars for managerial employees by inviting outside experts. Unfortunately, the number of employees who need long-term therapy has been rising in recent years. Therefore, we introduced a mental health diagnosis program on a trial basis at the head office in Omiya, in an effort to ensure early recovery through early detection. (The ratio of employees who underwent diagnosis reached 95%.) Diagnosis results and other related information are directly sent to employees and private information is not disclosed to the company. Employees can have their mental health diagnosed without worrying about private information disclosure. In addition, they can receive support from specialized counselors or doctors after diagnosis. The mental health care program is also supported by a contact office to directly confer with personnel department members. We will continue to work on preventing mental health problems, refining our pre-clinical diagnosis and follow-up care programs.

### For Creating Safe and Comfortable Work Environment

Tamron works hard to ensure security, maintain and enhance the mental and physical health of employees, and create a comfortable environment to work in. Unfortunately, however, eight occupational accidents and six commute accidents arose in 2008. The major causes of the occupational accidents were falling due to snow and road surfaces freezing on the premises of the three Aomori factories as well as bodily injury while using machines. We analyzed causes and took countermeasures to avoid reoccurrence. As for accidents during commuting, the ratio of accidents while commuting by bicycle was high. A lecture class was held at the head office in Omiya in October to help employees to ride their bicycles more safely. In addition, in order to be prepared for the worse-case scenario, an emergency treatment seminar on cardio-pulmonary resuscitation and treatment of burns and external injuries was held in order to minimize risks.

#### For Nurturing Human Resources

#### Technical Specialist Nurturing System for Upgrading **Technical Capabilities**

Human resources support the technical capabilities of our company. Nurturing engineers is extremely important, dictating the future of any company. We work hard on nurturing our engineers by creating a work environment where young engineers are able to learn the essence of manufacturing and express their views freely while working under a personnel evaluation system, one designed to fairly evaluate the abilities and accomplishments of each engineer. As part of our engineer-nurturing program, we have a technical specialist system, which awards appropriate internal positions to those engineers with technical capabilities. We award four job titles of engineer, senior staff engineer, chief engineer and executive advisory engineer. Engineers are given their titles as positions corresponding to assistant section manager, section manager and department manager on administrative or clerical office staffs, through strictly fair screenings. In addition, their technical capabilities are periodically checked in order to enhance their levels. Approximately 20 engineers now have titles as technical specialists. The system functions well, supporting engineers who want to enhance and master technical skills. Those who are given the titles are technical specialists whom other engineers rely on. They are the future role models for young engineers.

#### Training Program for Overseas Trainees

With the aim to nurture personnel with international sensibility, Tamron frames a program called the Overseas Trainee System, designed to give on-the-job training at overseas affiliated companies.

#### Interview with Employee Who Participated in the **Overseas Trainee System**



Taishi Saito, Repair Section, Mfg Division, Hirosaki Factory

When I worked at repair jobs day after day at Hirosaki Factory, I wanted to become an engineer capable of giving technical training courses to repairmen overseas like my current direct supervisor. I therefore applied for a position as an overseas trainee. I also wanted to experience abroad. When I heard that I had obtained a position, I felt incredible. Fortunately, my superior and colleagues readily understood my desire.

Basically, English was one of the languages spoken at Tamron Germany. Since my English was poor, I worked on learning spoken English, even on my days off at the beginning. Since my job responsibilities were basically almost the same as my job at Hirosaki Factory, I was confident except for the language barrier. I wish to be an engineer capable of working at Tamron in Germany and around the world by mastering skills that hold true overseas. I am working to be like the supervisor, the model I wanted to follow.

## For Establishing Good Relationships with Business Partners

Tamron started to work on CSR procurement in line with our CSR management philosophy. We will continue to work on supplying our customers with high-quality products while paying attention to human rights, labor, safety and sanitation together with our business partners.

#### **Tamron Procedures to Select Suppliers**

Working to strengthen our administrative structure on environment-related substances used in our products, Tamron introduced the Eco Partner Accreditation System into our supply chain several years ago. All production facilities of business partners who manufacture products, components and parts for us must be screened under the authentication system. We certify those business partners who implement evaluations and audits as prescribed, have established environmental quality management systems, and are willing to collaborate with us in environmental research and submission of required data. They are our Eco Partners. We exempt our Eco Partners from the obligation to submit environment-related data<sup>(1)</sup> subject to certain conditions and consider partnerships when deciding on purchasing.



Eco Partner Accreditation Procedures

 analyses of containing substances(ICP analyses and ingredients, and so on)
 We evaluate suppliers by activities on environmental issues, management system, harmful substances reduction and so on.

#### **CSR** Procurement

Tamron joined the Global Compact of the United Nations\* to address global environmental and social issues. Considering the five important parameters of labor, safety and sanitation, environment conservation, management frameworks and ethical management, we instituted Tamron Supplier Codes of Conduct that all suppliers are to uphold. As CSR management is essential for business, we incorporated the codes of conduct into our Basic Agreement with Business Partners to jointly establish supply relations for a new era with our business partners. In 2009, we plan to further review our internal frameworks and educate procurement personnel to increase and enhance our CSR procurement.

\*International initiative to support 10 principles related to human rights, labor, environment conservation, and preventing moral corruption. Tamron decided to support the initiative in August 2007. For further detail on the Global Compact, please visit the United Nations website.

في http://www.unic.or.jp/globalcomp/index.htm



### **Chemical Management Structure**

In July 2006, the EU enforced the RoHS Directive restricting the use of specific hazardous substances in electrical and electronic products. In China, the Governance Law for Preventing Electronic Information Devices from Contamination was enacted in March 2007, covering electronic information devices and the manufacturing facilities and metal molds for making the devices.

We introduced and maintain the Eco Partner Accreditation System together with our business partners to meet the stricter regulations on chemical substances. We distribute our Environment-related Substance Management Regulations prohibiting the use of harmful chemical substances and Environmental Quality Management Procedures as well as Guidance for Environmental Quality Assurance Structure. The three publications serve as procedure manuals for all our business partners for preventing harmful chemical substances from being mixed in our products, asking them to audit and cooperate. In addition, working to guarantee that our products are free of harmful chemical substances, we introduced advanced equipment using technologies such as XRF (X-ray fluorescent analysis apparatus), ICP-AES (Inductively-Coupled Plasma Atomic Emission Spectrometry) and GC-MS (Gas Chromatography) Mass Spectrometry for checking lead, mercury, cadmium, sexavalent chrome, PBB and  $\ensuremath{\mathsf{PBDE}}(1)$  in parts, materials and products. In addition, in 2009 and beyond, we will work to manufacture safe products in line with the REACH Initiative(2) that will be enforced in the EU in 2009.

- (1) PBB (polybrominated biphenyl) and PBDE (polybrominated diphenyl ether) are used mainly as fire retardants in plastic, rubber and tape. They are registered as endocrine disrupting substances (environment endocrine disrupters), suspected to cause memory failure, central nerve system disorders such as depression, and arteriosus, liver problems, and hypertrophied thyroid gland.
- (2) EU's new directive aimed at protecting human health and environment through preliminary registering and evaluating certain chemical substances in products entering the EU.

#### Interview with a Supplier



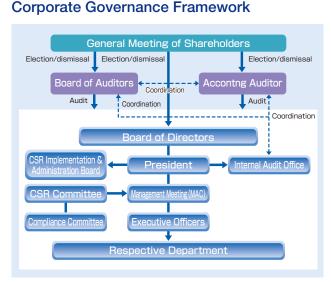
Keiji Miyamoto Manager, Quality Assurance Division, Nidec Sankyo

Our company assists Tamron with green procurement, primarily through supplying stepping motors. Since the major manufacturing operations of our company are overseas, strictly controlling manufacturing operations at our overseas factories is extremely important for meeting Tamron requirements. All the business premises of our company acquired ISO certifications and established frameworks to manage quality, protect the environment and prevent harmful substances from entering our products. We are ensuring structures sufficient to prevent mixing harmful substances from design to delivery. We introduced XRF analysis apparatuses at all business premises to verify that our products are free of harmful substances while promoting accreditation of IEC QC08000(3) at factories in China. We will continue to work hard on improving our assurance levels further. In the EU, a new REACH directive is expected to be enforced this year. We are committed to meeting new stricter regulations and continuing to supply our customers with safe products.

(3) Requirements under a process management system for controlling harmful substances specified by the International Electrotechnical Commission (IEC).

# **Relationships with Shareholders and Investors**

We are striving to establish a highly transparent organizational structure by constantly reviewing our organizational climate, working to realize our corporate philosophy by fulfilling our responsibilities to all stakeholders of our company.



Corporate Governance Framework

#### (1) Separation of Management and Executives

Tamron introduced an executive officer system in January 2005.

Under the new system, we expect to focus on management decisions, working over strategies on a mid/long-term basis as well as ideas for evolving new business, while executive officers flexibly and promptly superintend and carry out our daily business operations.

#### (2) Organizational Structure for Internal Control

Tamron organized an Internal Audit Board in January 2004 as an organization under direct supervision by our representative director. The board audits our business operations based on our internal audit regulations, independently reporting the state of compliance with internal regulations to our representative director. The board also implements followup audits some time after the initial audit to ascertain that improvements have been made and ensure compliance with internal regulations. Tamron also set up a CSR management office in January 2007 to put CSR management into practice. The CSR management office is promoting work in line with our Twelve CSR Themes to put CSR management into practice, in addition to refining quality and environment management systems.

#### 3) Internal Control through Committee Meetings

We regularly report business tasks such as budget changes and countermeasures in monthly business performance discussion meetings (MAC meetings) attended by all directors, full-time corporate auditors and executive officers. External auditors and a representative of our Internal Audit Board also attend each meeting to observe. At each meeting of our CSR Committee, which was organized in 2007, aspects related to CSR management are discussed with an eye to all divisions concerned, pursuing unified business operations, and resolutions adopted are brought up for discussion at MAC meetings.

#### For Thoroughgoing Compliance

The Compliance Committee at Tamron meets monthly, chaired by a director in charge of compliance, to review problems related to laws and regulations. The committee also reviews educational programs for all employees and examines issues to be addressed in refining our crosssection compliance structure.

#### 1. Workshop on Insider Transactions

In 2008, inviting a lecturer from the Tokyo Stock Exchange, we held a workshop on insider transactions to better understand the regulations, learning more about transactions running afoul of the regulations and how to prevent insider transactions. We wish to hold similar workshops again to prevent employees from violating insider transaction regulations.

#### 2. Workshop on Subcontracting Transactions

In 2008, we also conducted a workshop to help employees working at departments related to subcontracting to learn more about the Subcontracting Law and related transactions.

#### **Efforts for Stricter Internal Control**

In line with the Corporate Law enforced in May 2005, we resolved basic policies for strengthening our internal control systems at a meeting of the board of directors held in the same month. Since then, we instituted our Corporate Philosophy, Action Declaration and Codes of Conduct as prerequisites for all business operations at Tamron, requiring compliance and continuing to refine our structure.

Based on the Financial Instruments Transaction Law, an internal control reporting system<sup>(1)</sup> was enacted in April 2008. Since our company works on a fiscal year ending December 31, we started to put the system into practice from January 2009. In 2008, we promoted work operations to put related documents in writing while defining risk control steps in processes to secure stakeholders' confidence in our financial statements. We will continue to work on reviewing our internal control systems in order to refine our systems to meet our social responsibility for reliable financial statements.

(1) The Financial Instruments Transaction Law requires refining corporate frameworks to secure accuracy in financial statements and information disclosed as well as creating and submitting internal control reports evaluating the effectiveness of the frameworks.

#### State of Progress of Internal Control Projects

| 2007   | 2008  | 2009  |
|--|---|---|
| Inaugurated Internal<br>Control Project<br>Team<br>(with 23 members) | Defined risk control<br>measures<br>Put workflow in writing<br>(reviewed workflow)<br>Evaluated our company-wide<br>internal control system<br>Refined and evaluated<br>the state of operations | Full-fledged<br>introduction<br>(Refinement and<br>improvement of the<br>internal control system) |

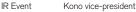
### Communications with Shareholders and Investors

The importance of information disclosure (IR)(1) for securing the soundness of management and transparency has been growing every year. Tamron implements adequate information disclosure on a timely basis, while paying attention to fairness, in compliance with related laws and regulations, participating in seminars the Tokyo Stock Exchange holds from time to time. For instance, Tamron holds briefing sessions twice a year (intermediate stage and term end) for explaining account settlement results to institutional investors and security analysts, in addition to individual IR meetings. To eliminate discrepancies between our stakeholders, we also regularly insert explanatory materials on account settlement and press releases in English too. We participate in IR events to explain our business and management philosophy to as many individual investors as possible. We will continue to work on enriching our IR activities.

(1) IR (Investor Relations) means providing shareholders and investors with information such as financial standings that is necessary for them to make investing decisions.

For further details, please visit our website at WEB http://www.tamron.co.jp/investors/top/index.html





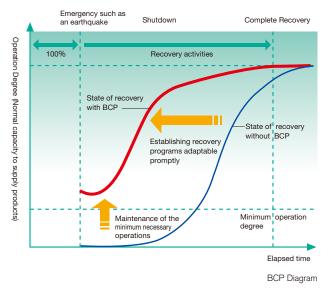
### Soil Contamination Management

Our voluntary investigation in 2003 on groundwater and soil on the premises of the Omiya head office revealed soil contamination by volatile organic compounds such as trichloroethylene and tetrachroloethylene and heavy metal such as lead and boron, exceeding permissible standard values. We formulated countermeasures against increased groundwater and soil contamination, commenced engineering work to install PRB facilities of walls and tanks using neutralizing iron powder, and completed the engineering work in 2005. (For additional information on countermeasures taken up to 2007, please refer to page 21 of our CSR Report for 2007.) Since then, we have continued to periodically monitor groundwater to ascertain the effectiveness of the engineering work. The concentration of contaminants in groundwater sampled from monitoring wells near the boundary between neighboring areas is below the specified level.

WEB http://www.tamron.co.jp/envi/top/index.html

# Business Continuity Plan as Part of Risk Management

In January 2008, we commenced risks assessment across the board in accordance with our risk management policies. We are now managing important risks involved in our business operations in order to maintain continuity of our business. In 2008, we formulated our BCP (Business Continuity Plan) for ensuring smooth recovery of business operations from natural disasters such as large-scale earthquakes or other accidents. The plan defines procedures we should follow on a routine basis and countermeasures to take in emergency situations in order to recover our core business operations and maintain continuity, even in emergencies, by minimizing damage to our assets. Based on the plan, we will organize an organizational control committee chaired by our representative director to promptly respond to problems if an emergency arises. We also implement our risk management system on a company-wide basis, and work on enhancing its effectiveness through auditing the implementation and periodically reviewing the system itself.



#### Training for Emergency Situations

Since our head office is located in a residential area, ensuring smooth evacuation and preventing fire hazards are essential as part of our risk management program for earthquakes and fires. We hold fire drills annually with all employees participating and fire department assistance. In November 2008, our employees learned about initial stage fire fighting and methods to use fire extinguishers and water-gun hoses, including actual practice. We also held an initial stage drill against an earthquake, using the preliminary earthquake flash announcement program of the government.

# **Relationships with Society**

Tamron employees recognize the significance of being part of their local community and working at Tamron. To grow together with society and continue to be supported by society, Tamron works to support social events and cultural activities, hoping that photography and imaging culture develop and evolve further.

# For Contributing to Developing Photography and Imaging Culture



Grand Prix of the 2007 Macro Lens Photo Contest Shozo Tanaka, "Firefly"

Tamron works to contribute to developing photography and imaging culture through using our experience as a camera lens manufacturer. Tamron hosts events such as photo contests and seminars as part of our mission to share the joy of photography with participants and viewers of pictures taken with Tamron lenses.

#### Macro Lens Photo Contest

Tamron hosts the national Macro Lens Photo Contest annually. Open to all photographers, the photos must be macro pictures. In 2008, photographers submitted 2,752 macro pictures. Professional photographer Shin Yoshino, who was on the panel of judges, commented that, among the many usual insect and flower pictures, photographers also expressed their photographic creativity by selecting subjects such as water droplets, crystals and even portraits. We will continue to hold the photo contest in order to share the joy of viewing the small worlds of macro photography captured with lenses, with as many people as possible.

WEB http://www.tamron.co.jp/index\_p.html

#### Tamron Bronica Club

Tamron supports the Tamron Bronica Club by providing a place for serious amateur photographers who use Tamron lenses or Bronica products to share the joy of photography. In 2008, in addition to introducing photographic techniques through a club magazine, Tamron hosted events including workshops for indoor portraits and photographic seminars at Kyoto Prefectural Botanical Garden and Shinjuku Gyoen National Garden.

WEB http://www.tamron.co.jp/tb\_club/top/index.html

#### Growing Together with Local Communities

#### Relationships with NGOs and NPOs

In 2008, we were fortunate to be able to work with NPO Hand-on Saitama operating in Saitama City. Discussing the challenges Saitama City needs to address is informative for our work to contribute to society.

#### Interview with a NPO



NPO Hands-on Saitama Akiko Wakao, Secretariat

Hands-on is a non-profit organization working to improve Saitama City together with citizens, striving to encourage people to invest themselves in making Saitama City a better place for everyone. In 2007, in collaboration with Saitama City, we worked on the Mikan Project, a research project. In Japanese, the project name represents thinking about companies in the future. As part of the project, we visited Tamron to obtain information. Since then, we have worked together through events such as CSR workshops. We learned that Tamron is working to establish CSR management through the voluntary CSR work of employees, annually publishing a CSR report that employees write and compile. Hearing that "Employees are attached to CSR reports they write," we thought that the same thing holds true since we work on creating communities participated in by citizens. The ratio of nuclear households in Saitama Prefecture is 64.4%, which is the second highest in Japan. Relationships among people are diminishing. Families are becoming isolated more than ever, presenting problems for nursing aged people or small babies. However, we will be able to create a better society if businesses and NPOs work together. Let's continue to work together.

#### Activities for Local Community Security

Crimes including breaking in to homes and cars occur in Saitama City. Therefore, our Omiya head office established close communications networks with Omiya East Police Station and businesses in our neighboring area. We also concluded a local community safety assurance agreement with our local community to prevent crime, attempting to create a local community where people can live with ease of mind. As a result, in December 2008, the Omiya East Police Station and Saitama City commended our company for our work to prevent crime.

#### Participation in Car-free-day Program and No My-car Days

Our Omiya head office supports the Saitama Eco Car-fair & Carfree-day Program to establish traffic systems avoiding overly relying on cars and to review our lives from the perspective of Earth. In September last year, we suggested all employees voluntarily refrain from using cars and motorcycles and instead use public transportation, which was a good opportunity for them to think about global warming and commuting by car. In addition, in October 2008, we stipulated the 3rd Friday of every month as a No My-car Day to suggest our employees refrain from commuting by car.

# Activities in China

Tamron Optical (Foshan) is also striving to address the twelve themes under Tamron's CSR management philosophy, emphasizing social contributions matching the needs of the local community and education to enhance employee motivation.

#### Support for Victims of Major Earthquake in Szechuan

On May 12, 2008, a major earthquake of 8.0 magnitude hit Szechuan, causing great damage. Fortunately, all employees were safe since the stricken area was far from where TOF is located, and there was no actual damage to TOF's facilities. Employee families suffered no fatalities or total losses of houses. However, TOF decided to allow employees from Szechuan to return home temporarily, if and when they wished to return home to support or care for their families, based on the company regulations, after public transportation was available. TV news was full of

tension-packed scenes of rescue teams saving lives in smashed buildings. Given the high degree of suffering, Tamron donated 5 million yen through the Foshan Red Cross to help the prompt



recovery of the afflicted area. In addition, TOF and Tamron Optical (Shanghai) collected contributions from employees and donated 1.5 million yen. The donated money was used for supporting victims. Since Tamron's action was the earliest in Szechuan and the total amount of donations was large, the Government of Foshan City commended Tamron. Tamron will continue to work on social contribution through work matching the needs of local communities.

#### (Damage to Employees and Their Family Members) (In May 2008)

Total number of employees at TOF: 4,900 (567 from Szechuan) Damage to houses: 79 employees Family injuries: 3 (light injuries)

#### **Response to Emergency Circumstances**

Witnessing the devastation after the terrible earthquake, all employees at TOF recognized the importance of preparing for emergencies. In 2008, TOF also implemented risk assessment for the surrounding environment, in accordance with the risk classification table stipulated by Tamron's internal regulations, clarifying tasks and countermeasures to reduce future risks. Since the necessity to focus clearly on countermeasures against new types of influenza was highlighted as a result of the risk assessment, TOF plotted out a business continuity plan assuming a new influenza outbreak.

#### Efforts to Develop Human Resources at TOF

In the past, TOF concentrated on building production capacity. On the occasion of the 10th anniversary in 2007, TOF implemented internal seminars for refining systems from the perspective of human resources, in addition to efforts to improve systems from the perspective of the physical facilities. Lessons were prepared, reflecting employee requests, and the audience totaled 4,500. Since a unit accreditation system is introduced in the seminar program, participation in the seminars constitutes an assessment item for pay raises and promotions. TOF plans to refine the educational program further as a long-term educational program necessary for the future of TOF.

#### Main Contents

| Category           | Subject                                      | Contents   | Objective   |  |
|--------------------|--|--|---|--|
| External education | Seminar at Zhongshan<br>University (1 year)  | Japanese conversation                                | Nurturing engineers and key<br>persons necessary for the        |  |
|                    | Seminars in Japan<br>(6 months)              |  |   |  |
| Internal education | Skill learning program<br>for middle echelon | Management methods                                   | Skill learning  |  |
|                    | Japanese language                            | Basic Japanese language                              | Improving skill to communicate<br>with Japanese employees       |  |
|                    | Quality management                           | Basic knowledge on quality<br>management and methods | Enhancing quality consciousness<br>and quality management skill |  |



Interview with an Employee Who Participated in the Program



Deputy Section Manager, Receiving Inspection Section, Quality Assurance 陳暁分 CHEN XIAO FEN

After studying Japanese at Zhongshan University, I continued to study Japanese at Tamron Japan. I could greatly enhance my Japanese proficiency through working in Japan. After return to China, communications with Japanese employees at TOF became much easier, and I could work more efficiently. In Japan, I could learn more about the Japanese language and the minds and values of Japanese. For instance, knowledge of Japanese courtesy and culture, consciousness of the 5S and posture toward persistent improvement were of great help for me to do my quality assurance work.

My thinking and methods for doing my job changed. I begun to pay more attention to the five disciplines, and my quality consciousness rose. I could learn more about quality management techniques. I wish to continue to work on improving the quality of our products including introducing new management methods to our business practices.

# For Protecting Our Environment

Recognizing the importance of our responsibility to protect the environment of the Earth, we are aiming at environmentally-friendly work in all our business operations.

#### **Environment Management Structure**

Tamron decided to integrate our management systems into one system with a 3-year plan from 2008. In 2008, an integrated system for quality and environment management was established and implemented. The main objectives were simplifying our management and reducing total hours for maintenance and operation. We achieved the objectives by connecting quality with environmental objectives, thus concentrating our limited management resources on work common to both the environment and quality. (For additional information on environmental objectives and achievements, please refer to pages 17 and 18.)

In January 2009, we expanded the scope of the integrated system for environment and quality management to the three Aomori factories. We are confident that through this expansion our manufacturing operations will be controlled in a consistent system, which will lead to enhancing our workflow and product quality. In 2010, we plan to integrate environment management systems (EMSs) and quality management systems (QMSs) at Tamron Optical (Foshan) (TOF) into one system to enhance environment management operations of the entire group, including TOF where the scope of operations has been expanding.

#### **Timeline for System Integration**

| 2008  | 2009   | 2010   |
|---|--|--|
|   |  |  |
| Integration of QSM and EMS at the Omiya head office | Integration of QSMs and EMSs<br>at the three Aomori factories<br>with the head office system | Integration of TOF<br>systems with the head<br>office system |
|   |  |  |
| Completed   | In operation   | stem coordination in<br>ina as was done in Japan             |

### **Education of Environment/Quality Management**

Following the introduction of the integrated management system, an e-learning course was provided for all employees working at the Tamron head office to run through the basics of establishing numerical objectives as much as possible, aiming at achieving the objectives to enhance product quality. In addition, as part of CSR education, CSR Procurement Lesson Courses were provided to all managerial level employees to learn about social problems in the world including environmental problems and child labor and their relationships with our business operations.

As for environment management education, we provided educational courses to employees working at related departments, to teach methods to reduce waste and CO<sub>2</sub> to address problems carried forward from 2007. We will continue to provide similar opportunities to our employees, with an eye toward developing human resources capable of creating and implementing solutions for problems concerning their jobs.

#### **Environmental Accounting**

The total investment for environmental protection in 2008 was 6.22 million yen while the total environmental expenses reached 283.63 million ven and the total economic effects stood at 0.66 million yen. The investment amount decreased by 45.23 million yen compared to the 2007 investment amount and the total economic effects also fell by 3.74 million yen year on year.

Resource recycling costs such as those for disposing or recycling waste and upstream and downstream costs, which are costs for environment management after procurement and sales, were on the decrease since new activities were not required on top of established management systems. Earth environment conservation costs decreased by 45.22 million yen compared to 2007 in terms of investment and 5.33 million yen in terms of expenses. As a new investment, we procured microwave sample dissolution systems that are required at pre-processing steps for measuring chemical substances in electronic parts, working to enhance our structure for managing chemical substances.

In addition, costs for energy saving monitoring apparatuses introduced in 2007 to realize real-time monitoring as well as timers for simultaneously controlling air-conditioning are included in the investment. We reduced electricity usage at the Omiya head office, but the reduction was not reflected in the economic effects due to an increase in power rates. We will continue to review our systems so that we may increase our environment conservation and economic effects in proportion to investments and expenses.

| Category                        |  | Environm | ental cost | Environmental  | Economic | Main work   | Page       |
|---------------------------------|--|----------|------------|--|----------|---|------------|
| Call                            | Oalegory                                     |          | Expense    | conservation effect  | effect   | IVIAITI WORK  | Page       |
| Pollution<br>prevention<br>cost |  | 0        | 12,875     | Zero environment<br>contamination<br>accident  | _        | Sewage systems coupling<br>work (Omiya head office),<br>repair work for boiler/<br>cooling tower piping<br>arrangements<br>(three Aomori factories) | -          |
| Cost<br>with in<br>business     | Earth<br>environment<br>conservation<br>cost | 6,220    | 36,535     | Kept products free<br>of harmful chemical<br>substances  | _        | Simultaneous controlling<br>of air-conditioners with<br>timers, chemical<br>substance analysis  | P10<br>P19 |
| area                            | Resource<br>cycling<br>cost                  | 0        | 25,528     | Enhanced recycling<br>ratios of general<br>waste from<br>business as well as<br>industrial waste | 666      | Waste reduction<br>and recycling  | P20        |
|                                 | Sub-total                                    | 6,220    | 74,938     |  | -        |   | -          |
| Upstream downstrea              |  | 0        | 27,783     | Implemented environmental,<br>quality assessment at customers<br>business premises               | -        | Green procurement,<br>recycling containers and<br>packaging materials   | P10        |
| Management<br>activity cost     |  | 0        | 45,036     | Achieved<br>environment<br>objectives and<br>targets   | -        | Maintenance of<br>environment<br>management systems,<br>environment education,<br>expansion of green zones  | P15        |
| R&D cost                        |  | 0        | 135,256    | Enhanced performance<br>through DfE approaches   | _        | Additional activities<br>to promote DfE   | P8         |
| Social acti                     | ivity cost                                   | 0        | 623        | Reduced waste  | -        | Clean-up of neighboring areas   | -          |
| Cost to pr<br>Environme         | revent<br>ntal damage                        | 0        | 0          | _  | _        | _   | P12        |
| Total                           |  | 6,220    | 283,636    |  | 666      |   |            |

\*Scope of Environmental Accounting

Period: From January 1 through December 31, 2008

Premises covered: Omiya headquarters, branch offices in Tokyo and Osaka, three Aomori factories

'Labor costs are calculated based on the average wage. \*The economic effect from the resource recycling cost is the amount of profit from

selling metal waste as valuable resources. \*Depreciation allowance is not calculated as an expense.

### **Environmental Loads**

Energy consumption rose 25% in 2008, which was mainly because power consumption at Tamron Optical (Foshan) increased by about 11 million kWh while natural gas consumption at the company cafeteria increased by about 110,000 cubic meters due to the increase in workers. (For additional information on power consumption, please refer to page 19.) At TOF, kerosene oil consumption decreased while diesel oil consumption increased because of the water heating change from kerosene oil to diesel oil. Other changes from 2007 include energy consumption for logistics. Gasoline consumption increased due to the increase in the volume of delivery to OEM customers. Also, diesel oil consumption at the three Aomori factories increased because diesel oil consumption was included in the calculation following the completion of a system to estimate and calculate oil consumption used by trucks exclusively run for transportation of parts among the three factories. Our tasks from now on include enhancing logistics efficiency.

### **INPUT**

| Electric power 57,906,788kWhCrude oil194klCrude oil194klKerosene oil10.3klDiesel oil57.7klLPG4,000 m³Natural gas92,000 m³Total537,000GJPaperCopy paper20.5t   | Water         Clean water       49.8万㎡         Sewage water       13.0万㎡         Total       62.8万㎡         Raw/auxiliary materials         Metal (brass, aluminum)         Glass         Plastic         Chemicals (drugs, solvents, cleaners)         Gas (nitrogen, oxygen, argon)         Electrical components         Cardboard | Gasoline     | nergy*1<br>276.4k&<br>104.9k&<br>81.3k&<br>B1.3k&<br>Reference Guideline:<br>"Greenhouse Effect Gas Calculation/<br>Reporting Manual" (Ver.2-3) issued by The<br>Ministry of Environment |
|---|---|--------------|--|
| Manufacturing<br>raw materials/<br>parts at suppliers<br>OUTPUT<br>Electric power 29,077t-C02<br>Crude oil 525t-C02<br>Kerosene oil 26t-C02<br>Diesel oil 151t-C02<br>LPG 25t-C02<br>Natural gas 192t-C02<br>Total 29,996t-C02<br>Waste entrusted for intermediate treatment<br>Industrial waste 598.0t<br>General waste 165.3t<br>Total 763.3t<br>(reference) TOF<br>Industrial waste 171.9t<br>General waste 789.6t | Development, design<br>and production<br>at TamronRecycledPaper36.5tCardboard69.2tMetal71.4tGlass123.8tPlastic155.1tGrinding sludge22.8tWaste fluid175.0tOthers7.0tTotal660.8tProducts'2Total2,092.0t   | Gasoline 243 | Scope of INPUT Items   |

## State of Achievement of 3rd Environmental Objectives and Targets

In 2008, Tamron worked on achieving the 3rd environmental objectives and targets. Objectives and targets were mostly achieved. However, we were unable to achieve a few items related to environmental loads, and our challenges from now on were clarified.

### Degree of Achievement of Environmental Objectives and Targets for 2008

Degree of Achievement of Environmental Objectives and Targets for 2008 (Entire Group)

In 2008, our Omiya head office and three Aomori factories worked on environment conservation, establishing uniform environmental objects and targets. Tamron Optical (Foshan) (TOF) also worked in the same direction by setting the same targets. However, only targets for CO<sub>2</sub> emissions reduction and preventing environment contamination were incorporated in the objectives and targets of the whole group, in view of differences in methods for estimating and calculating waste volume and regulated chemical substances. Our tasks for the future include reducing industrial and general waste emissions as well as CO<sub>2</sub>, promoting recycling and implementing LCS (Life Cycle Assessment). (For additional information on waste emissions from our sites and the transition of power consumption amounts which become CO<sub>2</sub> emissions factors, please refer to pages 19, 20 and 21.)

In order to refine our integrated management structure, we created an integrated management manual for quality and environment and improved related documents. In 2008, our company received conformance accreditation from an ISO certification organization for our integrated quality/environment management system.

#### Achievement Ratios of Environmental Objectives/Targets in 2007 and 2008 and Objectives/Targets for 2009 (Group)

In 2008, we worked on calculating the achievements of environmental objectives and targets at the Omiya head office and three Aomori factories. As for targets for reducing  $CO_2$  emissions and preventing environment contamination, Tamron Optical (Foshan) worked on the same objective management under a uniform system.

|  | Environmental Targets, State of Accomplishment  |   |             |  |  |
|--|---|---|-------------|--|--|
| Environmental Objectives   | Environmental Objectives for 2007   | Work and Achievements in 2007   | Self-rating |  |  |
| <ol> <li>Integrating environmental management and<br/>quality management systems into one system,</li> </ol>   | Preparations for integrating environmental objectives<br>of the Omiya head office, 3 factories in Aomori and TOF,   | Established objectives to be commonly applied in 2008,  | A           |  |  |
| integrating ISO systems of the Omiya head office<br>and 3 factories in Aomori into one system  | Preparations for integrating environmental<br>management and quality management systems into<br>one system  | Prepared an integration management<br>manual for integrating management systems<br>to start operating them from January 2008  |             |  |  |
| 2 Reducing waste, promoting recycling<br>(1) Achieving zero emissions target *<br>*Definition of zero emissions: The volume of waste<br>eventually sent to simple reclamation disposition<br>becomes 2% or less of the total volume of industrial<br>waste (i.e., recycling ratio of 98% or more)  | Target - Simple reclamation ratio of 5% or less on industrial waste (i.e., recycling ratio of 95% or more)  | (Omiya head office) Simple reclamation<br>ratio: 1.9% (Recycling ratio: 98.1%)  | A           |  |  |
| (2) Reducing industrial waste volume in basic unit *<br>*Basic unit: industrial waste volume/sales) Industrial   | Target - Reducing industrial waste volume by 2% in<br>basic unit, compared to 2006 (waste from 3D Techno<br>Center to be managed on actual volume)  | (Omiya head office) Reduced by 31.7%  | A           |  |  |
| (3) Promoting recycling of general waste   | Target - Promoting recycling of general waste<br>(efforts to understand status quo and promote sorted emissions)  | As a result of eco patrolling <sup>(1)</sup> , awareness of sorted emissions was enhanced   | А           |  |  |
| (4) Reducing general waste   | Target - Reducing general waste volume by 10%, compared to 2006   | (Omiya head office) Reduced by 36.7%  | A           |  |  |
| 3 Promoting measures to reduce CO <sub>2</sub> emissions<br>"Basic unit: CO <sub>2</sub> emissions/sales   | Target - Establishing methods for calculating $CO_2$ emissions volume   | Established methods for calculating CO <sub>2</sub><br>emissions volume   | A           |  |  |
| <ul> <li>4 Promoting DfE - positive sales promotion for products developed in DfE (Designs for Environment)</li> <li>(1) Each implementation item is to be assesse on the basis of cross-comparison with other products in product development and design stages.</li> <li>(2) Target achievement ratios in each year are to be determined by compiling assessment results at development and design stages</li> </ul> | <ol> <li>Promoting resource-saving designs as planned</li> <li>For longer service life: review of product reliability<br/>test contents,</li> <li>For lighter weight: 2% reduction (target),</li> <li>For more compactness: 2% reduction (target),</li> <li>For easier disassembling: 2% work</li> <li>For onglement LCA</li> <li>To implement LCA</li> <li>To consider recycled materials introduction</li> <li>Eliminating harmful substances in product:<br/>zero inconformity incidence (target)</li> </ol> | <ol> <li>(1) (i) Test contents reviewed, introducing<br/>new reliability test methods is under study,</li> <li>(ii) Product weight: reduced by 11.6%,</li> <li>(iii) Product cubage: reduced by 15.7%,</li> <li>(iv) Work man-hours improved by 3.7%,</li> <li>(v) LCA being implemented (2 models)</li> <li>(vi) Recycled materials introduction test<br/>was done.</li> <li>(2) Inconformity incidence: zero</li> </ol> | В           |  |  |
| 5 Proper management of chemical substances<br>(PRTR applicable substances) *<br>*Basic unit: Volume of chemical substances used/sales  | Establishing methods to grasping the volume of<br>chemical substances used  | Established methods   | A           |  |  |
| 6 Preventing environmental contamination   | <ul> <li>(1) Suppressing contamination on groundwater outside<br/>PRB to a level better than meeting the environmenal<br/>standard</li> <li>(2) Zero environmental contamination accident</li> </ul>  | Improved to a lavel better than meeting the<br>standard value at groundwater contamination<br>measuring points outside PRB.<br>Quality of miscellaneous water (BOD value):<br>BOD value did not meet the standard value<br>in the single month of February. No other<br>environmental contamination.  | A<br>B      |  |  |

(1) Structure to evaluate if instructions for sorting waste materials as well as setting air-conditioner temperatures within the prescribed range are being complied with (evaluation through bimonthly investigation by departments representatives )

(2) Based on the volume of waste from the Omiya head office, Tokyo office and three Aomori factories.

(3) Based on the volume of waste from the Omiya head office, Tokyo office, Osaka office, three Aomori factories and Tamron Optical (Foshan).

As tasks for 2009, we have changed the target for reducing general waste emissions to 10% from 20% compared to 2006 and CO<sub>2</sub> emissions to 3% from 6% compared to 2007 to set targets matching the actual conditions. Promptly devising further countermeasures in accordance with the management system that integrated management systems of the head office and three Aomori factories from January 2009 is necessary. Countermeasures for reducing CO<sub>2</sub> emissions are particularly important given that CO<sub>2</sub> emissions in 2008 increased by 37.5%. For this purpose, we organized an energy saving promotion subcommittee comprised of

mainly persons in charge at our sites, to sort out a structure capable of devising and carrying out countermeasures. After the example of the Omiya head office, the three Aomori factories and Tamron Optical (Foshan) similarly organized waste reduction subcommittees, energy-saving designing/manufacturing subcommittees, CSR procurement subcommittees and environmental impact assessment subcommittees in order to deploy operations on a companywide basis. We see the need to work on the final details since there are differences between Japan and China in methods for managing waste and chemical substances due to differences in regulations.

#### Self-rating: A = Satisfactory, B = Partly unsatisfactory

| Environmental Objectives for 2008   | Work and Achievements in 2008   | Self-rating |
|---|---|-------------|
| Integrating environmental objectives of the Omiya<br>head office, three Aomori factories and TOF  | Commenced working on the common environmental<br>objectives and targets from January 2008 at the Omiya<br>head office, three Aomori factories and TOF in China  | А           |
| environmental management and quality management systems   | Commenced operations in January 2008<br>under the integrated management system  |             |
| Confining the simple reclamation ratio <sup>(2)</sup> of industrial waste to 4% or less (recycling ratio: 96%)  | Simple reclamation ratio: 1.2%<br>Recycling ratio: 98.8%  | A           |
| Reducing industrial waste emissions by 3%<br>compared to 2006 in specific productivity units<br>(target management by including 3D Techno Center)   | Growth rate: 3.8%<br>(Omiya head office: 67.2%<br>(Three Aomori factories: 0.9%)  | В           |
| Enhancing recycling ratio of general waste<br>(statue quo analysis and promotion of sorted<br>disposition)  | Separated waste disposal at sites in<br>accordance with rules stipulated by residents'<br>associations (confirmed through the eco-patrol)   | А           |
| Reducing general waste emissions <sup>(2)</sup> by 15% compared to 2006   | Reduction ratio: 10.9%<br>(Omiya head office: 8.9%<br>Three Aomori factories: 14.2% )   | В           |
| Reducing $CO_2$ emissions <sup>(3)</sup> by 3% compared to 2007   | Growth rate: 37.5% <sup>(4)</sup><br>(Omiya head office: 6.0%<br>Three Aomori factories: 17.0%)<br>TOF, China: 51.4%  | В           |
| <ol> <li>Introducing resource-saving designs as planned:         <ul> <li>(a) For longer serviceability, 100% pass rate<br/>on new designs in terms reliability</li> <li>(b) For lighter weight (2% reduction in product weight)</li> <li>(c) For more compactness (2% reduction)</li> <li>(d) For easier disassembly (2% reduction)</li> <li>(e) Better methods for utilizing LCA</li> <li>(f) Use of recycled materials in products</li> <li>(2) Complete elimination of harmful substances<br/>from products (zero incidence)</li> </ul> </li> </ol> | <ol> <li>Introduced resource-saving designs as planned:         <ul> <li>(a) For longer serviceability (introducing a reliability test program under consideration)</li> <li>(b) For lighter weight (4.% reduction in product weight)</li> <li>(c) For more compactness (4.0% reduction)</li> <li>(d) For easier disassembly (5.0% reduction)</li> <li>(e) Methods and applicable products under study</li> <li>(f) Use of recycled materials in products:<br/>quality evaluation done, under line-test</li> <li>(2) Complete elimination of harmful substances<br/>from products (zero incidence)</li> </ul> </li> </ol> | В           |
| Reducing ratio of chemical substances used in products <sup>(2)</sup> by 0.5% per specific productivity unit, compared to 2007  | Reduction ratio: 7.3%   | А           |
| <ol> <li>Suppressing contamination of groundwater<br/>outside PRB to a level better than an<br/>established environmental standard</li> <li>No environmental contamination accidents<sup>(4)</sup></li> </ol>   | No environment contaminating accident at any site   | A           |

(4) CO<sub>2</sub> emissions amount: Energy usage amount (GJ) x discharge coefficient Omiya headquarters and branch offices in Tokyo and Osaka: 0.000337 Three Aomori factories: 0.000441 TOF: 0.000555

| Environmental Objectives for 2009   |
|---|
| Integrating ISO systems of the Omiya head office<br>and three Aomori factories  |
| Confining the simple reclamation ratio of industrial<br>waste to 2% or less<br>(i.e., recycling ratio of 98% or more)   |
| Reducing industrial waste emissions by 5%<br>compared to 2006 in specific productivity units<br>(target management by including 3D Techno Center)   |
| Enhancing recycling ratio of general waste<br>(status quo analysis and promoting sorted disposal)   |
| Reducing general waste emissions by 10% compared to 2006  |
| Reducing $CO_2$ emissions by 3% per specific productivity unit, compared to 2007  |
| <ol> <li>Introducing resource-saving designs as planned:         <ul> <li>(a) 100% pass ratio of inspection for longer serviceability</li> <li>(b) For lighter weight (2% reduction in product weight)</li> <li>(c) For more compactness (2% reduction)</li> <li>(d) For easier disassembly (2% reduction)</li> <li>(e) Better methods for utilizing LCA</li> <li>(f) Use of recycled materials in products</li> <li>(2) Complete elimination of harmful substances from products (zero incidence)</li> </ul> </li> </ol> |
| Reducing ratio of chemical substances used in<br>products by 1% per specific productivity unit,<br>compared to 2007   |
| <ol> <li>Suppressing contamination of groundwater<br/>outside PRB to a level better than the established<br/>environmental standard</li> <li>No environmental contamination accidents</li> </ol>  |

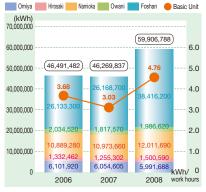
# Saving Energy and Water to Prevent Global Warming

Tamron strives to reduce power and water consumption at factories based on our integrated management system.

#### **Reducing Power and Water Consumption**

Electric Power Consumption

The total group 70,000,000 volume of electric 60,000,000 in 2008 rose 29% year on year. Power consumption at 30,000,000 Tamron Optical (Foshan) (TOF) increased by about 46% compared to 2007 because the



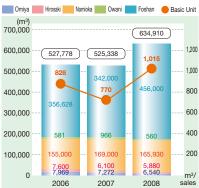
factory equipped with integrated manufacturing systems started to produce optical devices for new application fields, including camera phone lenses and vehicle-built-in optical devices. Per-hour power consumption at TOF rose because the total number of employees increased by about 400 in 2008 and due to new machinery being introduced. Power consumption at the three Aomori factories also rose about 10% year on year, primarily because of new lens processing machines installed at the Namioka factory, new mechanical equipment introduced to the Owani factory, and increased machining and assembling operations for new products at the Hirosaki factory.

Power consumption at the Omiya head office declined by about 2% with the new facilities to control air-conditioning systems individually and energy-saving fluorescent lamps introduced in 2007. We will continue to work on reducing power and water consumption at our factories.

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

Our CO<sub>2</sub> emissions are mostly from electric power consumption. From the results of energy saving monitoring conducted in 2007, we understand the importance of enhancing productivity at manufacturing sites in Omiya and are working on measures to do so. We also need to save stand-by power consumption by changing the operations of our metal mold fabrication facilities and clean room airconditioning systems at night and on weekends. We are reviewing facilities requiring operation 24 hours a day and those without such need. From November 2008, to begin with, we started to urge all employees to turn off airconditioners after regular work hours, and commenced to dim all lights on "No Overtime Working Days" twice a week, starting in January 2009. We will continue to work to prevent global warming by introducing relevant measures one by one at our three Aomori factories and TOF in China too, based on our integrated management system.

Water ConsumptionImplementThe total volume of<br/>water consumed in<br/>2008 rose by about<br/>20% year on year. Our<br/>factories use water to<br/>clean glass materials<br/>before processing.<br/>Water consumption<br/>at the Omiya head<br/>office and three<br/>Aomori factories<br/>declined in 2008, but<br/>consumption at TOFImplement<br/>(m<sup>9</sup>)<br/>500,000<br/>600,000



rose by about 30%. Water consumption at TOF is relative to the net working rate. Group water consumption in terms of specific productivity, a unit to determine water consumption volume per sales<sup>(1)</sup>, was on the rise because many new products developed were on the stage of marketing and did not directly contribute to our sales in 2008. We will continue to work on saving water consumption by reviewing our work and installing a new recycling-oriented cooling system at the Namioka factory.

(1) From this report, we amended sales in the three-year period from 2006 to 2008 to consolidated sales and recalculated the specific productivity.

### Interview with a Member of the Power Consumption Reduction Team



Tatsuji Ogaki, Deputy Section Manager, General Affairs Division

Power consumption at the Omiya head office doubled from 2005 due mainly to a new building. As a result of the construction of the new building accommodating a mold making factory, it became a second-class specified energy management factory in 2007. Since our power consumption at the Omiya head office relies almost 100% upon electricity purchased, reducing power consumption automatically means reducing CO<sub>2</sub> emissions. Therefore, while trying to devise means to visually show power consumption as much as possible, we switched our air-conditioning and lighting systems to energy-saving systems in the order of precedence. In addition, we started an eco-patrol program to check if temperatures are adequately controlled, if power is used more than is necessary for lighting and so on. From November 2008 we started to cut air-conditioning systems of fatter regular work hours and from January 2009 we started to turn off lights on "No Overtime Work Days". Thanks to these efforts, we could reduce power consumption at the Omiya head office every year since 2006. Power consumption in 2008 declined 2% compared to 2006.

We started a power saving program integrated with our Production Management & Administration Unit in January 2009. So far, we have worked on reducing power consumption by centering on office work departments, but from now on our work to reduce power consumption at production departments holds the key in reducing CO<sub>2</sub> emissions in the Tamron group. Power consumption at production departments is proportionally the highest. We also wish to study alternative power options, looking at natural energy such as sunlight.

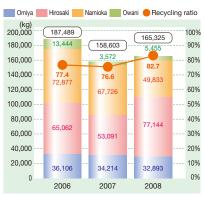
# Reducing Waste, Promoting Recycling

We are working on industrial waste reduction and resource recycling.

#### **Reducing Waste**

#### General Waste from Business

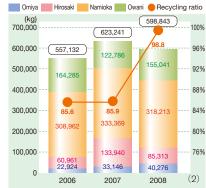
The total volume of general waste in 2008 was reduced by 10% compared to 2006 but rose by 4% compared to 2007. Waste especially large in quantity was combustible waste from the Namioka factory (about 32 tons), paper from



the Omiya head office (about 22 tons) and cardboard boxes from the Hirosaki factory. At the Namioka factory, paper used when polishing lens elements comprises the major portion of combustible waste. At the Omiya head office, we reviewed job routines at departments, promoted document digitalization and encouraged submitting and implementing proposals for further improvement, but the necessity of reducing the absolute quantity of paper used, including documents for meetings, still remains. All cardboard boxes from the Hirosaki factory were recycled, but the total volume increased by about 59% since parts from suppliers were delivered at first to the Hirosaki factory due to changes in the workflow. We plan to switch to returnable boxes, depending upon parts. Our recycling ratio at the Hirosaki factory rose to 82.7%.

#### **Industrial Waste**

Our group industrial waste level during 2008 rose 8% compared to 2006 but declined by 2% compared to 2007. Industrial waste especially large in quantity was liquid solution from the Namioka factory, plastic from the Owani factory, metal from the Omiya head office and



oil from the Namioka factory, in order of volume. The Owani factory generates a large amount of runner materials(1) as injection-molding plastic materials comprise the major portion of the waste plastic. We developed new technology to allow recycling plastic parts in our products by mixing pelletized waste plastic into molding resin. Prototypes have been found to be free of quality problems, but we must confirm that the new technology presents no problems in mass-production lines before starting to use it for mass-production.

We also wish to take additional measures to reduce waste liquid solution and waste oil from the Namioka factory. (For further information on measures against metal waste from the Omiya head office, please refer to the interview section on the right of this page.) We improved our group recycling ratio to 98.8% by introducing a new material recycling method for waste glass that was unrecyclable in the past, working with an external business partner specializing in recycling.

- (1) Materials used in portions equivalent to paths to route resin for making plastic components
- (2) Corrected the statement since the industrial waste volume in our CSR reports for 2006 and 2007 did not contain metal waste that included valuable goods or wood waste.

#### Reducing and Recycling Waste at Omiya Head Office and TOF, China

Our Omiya head office worked on estimating and calculating the waste volume more precisely, working to reduce waste. Total industrial waste generated from the Omiya head office rose by about 22% compared to 2007, primarily because of the increased waste plastic materials, waste oil and waste metal resulting from the increase in capacity utilization at our 3D Techno Center.<sup>(3)</sup> Metal mold shapes differ depending upon plastic components to be produced, requiring each mold be designed to precisely match the component. Defining a precise shape in one try is almost impossible, and processes to finely adjust the mold and machine the mold to the precise shape are essential. Waste plastic components are generated from these processes. In 2009, however, we will work on reducing waste plastic components by establishing a target number of correction times required to derive accurate shapes.

Another factor for increased waste at the Omiya head office is the increase of mold ascertained prototypes<sup>(4)</sup> and waste products, which account for about 40% of industrial waste there. Therefore, it is necessary to study the means to reduce the number of design changes and improve methods for controlling the number of prototypes and administering quantities to be mass-produced. Tamron Optical (Foshan) (TOF) started to work on estimating and calculating the volume of waste from 2008. Waste disposal contractors had not precisely done so. Therefore, employees at TOF started from attempts to estimate waste generation using product unit information. TOF could roughly calculate the volume of waste from its manufacturing operations, recognizing the necessity of proper management. TOF plans to pursue tasks to improve data accuracy, defining important waste to focus on.

- (3) 3D Techno Center is a business unit established in 2005 for machining metal molds for plastic components using 3D blast machining technology.
- (4) The term "mold-ascertained prototypes" means pre-production samples that are confirmed to meet the specifications and quality standards required by customers among pre-production units.

Interview with a Waste Reduction Project Team Member



Kenji Shindo, Section Manager 2nd Manufacturing Department, Manufacturing Division, 3D Techno Center

Our 3D Techno Center inevitably generates waste oil, plastic brocks as sample components made for testing metal molds, and metal waste from the mold fabrication processes. In April 2008, we introduced machinery to remove oil spots from molds, contributing to reducing waste oil since it enabled recycling oil and lengthening duration of service. As a result, although the absolute amount of oil used increased by about 2.5% due to an increase in production volume, the specific productivity obtained by dividing waste volume by the number of hours worked was reduced by about 40%. We will continue to work on reducing metal waste in 2009 by introducing a new method to machine each mold more precisely in a form matched to it, working from material procurement.

# **Efforts at Three Aomori Factories**

Our three Aomori factories manufacture high-performance products while paying attention to reducing waste and other issues concerning environmental impact.

#### **Activities at Three Aomori Factories**

Our three Aomori factories that are part of the Production Management & Administration Unit of our company are responsible for manufacturing high-performance products for our OEM customers. The Hirosaki factory is the mother factory, working on maintaining and enhancing the quality assurance structure of our group. The three factories acquired ISO140001 certifications in 2000, and have worked on environmental conservation since then, establishing objectives and targets every year. The work is led by five environmental subcommittees: Energy Saving Subcommittee, Zero Emission Factory Promotion Subcommittee, Environmental Accounting Promotion Subcommittee, Green Zone Development Subcommittee and Safe and Healthy Environment Promotion Subcommittee. Environmental protection work at each factory is performed under the leadership of the five subcommittees. For instance, the Namioka factory switched from reclamation to recycling in June 2008 for recycling glass waste by contracting with an industrial waste disposal contractor in Aomori. As a result, the factory could confine the simple landfill ratio of industrial waste to less than 4%. The Owani factory worked on commercializing recyclable runner materials in close cooperation with the resource saving design promotion project team at the Omiya head office, and prototype components are now being evaluated. As to saving energy, the Namioka factory changed its emergency exit sign lighting system to an energy-saving lighting system. The new system is expected to save about 2,283Kwh electricity (equivalent to about 1tCo<sub>2</sub>) annually.

For the three Aomori factories, 2008 was the year to take the first step to share the same environmental objectives and targets with the Omiya head office. In 2009, we plan to integrate the environmental subcommittees of the three Aomori factories with the subcommittees of the Omiya head office. We also wish to work together with Tamron Optical (Foshan).

### Interview with Production Division Manager at Owani Factory



Masahiko Yoshihara Manager, Production Division

As part of our environmental protection efforts at the Owani Factory, we focus on reducing waste generated from operations to injection-mold1 plastic components. In 2008, we confirmed that runner materials of injection-molded plastic components could be recycled without causing any quality problem, by blending recyclable materials into new materials by about 20%, as long as they were components used inside finished products. What remains to be pursued is to identify products and parts allowing the use of recyclable materials and working to develop runner-less injection molding technology. We also wish to devise means to stabilize product quality at an early stage of mass-production by ascertaining injection conditions matching particular metal molds, hopefully at the stage of test-injection molding for new mold-ascertained prototype products. (Refer to the note on page 20.).We hope this will also eventually lead to reducing waste. In 2009, we wish to continue our environmental work, based on the integrated management system, with an across-the-board perspective while recognizing our role as a manufacturing site.

(1) "Injection-molding" means a method to make plastic components by injecting heated resin into a metal mold and pressing it.

#### Green Zone Development

The Green Zone Development Subcommittee of the three Aomori factories planted flowers and foliage as part of a campaign to beautify the premises of the three factories. Green zones are not sufficient at this stage, but we created some healing spaces.



Green zone at the Namioka factory

#### Safety and Sanitation

The Safe and Healthy Environment Promotion Subcommittees of the three Aomori factories regularly patrol the working environment at the work sites to check the state of security and compliance with environment-related laws and regulations. The subcommittees jointly establish an annual patrol plan at the beginning of the year, and subcommittee members alternately inspect, pointing out their findings at other factories for improvements. In 2008, the subcommittees added items to check compliance with laws and regulations related to adequate display of chemical substances on their check sheets in order to make their work more effective.

#### Contributing to Local Communities

Up to 2007, cleaning focused on our own premises. However, we expanded the scope to neighboring areas, cleaning during the eight-month period from April through November. Due to heavy snow in



Local Cleaning

winter, we are unable to clean throughout the entire year, but we wish to continue cleaning when we can. The Hirosaki factory also sponsored the Hirosaki Castle Snow Lantern Festival, the Hirosaki Maple Leaves & Chrysanthemum Doll Festival and the Hirosaki Neputa Festival and offered the use of its premises as a baseball practice ground to the Hirosaki Yankees, a local Little League baseball team.

The Namioka factory supported the Kitabatake Festival with such events as the feudal lord's procession and fireworks display, while the Owani factory supported the Owani Hot Spa Summer Festival. The three Aomori factories wish to contribute to the local communities, always valuing their relationships.

### Independent Third Party Assurance Report



#### Hideki Murai

#### Academic Background:

Completed the 2nd stage of the doctoral course of the School of Commerce of the Graduate School of Nihon University, in March 1992. **Current Positions:** 

Professor of the College of Commerce, Nihon University; Visiting Professor, University of Udge, Poland; Visiting Researcher University of Waterloo, Canada

#### **Research Theme:**

Management and accounting problems associated with greenhouse effect gas emissions right trading. At present, a leading authority in the field of validating environmental performance data as well as academic research of handling greenhouse effect gas emissions rights. Also, many CSR reports concerning sustainable growth ratings used by the Sustainable Management force are highly cardinated. Management Forum of Japan are highly evaluated.

#### Offices of Committee Members Held Successively:

Chairman of the Environmental Accounting Study Commit lwate Prefecture; Member of the Domestic Emissions Rights Trading Study

Member of the Domestic Emissions Rights Trading Study Committee, Ministry of Environment; Member of the Committee on Accounting of Emissions Reductions and Environmental Problem Study, Global Industry & Culture Research Institution (Judicial foundation); Adviser to Japan Carbon Offset Forum (J-COF) formed by

Overseas Environmental Corporation Center (incorporated body)

#### Major Papers:

Current Status of Emissions Right Trading Systems in the EU (EUETS) and Directions for Accounting Standards<sup>\*</sup>, contributed to December 2008 issue of Corporate Accounting, Chuckeizai-sha Inc.

December 2008 issue of Corporate Accounting, Chuckeizai-sha Inc. "Measures for Renewable Energy and Environmental Issues", Accounting Research, Vol.21, Research Institute of Accounting, Nihon University, March 2007. "Emissions Rights and Accounting", Environmental Accounting: Theory and Reality" (2nd edition, in Chapter 12), jointly written and edited with Susumu Katsuyama, Chuc Keizaisha Publications, July 2006. "Legal and Accounting Problems of CO2 Emissions Rights and Overseas Forestation", Accounting Research, Vol.19, Research Institute of Accounting, Nihon University, February 2005

#### Belonging Academic Societies:

Japan Accounting Theory Research Association;

Japan Accounting Theory Institution (member of the board); Japan Corporate Social Accounting and Reporting Association (member of the board); Japanese Association for Research in Disclosure (member of the standing board); Member of Political Measure & Environmental Forease in Control C Economics Study Committee:

Member of American Accounting Association (AAA)

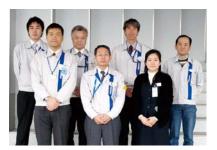
### I. Reviewing 2008 as the 1st CSR year

To begin with, I wish to briefly comment on Tamron in the current harsh economic times with the global downturn and declining stock prices in the Japanese market. Tamron's stock price declined almost one-third of the price in March last year. However, it does not mean that the corporate value of Tamron dropped by one-third. A business entity should be valued by more than stock price and business performance. It should be evaluated from a comprehensive perspective including its posture toward social issues and environmental problems. In fact, the decline of Tamron's business performance that started with the full operation of its factory in China while working to contribute to society as stated in this report was confined within the scope of 10% compared to 2007, under the severe economic downturn.

#### II. For refining CSR management further, with an eye to grass roots

From 2008, Tamron started to announce the financial statement and annual CSR report simultaneously on the day of the general meeting of shareholders. Only about 10% of all companies announce the said two reports simultaneously on the day of the general meeting of shareholders. Tamron also announced a policy to integrate management systems in order to promote CSR management efficiency. The move is to integrate ISO9001 and ISO14001 in order to manage quality and the environment at the same time. By promoting work under the integrated management system, cutting labor and managements costs becomes possible. One theme that needs to be addressed is reducing the environmental impact at Tamron Optical (Foshan). The factory has started to work on reducing waste, enhancing its recycling ratio, circulating

### Editors' Postscript



Editors at Omiya head office

In compiling this document, we tried to report our accomplishments, focusing on communication with our stakeholders. We tried to make this report as much reader-friendly as possible, by picking up topics such as our Railroad Photo Contest and Educational Course Delivery Services while preparing different chapters for respective stakeholders. We also tried to include employee and business partner feedback through our interview columns. Our important theme from now on is environmental impact management and reducing waste from our factory in China as suggested in the third party assurance report. We will I reviewed Tamron's CSR Report for 2009 based on the three primary themes I proposed in my assurance report last year. As one result, I saw that the total CO<sub>2</sub> emissions from Tamron Optical (Foshan) increased by about 40% due to the introduction of a clean room and additional machining equipment. Seeing its actual shop-floor, I thought that sites for manufacturing products through conventional technology-intensive methods and digitized factory operations were properly harmonized. Carrying on the tradition of technology takes a long time, but I am confident that Tamron's attention to detail in making metal molds supports the quality of Tamron products and eventually Tamron as a business. Tamron has not yet introduced a third party assessment program in regard to CO2 emissions, but it will be essential in the future when including information related to CO2 emissions in financial statements becomes mandatory.

water and saving power consumption, but a management program for reducing CO<sub>2</sub> emissions has not yet been introduced. As stated already, the total volume of CO<sub>2</sub> emissions from the factory in China increased for making high quality products at low costs and in large quantities. Since environmental performance data are already available on a monthly basis, establishing a CO<sub>2</sub> reduction management system workable in China is an important task to Tamron.

Tamron wishes to be a company capable of supplying customers with high quality products at reasonable prices while paying attention to our environment and social contribution. Tamron's goal is to be such a company with an image that shows this to customers and stakeholders. I hope and trust that Tamron will continue to focus on this path, going forward undaunted, with unswerving management.

continue to promote our CSR management as a whole group in this direction.

We hope Tamron will continue to be a company contributing to society by reflecting the views of our stakeholders. We would greatly appreciate hearing your feedback and suggestions.







TAMRON CO., LTD. CSR Implementation & Administration Board

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