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# NMB-Minebea Thai's Commitment to Manufacturing

## The Fundamentals of CSR

*Thailand is the Minebea Group's largest production facility. It has been approximately 30 years since Minebea built its first plant in Thailand. NMB-Minebea Thai Ltd. was built upon, and its manufacturing is supported by, the fundamentals of CSR.*

**NMB-Minebea Thai Ltd.,  
largest production facility  
of the Minebea Group**

Minebea was established in 1951 as Japan's first miniature ball bearing manufacturer. Buoyed by the era of high economic growth, the company steadily expanded its business. But as Minebea entered the 1960s, demand expanded and domestic plants faced a shortage of workers. The creation of a production base with ample supplies of labor became a pressing task, and the company looked to Thailand, a country that was attracting foreign enterprises as a second Asian production facility.

Travel by car one or two hours

north of the Thai capital of Bangkok, and you can visit Minebea's five Thai manufacturing plants. Since 1982, when the Minebea Group built the Ayutthaya Plant in Ayutthaya Province and began producing miniature ball bearings, it has steadily expanded its production facilities with the Bang Pa-in, Lop Buri, Rojana, and Navanakorn Plants, expanding the scale of its business. Today, with five plants employing a total of 31,011 people (as of March 2011), this is the Minebea Group's largest production facility.

From the beginning, Minebea aimed to plant in Thailand its passion for, and commitment to, manufacturing. This was because to manufacture more high-quality products more efficiently than

anyone else, and pursue "manufacturing with sincerity" that can be offered to the world, Minebea believed that the company itself had to put down roots, and that growing along with the local community was a social responsibility. This belief made environmental measures and consideration for employees, the local community and its residents natural for NMB-Minebea Thai (hereafter Minebea Thailand).

Minebea Thailand Director and Group Executive Officer Vutichai Udomkarnjananan (Vutichai) says, "We could not have grown by focusing on profits alone. It was important for us to build good relationships with everyone connected to Minebea Thailand." Below, we introduce the environmental measures and

improvements to the employee working environment promoted by Minebea Thailand as part of its corporate responsibility, as well as activities, based on original employee ideas, to contribute to the local community and its residents.

### Stringent environmental measures

The Minebea Group believes that harmonizing with the environment as a manufacturing enterprise is a prerequisite for carrying out activities as an enterprise and achieving sustained growth for the Group, and has carried out plant construction and management that does not harm the area around the plant or the natural environment. Minebea Thailand has also progressed its environmental measures in a manner appropriate to Thailand's climate, water supplies, and status as an energy-importing nation.

For example, Thailand's water supplies are not as abundant as Japan's, and factories do not have unlimited access to municipal water supplies. In response, we have introduced a "Plant Wastewater Zero System" that purifies plant effluents to the same level of quality as municipal water, so it can be reused. An idea that was possible precisely because Thailand has heavy rainfall was to collect rainwater in a reservoir for use, and we succeeded in limiting the amount of water we need to procure. In FY2010, Minebea Thailand's total water usage amounted to 3.123 million m<sup>3</sup>, only 2.035 million m<sup>3</sup> of which was municipal water—about 65% of the total. Approximately 299,000 m<sup>3</sup> of plant effluents were reused, and rain and ground water use amounted to 789,000 m<sup>3</sup>. We also aggressively introduced such advanced environmental technologies as a biogas-generation plant that turns raw waste from the plant cafeteria into biogas that is used in the cafeteria in place of LP gas, and recycling of cutting oil through the introduction of a swarf compressor machine.

In addition, the construction concept for the new production facility within our Bang Pa-in Plant was "Minebea's most energy-

efficient plant." The approach included heat-reflecting paint on exterior walls and roof, high-efficiency centrifugal chillers, high-efficiency fans, and electronic ballast for fluorescent lighting, and these measures have reduced our energy cost by approximately 45% compared to our original plant. To encourage understanding of our activities on the part of the local residents, these environmental measures are communicated to the local community through our in-house newsletter, which is distributed monthly, as well as via the local government notice board.

Environmental measures are often required by law or such standards as ISO, but target values far exceeding required levels have been established for most of Minebea's efforts, and these values

are being met. Because of our commitment to manufacturing, we devised and have been implementing ways to operate that do not harm the local natural environment.

### Fostering employee pride in Minebea

Many of our activities to contribute to the local society are based on ideas from the employees themselves. Our employees are well-versed in the local situation and needs, and we actively utilize employee proposals to carry out activities as Minebea Thailand. "Suggestion Boxes" have been placed in each plant, enabling employees to contribute their ideas. A national

### ● The Minebea Group in Thailand and Cambodia



character based on a culture of mutual assistance and a strong religious orientation is the driving force behind Minebea Thailand's activities to contribute to society.

Minebea Thailand is devoting effort to the education of young people who will support the Thailand of the future, providing wide-ranging support to schools in the vicinity of the plants by applying knowhow acquired as part of plant management. For example, we are teaching children how to sort refuse based on experience in such activities gained at the plant. The sorted refuse can be sold and the proceeds applied to school management. We also teach children to raise organic vegetables, and the harvest is used in school lunches. Fixtures from the plant were used to build a new school library, to which we also contributed books, and we helped rebuild the school building, which had deteriorated. The unique aspect of our activities is our focus on local conditions and the challenges facing the school, and our imaginative initiatives to address those challenges. In the library of the elementary school that Minebea

Thailand helped to build, the senior-class female students who are in charge of checking out books happily noted, "We love to study. For exercise, we play sepak takraw.\* Between study and exercise, we often visit the library."

Much of our other support to the local community involves initiatives toward regional self-sufficiency. These include bamboo planting activities to enable continuous harvesting of bamboo shoots as food for the local temple. To help local residents generate income, our employees also provide guidance in the manufacture and sale of artificial flowers for use in funerals, as well as bookkeeping techniques.

Since its founding, Minebea Thailand has emphasized employee development. Employees are responsible for manufacturing, and imaginative employees improve manufacturing. With this in mind, we actively support employee participation in activities that contribute to society.

We are also making improvements to our working environment. Employees have a variety of work patterns, with four teams in three

shifts for 24-hour operations, and we provide extensive employee support. We adhere strictly to occupational safety and health laws, protect our employees' safety, and offer extensive educational opportunities, a shuttle bus and other amenities. We also offer an environment that emphasizes employee autonomy. In addition to the suggestion boxes mentioned previously, we established the Joint Consultation Committee (JCC) with participation by Japanese and local employees to maintain and enhance positive communication. Vutichai comments: "If, through a safe working environment and extensive educational opportunities, employees can gain a solid sense that they are needed by society and that they can be useful in the world by contributing to society with their own ideas, how will they feel? They'll be proud of their company, proud of being a member of the Minebea Group, and feel solidarity with the company. I don't think you can overestimate the influence that has."

\*Sepak takraw: a traditional Southeast Asian sport said to have originated in the ninth century. Players use their feet, thighs, chest, and head to hit a rattan ball (today, synthetic materials are used) over a net to the other player's court.



① Processing facility for Plant Wastewater Zero System ② Biogas-generation plant ③ Water reservoir ④ Energy-efficient production facility within the Bang Pa-in Plant ⑤ Rice-cooking equipment powered by biogas ⑥ Information on Minebea Thailand's efforts is posted at the town hall ⑦ High-efficiency centrifugal chiller





⑧ Children doing farming ⑨ Local community members make artificial flowers ⑩ Minebea Thailand contributed these bins for sorting refuse ⑪ Female student members of the library committee ⑫ Members of the Minebea Thailand CSR Management Committee ⑬ Children attending elementary school ⑭ Minebea Thailand helped build this new library and contributed books ⑮ Children eating school lunches



### Participation in the Thai government's CSR-DIW social responsibility promotion project

Minebea Thailand's commitment to "manufacturing with sincerity" and its efforts to date are today known by the term CSR. To organize our efforts to date under a CSR management structure, we participate in CSR-DIW, the social responsibility project sponsored by Thailand's Ministry of Industry (see column). The Bang Pa-in Plant participated in CSR-DIW in FY2009, followed by the Lop Buri Plant in FY2010. FY2011 participation is planned for the Ayutthaya and Rojana Plants.

Regarding participation in CSR-DIW, Vutichai notes, "Through international standards certification in such fields as the environment, safety, and labor practices, we have demonstrated that we are conducting our business with integrity, and we have strengthened our efforts in line with those standards. In conjunction with our participation in CSR-DIW, we established a CSR Committee and a Plan-Do-Check-Action approach to CSR management, and with the estab-

lishment of this structure I think we will be able to do more than before." In 2009, Minebea Thailand was recognized by Thailand's Ministry of Industry for its efforts to date.

In Japan as well, we have reorganized our accumulated social responsibility initiatives carried out on the basis of the Five Principles from a CSR perspective, and are promoting further systematization. An overall Group CSR management structure is gradually developing.

According to Vutichai, "To further promote CSR in Thailand going forward, I hope to deepen our collaboration in the field of CSR with the Japan headquarters and other facilities in the Group. I also hope to extend our CSR approach in Thailand to the Cambodia Plant, scheduled for completion in December 2011." Further systematizing CSR in the Group as a whole, and promoting CSR activities, will support "manufacturing with sincerity."

### Column

#### CSR-DIW

A project to promote social responsibility on the part of manufacturing enterprises. To improve international competitiveness, Thailand's Ministry of Industry began promoting CSR initiatives on the part of domestic enterprises from FY2008. Founded on the view that "companies should repay the local communities and regions in which they operate by sharing the benefits of the opportunities and good will they have received," the project calls for CSR initiatives in line with the seven core themes set forth in the ISO26000\* standard: organizational governance, human rights, labor practices, the environment, fair operating practices, consumer issues, and community involvement and development. Qualification and/or continued participation in CSR-DIW is determined based on annual auditing.

\*ISO26000: a comprehensive, detailed set of social responsibility guidelines for all types of organizations, developed by the International Standards Organization to realize sustainable development