

# SITE 2009 REPORT

## Overseas Operating Sites

1 Address 2 Products 3 ISO 14001 certification status



USA  
1

## American NTN Bearing Manufacturing Corporation, Elgin Plant (EMF)

**We halved our coolant usage  
We reduced our air conditioning power consumption by 15%**

In fiscal 2008, we worked to reduce the waste we generate and the electricity that we use.

To reduce the amount of waste we generate, we installed a magnetic filtration unit to the coolant system used to absorb the heat generated by the steel ball grinding process. This doubled the life of the coolant, which halved the amount of waste.

To reduce our electrical power consumption, we replaced our air conditioners with high-efficiency units, which reduced our power consumption by 15%. The new equipment sucks in more outside air than before, which has also led to cleaner air in the plant.



Cleanup volunteers

### Social contribution activities

- Volunteered for a Lake Michigan shoreline cleanup
- Donated emergency food to Community Crisis Center in Elgin
- Made donations to United Way

- 1 1500 Holmes Road, Elgin, IL 60123, U.S.A.
- 2 Bearings
- 3 June 2000

USA

2

## NTN-Bower Corporation, Macomb Plant (MMF)

**Repaired air compressor leaks to save energy**

Air compressors provide the compressed air that drives machinery, but they consume a great deal of energy. Improved air compressor efficiency can lead to energy savings. In fiscal 2008, we audited air leaks throughout the entire plant to eliminate them.

In addition, we installed mist collectors on our grinding equipment so that the coolant mist that occurs during grinding does not foul the air inside the plant.

Finally, new lighting has saved energy and improved the work environment.



Mist collector units



Acknowledgement from the United Way

### Social contribution activities

- Made donations to the United Way
- Participated in a local job fair (job rodeo)
- Donated to educational institutions, including Western Illinois University

- 1 711 North Bower Road, Macomb, IL 61455-2511, U.S.A.
- 2 Bearings
- 3 June 2000

USA

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## NTN-Bower Corporation, Hamilton Plant (HMF)

**Reduced natural gas and electrical power consumption  
A focus on environmental education for employees**

In fiscal 2008, we worked to reduce our natural gas and electrical power consumption.

By controlling the ambient gas in the heat treatment furnaces and by improving the combustion efficiency of the heating units, we reduced our natural gas consumption. Similarly, we replaced our lighting with energy-conserving alternatives to reduce our electrical power consumption.

Additionally, we carried out two training sessions related to environmental themes such as ISO 14001 for all employees.



Energy-saving lighting



Donation to the fire department

### Social contribution activities

- Made a donation to the fire department for the purchase of special firefighting equipment
- Supported local educational institutions
- Donated to a local economic development initiative

- 1 2086 Military Street South, Hamilton, AL 35570, U.S.A.
- 2 Bearings
- 3 June 2000

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USA  
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## NTN-BCA Corporation, Lititz Plant (LMF)

### Improvements focused on air compressors have reduced our CO<sub>2</sub> emissions

We changed a system that switches from the primary compressors to backup compressors (with 1/10th of the output) during time periods when the grinding and assembly lines are not operating. This reduced our monthly consumption of electricity by 4,500 kWh. This improvement only required changing the air line connections, resulting in significant benefits for the cost incurred.



Backup compressor

We also carry out regular air leak checks and repairs, make sure that lights are turned off when not in use, and install switches whenever possible so that electrical usage can be better controlled. These simple, straightforward efforts have added up and have helped us control our CO<sub>2</sub> emissions.



Providing space for sports activities

#### Social contribution activities

- Providing plant grounds for the local Little League
- Providing parking for local events

- 1 401 West Lincoln Avenue Lititz, PA 17543-7020, U.S.A.
- 2 Bearings
- 3 July 2000

USA

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## NTN Driveshaft, Inc. (NDI)

### Achieved "zero landfilled waste" through thermal recycling

Painting our plant roofs is one example of energy conservation activities in fiscal 2008. By painting them with heat-reflecting paint, we were able to improve their ability to keep out heat, which in turn allowed us to reduce the electricity that we use for air conditioning. These efforts resulted in a 19% reduction in CO<sub>2</sub> emissions from the previous fiscal year.



Roofs with heat-reflecting paint

We sent our waste to a power company for thermal recycling (in which it is reused as a source of heat), allowing us to achieve zero landfilled waste. Going forward, we will continue our recycling activities and reduce our waste even further.



Literacy Festival 2009

#### Social contribution activities

- Participated in "Literacy Festival 2009," the local library's children's literacy program
- Made a flood relief donation for flood damage in the US Midwest
- Collected donations and volunteered for the American Heart Association

- 1 8251 South International Drive, Columbus, IN 47201, U.S.A.
- 2 Constant velocity joints
- 3 December 1999

USA  
6

## NTK Precision Axle Corporation (NTK)

### Our new system reuses lathe coolant

We used to pay a contractor to treat our used lathe coolant. However, in fiscal 2008, we installed a system that allows us to reuse this coolant, which has reduced our environmental impact and waste.



A central coolant control tank

We collect coolant from a tank on each lathe in a central tank and manage it so that we can effectively use the coolant concentrate and the water that is used to dilute it. This also allows us to filter and adjust the concentration of the solution so that we can reuse the coolant. This system has reduced the work involved in replacing coolant and reduced manpower needs.



Company picnic

#### Social contribution activities

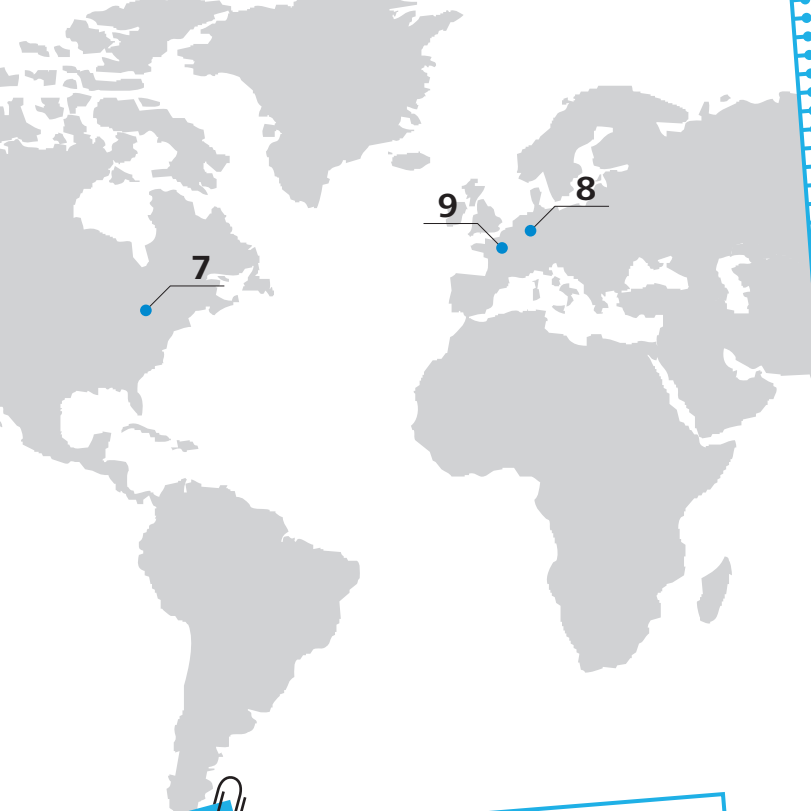
- Held a company picnic

- 1 741 South County Rd 200 West, Frankfort, IN 46041, U.S.A.
- 2 Parts for bearings and constant velocity joints
- 3 April 2008

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Canada  
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## NTN Bearing Corporation of Canada LTD., Canada Plant (CMF)

### Reusing cardboard boxes from Japan to send bearings to sales agents

We reuse the cardboard boxes that are used to ship parts from Japan.

We used to dispose of these cardboard boxes on-site, but we now reuse them to ship parts to sales agents in Canada. This has allowed us to not only reduce waste, but to save C\$18,000 per year.

On some of our manufacturing lines, we have installed motion sensors that turn on lights automatically.



Motion sensor that controls lights



Recycled cardboard boxes

#### Social contribution activities

- Participated in food aid program sponsored by the local community

- 1 6740 Kitimat Road, Mississauga, Ontario, L5N1M6, Canada
- 2 Bearings
- 3 July 1999

Germany

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## NTN Kugellagerfabrik (Deutschland) GmbH, Mettmann Plant (DMF)

### Appointed a manager for accident prevention Continued improvement activities to prevent accidents

We appointed an accident prevention manager to investigate the safety of our workplaces and to check for potential accidents, as part of our continuing efforts to prevent workplace accidents. To become qualified, this manager took and passed a test administered by the "Labor Safety Association," a public organization. The manager also participates in periodic seminars outside of the company to gain new knowledge and information, which is then reflected in our everyday work.

Our environmental management system is subjected to ISO 14001 maintenance audits by an external auditor twice a year. In fiscal 2008, these audits were carried out in March and November, and in each case, there were no observations.



Japan Day in progress

#### Social contribution activities

- Made donations to a program that helps disadvantaged children in other countries (SOS Children's Villages<sup>\*1</sup>)
- Volunteered for Japan Day<sup>\*2</sup>
- Made a donation to a local kindergarten for new playground equipment

- 1 NTN Strasse 1-3, 40822 Mettmann, F.R. GERMANY
- 2 Bearings
- 3 June 1999

France

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## NTN Transmissions Europe (NTE)

### An accident prevention initiative and interaction with educational institutions have led to a stronger relationship with the community

We worked with the local traffic safety organization and participated in a traffic accident prevention initiative spearheaded by the French government. In addition to giving employees traffic safety training and checking the lighting on vehicles, we support local traffic safety awards.

We also support the education of local students by giving them plant tours, telling them about NTE and NTN, and we accept students as interns in various departments including Production Engineering, Finance, and Human Resources.



A textbook related to safety and the environment that is distributed to employees



An information session for Le Mans University students

#### Social contribution activities

- Participated in Le Club AGIR FACE<sup>\*3</sup>
- Participated in "Employment Forum"<sup>\*\*4</sup>
- Sponsored a cross-country race held in Allonnes

- 1 Z.A. des Tremelieres Commuante Urbaine du Mans 72704 Allonnes Cedex, France
- 2 Constant velocity joints
- 3 January 2003

\*1 This is a program administered by the international children's aid organization, SOS Children's Villages, which gives aid to children. This organization protects children who have lost their families and gives financial assistance to help raise them.

\*2 Held in Dusseldorf's Old Town every June, this celebration of Japanese culture features fireworks, food stalls, and Bon Festival dancing. Approximately a million tourists come for the event from Germany and other nations.

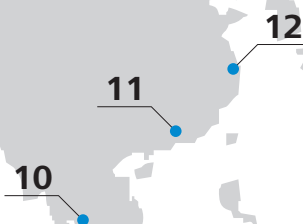
\*3 This is an organization of approximately 40 companies located in Le Mans that is led by the City of Le Mans. It supports youth development (helping youth obtain qualifications, change course, etc.)

\*4 Not just a typical employment information session, this event explained the specialized knowledge required for different types of work and helped young people choose a job training program.

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Thailand  
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## NTN Manufacturing (Thailand) Co., Ltd. (NMT)

### Reduced electricity consumption by using controllers Easy-to-read displays for improved garbage sorting and recovery

In fiscal 2008, we worked to conserve energy by optimizing our electricity usage. First, we installed an illumination controller that automatically turns off lights according to the brightness of the light outside. This highly-responsive method of turning off lights reduced the energy required to illuminate the workplace by 20%. Secondly, we installed a system that adjusts the number of air compressors operating at once. By reducing the number that are operating during lunch, we reduced our yearly power consumption by approximately 200,000 kWh.

To improve our garbage sorting and recovery, we displayed actual examples of waste above waste receptacles so that the sorting rules can be understood at a glance.



Illumination controller



Waste sorting receptacles

#### Social contribution activities

- Donated stationery and PCs to schools to commemorate NMT's 10th year in operation
- Supported flood victims in Thailand

- 1 11/2 Moo4, Tambol Pluakdaeng, Amphur Pluakdaeng, Rayong 21140, Thailand
- 2 Bearings and constant velocity joints
- 3 August 2003

China

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## Guangzhou NTN-YULON Drivetrain Co., Ltd. (GNYD)

### Installed a new wastewater treatment unit Improved our occupational safety and hygiene management with a new certification

As part of our environmental conservation efforts, we installed a unit that processes the wastewater from our painting processes and cleaning the plant. The water from this unit passes Guangdong Province's wastewater emissions standard and is capable of treating 30 tons of wastewater per day. The unit passed the Guangdong Environmental Protection Bureau's inspection in April 2008 prior to operating.

In the area of occupational health and safety management, we obtained the third-party OHSAS 18001 certification for Occupational Health and Safety Assessment Series, and we continued our efforts to protect employee health and safety. In December 2008, we obtained the newest version of this certification, OHSAS 18001:2007.



Wastewater treatment unit



Helping local children with their school fees

#### Social contribution activities

- Donated to the Red Cross after the Sichuan earthquake
- Helped local children with their school fees

- 1 No. 11, Jun Da Road, East District of Guangzhou Economic and Technological Development Zone, Guangzhou, Guangdong Province, China
- 2 Constant velocity joints
- 3 April 2005

China

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## Shanghai NTN Corporation (SNC)

### Our efforts during Safety and Environment Month raised employee awareness

We designated June 2008 as "Safety and Environment Month" and held various events related to safety and the environment. These included safety monitoring duties (daily), evacuation training, firefighting training, a safety and environment poster contest, training to respond to leaks from the oil storage area, and power outage training in the heat treatment plant. These activities raised employee awareness in the areas of safety and the environment and were recognized in March 2009 with the "2008 Songjiang Harmonious Work Site" from the Songjiang regional government.

To save energy, we carried out a review of fluorescent lighting and removed 2,130 lamps, and we worked to thoroughly establish energy conservation rules.



Monitoring traffic and distributing pamphlets



Award plaque

#### Social contribution activities

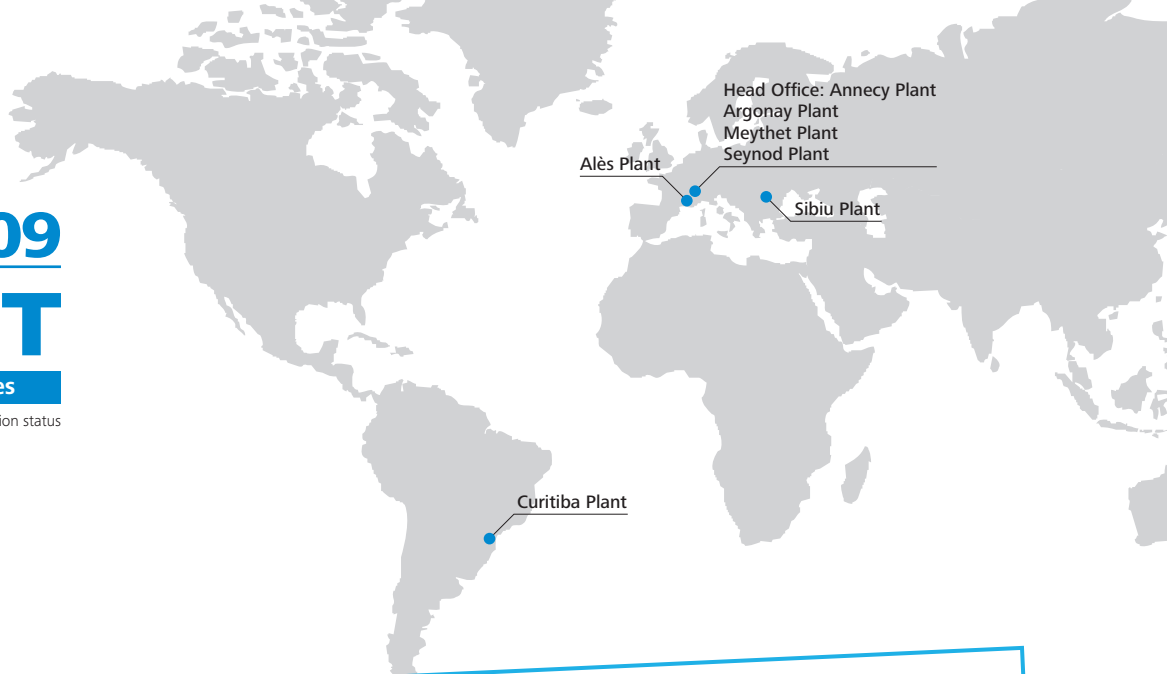
- Donated to the Red Cross after the Sichuan earthquake
- Participated in the traffic safety promotion activities held by the Songjiang Public Security Bureau's Traffic Team and the Songjiang Development Zone
- Monitored traffic and distributed pamphlets in the Songjiang Development Zone

- 1 No.666, Nanle Road, Songjiang Industrial Zone, Songjiang, Shanghai, China
- 2 Bearings and parts for constant velocity joints
- 3 July 2005

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France

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## S.N.R. ROULEMENTS

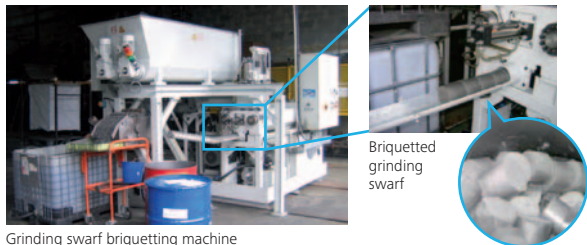
1 1, rue des Usines, 74010 Annecy, France  
2 Bearing 3 January 2009

### [Seynod Plant]

#### Recycling waste with a grinding swarf briquetting machine

The Seynod Plant has installed a grinding swarf briquetting machine to recycle the grinding swarf (metal cuttings) from the manufacturing process. This grinding swarf, which was previously processed by a contractor, now can be separated into metal and liquid, and the metal can be used as a raw material for steelmaking. The recovered steel is sold to steelmakers for use in their processes.

Up until now, the Seynod Plant has recovered approximately 35 tons of steel for recycling. Going forward they will also be processing the grinding swarf from the Meythet Plant, for a total recovery of 240 tons of steel a year. We will be working on expanding the use of the grinding swarf briquetting machine at other plants and to reuse the coolant that comes out during briquetting.



Grinding swarf briquetting machine

Briquetted grinding swarf

### [Argonay Plant]

#### Cleaning machine replaced with a non-CFC model

Before inspecting precision parts, there is a cleaning process which until this year used a cleaning fluid containing a CFC alternative (HCFC). Though HCFCs have a low potential of ozone depletion, this does not change the fact that it is a greenhouse gas that promotes global warming.

The Argonay Plant changed its cleaning machine to one that uses detergents that do not contain HCFCs.



The Argonay Plant's new cleaning machine

### [All SNR Plants]

#### Safety education, safety training, and gauging safety awareness

We gave our workplace supervisors training and education regarding our legal responsibilities, workplace accident prevention methods, and equipment safety. We also surveyed our employees who work on the plant floor to determine the level of safety awareness and how well safety activities have become established.

The results of this survey will be reflected in our fiscal 2009 safety management plan.

### Supported schools participating in an Eco-Marathon

For over 20 years, we have sponsored an Eco-Marathon that tests vehicle mileage per liter of gasoline. We provide participating high schools and universities with parts such as ceramic bearings.

In 2008, this event was held May 22-24, and one of the high school teams that SNR sponsored got 6th place. We will continue to support schools participating in this event.



Eco-marathon vehicle

### Engineers give a lecture on the environment at Polytech Savoie University

SNR engineers give lectures on the environment at Polytech Savoie University in Annecy, located in eastern France. Students attending these lectures come away with a deeper understanding of the seriousness and complexity of environmental issues and the importance of environmental regulations and environmental management.

### Participation in a popular local ski race

Since 2008, we have been an official sponsor of the cross-country ski race held in a suburb of Annecy.

The 23rd race was held in March 2009. As it is a popular local sports event, 1200 competitors participated — from children to semi-professionals. Even the mayor of Annecy completed the 22km course, and a total of 9 SNR employees participated in the 42km and 22km events.

The venue featured a ski speed measurement device that contains SNR bearings. By standing on this device, and moving in the same way you do when you ski, you can measure your average speed and maximum speed. Many amateur athletes tested their abilities on this device.



The mayor of Annecy tests a speed measurement device containing SNR bearings